# Adolescence et échec scolaire: une comparaison du décrochage scolaire en Inde et en France 

Manas Kumar Maulik

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## THÈSE DE DOCTORAT EN SCIENCES DE L’ÉDUCATION

## Présentée par Manas Kumar MAULIK

## Adolescence and school failure: a comparison of school dropout in India and France

## Sous la direction de Madame le Professeur Nicole Biagioli

Présentée publiquement le 28 mai 2015

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#### Abstract

In last few decades the importance of school dropout increased gradually. Priority has been given to prevention of dropout in the education sector by different developed and underdeveloped countries because dropout of the individual not only affects his future economic and social status but also presents a huge problem for his family, his children and ultimately for his country. In this study, we set out to compare school drop in two countries, India and France, very different in geography, history, growth rates, socio-economical and cultural context, but concerned with dropout each specifically, and having therefore developed their own remediation to the problem.

In order to fully emphasize the importance of the phenomenon, we first put it in the context of formal education, which is that of free and compulsory school for democratic states. In chapter 1, we describe structure, history and functioning of education systems in France and India. We choose some significant educational factors as enrolment students, their reading ability, the economic status of families and the resort to private tuition in order to use them in our comparison. We conclude with a brief reminder of the psychological development of adolescents and its impact on learning.

Chapter 2 is devoted to the detailed presentation of drop out and its allied factors. The standard of its definition, its measurement and its evaluation are reviewed as well as are underlined their variations depending on concerned countries. We then present the scores and condition of dropout in France and India. We compare the situations from national to local level in the places we have chosen for our field-work: Academy of Nice for France and WestBengal for India. We take into consideration the causes of dropping out, which we divide into external (for instance, dwelling place, cultural environment, illiteracy of the parents) and internal (for instance, deficiency in basic skills, grade repetition, teacher expectation). We carry on by accounting the main consequences of drop out (unemployment, illiteracy, decline of GDP and social climate disturbance) in the concerned countries. We finish by sketching the principal remedies: regular educational surveys (giving the example of Indian Sarva Shiksha Abhiyan Survey), adult education, and educational strategies.


Chapter 3 is dedicated to the presentation of our field-work in the form of investigations carried out in collège Leï Garrus (Var) and Lakshmipur Shamidji Seva Sangha High school
(Lakshmipur). We begin by recalling the results and methodology of PISA by which we have been inspired to set up two sets of questionnaires, one on the state of learning and one on the teacher-student relationship. We then make the report of preliminary investigation and definitive survey conducted in French 'collège' and Indian high-school. We conclude with the proposal of appropriate remedies concerning the teaching of mathematics (algebra), support for students with learning difficulties, and improvement of the teacher-student relationship. In conclusion, we emphasize the limits but also the need of the comparative approach, pronouncing us for an intercultural perspective of education research.

Key words: school dropout, literacy, mathemacy, comparative analysis, education system, educational survey, adult education.

## Résumé

Dans les dernières décennies; l'importance de l'abandon scolaire s'est progressivement accrue. Priorité a été donnée à sa prévention dans le secteur éducatif par différents pays développés et en voie de développement parce que le décrochage scolaire affecte non seulement l'avenir économique et le statut social de l'individu, mais représente aussi un grave handicap pour sa famille, ses enfants et en dernier lieu pour son pays. Dans cette étude nous avons entrepris de comparer le décrochage scolaire dans deux pays, l'Inde et la France, très différent par leur situation géographique, leur histoire, leur taux de développement, et leur contexte économique et socio- culturel, mais concernés par le décrochage scolaire, chacun de manière spécifique, et ayant donc développé leur propre réponse au problème.

Afin de mettre pleinement en valeur l'importance du phénomène, nous commençons par le replacer dans le contexte de l'éducation formelle qui est celui de l'école gratuite et obligatoire des états démocratiques. Dans le chapitre 1, nous décrivons la structure, l'histoire et le fonctionnement des systèmes éducatifs de la France et de l'Inde. Nous choisissons quelques facteurs éducatifs significatifs tels que le taux d'inscription des élèves, leur compétence de lecture, le statut économique des familles, le recours à des leçons privées, dans le but de les utiliser dans notre comparaison. Nous terminons par un bref rappel du développement psychologique de l'adolescent et de son impact sur l'apprentissage.

Le chapitre 2 est consacré à la présentation détaillée du décrochage scolaire et des facteurs qui lui sont associés. Les standards de sa définition, de sa mesure, et de son évaluation, sont passés en revue tout autant que sont mises en valeur les variations relatives aux pays étudié. Nous présentons ensuite les chiffres et l'état du décrochage scolaire en France et en Inde. Nous comparons les situations au niveau national et local dans les lieux que nous avons choisis pour notre travail de terrain : l'académie de Nice pour la France et le West-Bengal pour l'Inde. Nous tenons compte des causes du décrochage, que nous partageons en externes (comme le lieu d'habitation, l'environnement culturel, l'analphabétisme des parents) et internes (comme l'insuffisance des compétences fondamentales, le redoublement, les attentes des enseignants).Nous continuons en tenant compte des principales conséquences du décrochage (chômage, analphabétisme, déclin du PIB et troubles du climat social) dans les pays concernés. Nous terminons en esquissant les principaux remèdes : enquêtes réguliers sur
l'éducation (en donnant l'exemple de l'enquête indienne Sarva Shiksha Abhiyan), la formation des adultes, et les stratégies éducatives.

Le chapitre 3 est réservé à la présentation de notre travail de terrain, sous la forme d'une suite d'enquêtes réalisées au collège Leï Garrus (Var) et à l'école secondaire supérieure Lakshmipur Shamidji Seva Sangha (Lakshmipur). Nous commençons par rappeler les résultats et la méthodologie des enquêtes PISA, dont nous nous sommes inspiré pour établir deux jeux de questionnaires, l'un sur l'état des apprentissages et l'autre sur la relation enseignant-élève. Nous faisons ensuite le compte-rendu de l'enquête préliminaire et de l'enquête définitive menées dans le collège français et dans l'école indienne. Nous terminons par la proposition de remédiations adaptées, concernant l'enseignement des mathématiques (algèbre), l'accompagnement des élèves en difficulté scolaire, et l'amélioration de la relation enseignant-élève. En conclusion, nous insistons sur les limites mais aussi la nécessité de l'approche comparative, en nous prononçant pour une perspective interculturelle de la recherche en éducation.

Mots clés: décrochage scolaire, littéracie, mathémacie, analyse comparative, système éducatif, enquête sur l'éducation, formation des adultes.

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## General Introduction

The contribution of education to mankind development occurs in many fields. It makes people more productive through learning and acquiring skills, improves health and nutrition, enriches life and promotes social development through social cohesion. The expansion of regional, national and international economies into a global marketplace has promoted the importance of education as a primary factor. It allows young adults to enter the workforce and to enjoy economical advance, as well as to share in the social, health and other benefits associated with education and with productive careers. That is why dropping out of school from conventional education sectors greatly undermines these opportunities and is associated with many adverse personal and social consequences, including poverty, incarceration, unemployment and low wages. School dropout not only affects the lives and opportunities of those who experience it, but also has enormous economic and social implications for society at large.

The prevention of school dropout growth should be an issue of priority for any countries of the world. France and India are respectively a developed and a developing country, facing the same problem in separate dimensions and perspectives. In India, major dropout happens between standard- 1 to standard-8, in France it is adequately found in the educational level of 3ème to 2 nde (9th and 10th standard of O.E.C.D.). In India constitutional amendment for compulsory education has been scheduled from 6 to 14, in France it extends from 6 to 16.

In order to face the challenges of school dropout, policy-makers in education field often rely on profound research into this area. Educational research seeks to establish causes and effects or at least the co-relationship between educational policies, pedagogical methods and learning outcomes. To facilitate the process of prevention of dropout, a lot of research works have been implemented in recent past, causing educational progressive changes. For example, grade retention has been severely reduced in the different countries of the world as it was found the single largest predictor of drop out, as mentioned by M. Roderick in "The path to dropping out" (1993) ${ }^{1}$. Research works by Comer and Haynes (1992) have suggested that parental involvement contributes to improve academic performances, behaviors, and learning processes of academically weak students. According to another recent research work of

[^0]American physiologist Fiona Roberts, America produces a generation of "lost boys" ${ }^{2}$ who tend to be victimized of excessive use of internet and video-games, with the result that many of them are leaving school in the middle of their studies.

Literacy is one of the prime indicators to judge the education status of a country. Now let's discuss the status of literacy around the universe. According to the statistics of UNESCO, 796 million adults of the world in 2008 were suffering of insufficient basic literacy skills, among whom two thirds were women, and 67 million children were out of school. The World Declaration on Education for All (W.D.E.F.A.), Thailand, March 1990, adopted a resolution on meeting basic learning needs ensuring Education for All (E.F.A.) by 2015. The unconsciousness of the requirements of literacy, and the increasing student dropout scenario throughout the world might impose a big challenge to achieve the goal targeted by UNESCO by 2015 .

As a developing country, India has recently improved much in the context of literacy. According to the census report of $2011^{3}$, an average of $73.80 \%$ literate persons has been indicated ( $82.14 \%$ of which were male and $65.46 \%$ were female) but it remains far away from the literacy status of France, with its almost $100 \%$, and from students enrolment achievement. This current literacy statistics of India show better result for both male and female (6.9\% more for male and $11.8 \%$ more for female compared to 2001). Still there is a huge illiteracy in India, eradication of which needs a drastic action from government side and an upliftment from social consciousness.

Evidences of current literacy situation and adult education in France have been disclosed in the regional meeting of UNESCO of Lyon (2005). The director of A.N.L.C.I. (Agence Nationale de Lutte Contre l'Illettrisme) reported that, according to survey conducted by IVQ (Information et Vie Quotidienne) of 2002-03, 12\% people aged between 18 to 65 in the mainland of France have serious problems of reading. The report furthermore reveals that $7 \%$ to $10 \%$ of them were yet school students. Evidently the literacy rate, students' enrollment and status of adult education play a leading role regarding students' dropout.

[^1]This study and research work on the prevention of dropout in adolescence (14-15 age groups) had been initiated in the academic year 2009-2010 in the I.U.F.M. ${ }^{4}$ of U.N.S.A. (University of Nice-Sophia Antipolis) in France.

The ultimate goal of this study is to find out the causes and remedies for dropout in lower secondary school in France and India. According to the information of "Le projet académique de Nice" ${ }^{5}$ (2009) in France, and S.S.M. (Sarba Sikha Mission, 2008-09) of India, the national dropout rate of the two countries were respectively $11 \%$ and $25.1 \%$ for the students aged 14-15.

According to the statistics of the "Académie de Nice" in France, in 2008, the students dropout rate for those who had left school on or before $3^{\text {ème }}\left(9^{\text {th }}\right.$ standard of O.E.C.D $)$ was $11 \%$ in national level and $15.4 \%$ for the Académie of Nice (which is composed of Alpes-Maritimes- 06, and Var- 83). In 2012, these statistics changed to $15 \%$ in national average and $15.1 \%$ for the Académie of Nice.

European Union website (Eurostat) informs that in Europe, 18 to 24 aged pupils who dropout, mostly in the standard of lower secondary level, were $12.8 \%$ in 2010. In the last ten years the dropout has reduced slightly (it was $13.3 \%$ in 2000). Statistical analysis shows moreover that although the percentage of female school dropout is decreasing ( $10.3 \%$ in 2010 compared to $11.9 \%$ in 2000), the percentage of male school dropout has slightly increased ( $15.4 \%$ in 2010 against $14.8 \%$ in 2000). In 2000 the dropout rate of France and the average of E.U. were respectively $13.3 \%$ and $17.6 \%$ (the difference was $4.3 \%$ ), but in 2010 the dropout rate of France was $12.8 \%$ and the average of E.U. was $14.1 \%$ (difference reduced to 1.3\%).

From the above statistics one can realize that in the last ten years, student's percentage of prevention of dropout in E.U. shows better results than that of France. These statistics also measure that, from $2001(13.5 \%)$ to $2005(12.2 \%)$, the percentage of dropout has been reduced in France. In 2008, the level of dropout rate ( $11 \%$ ) was the lowest ever reached; afterwards it has been gradually increasing with time, which is an alarming situation for the education department of the country. Furthermore, statistics show that the student dropout rate in $\mathrm{ZEP}^{6}$ is nearly 3 times superior compared to the schools of other zones in France.

[^2]According to the report of S.R.I.-2010, in India, $6.94 \%$ children were out of school, in 2006 and 2009 this ratio was $4.7 \%$ and $3.2 \%$ respectively. In 2009, proportion of school dropout was $25.98 \%$, in which $1.1 \%$ students ended their academic carrier in mere grade-1. From this report one can realize why, in India, the prevention of dropout is a big challenge for the educationists and plan-makers. The stake is not only to foresee a strategy to prevent the dropout but also to improve the status of student enrollment at least in primary level. In the education system of India we find acute differences in the progression of educational levels according to caste, religion and age. For example, in the report of S.R.I., children who are out of school in the age group of 6 to 13, are found highest in Muslims ( $7.67 \%$ ), followed by scheduled caste ( $5.96 \%$ ), scheduled tribe ( $5.6 \%$ ) and Other Backward Classes (O.B.C.) and others $(2.67 \%)$. This disquieting increasing of students' dropout both in France and in India is enough to motivate a researcher to work on this field and to find out the ways to meet the challenges.

The international completion rate of secondary schooling is also an important indicator for the acknowledgement of the dropout situation across the world, which varies widely. A survey has been provided by Marie Arneburg, the Norwegian ministry of education, in 2009, with the cooperation of O.E.C.D. ("completion rates in upper secondary education" www.regjeringnen. no11602009.pdf ). Statistics explain the upper secondary completion rates within 12 O.E.C.D. countries as follows: Israel (90\%), U.S.A (88\%), Netherlands (84\%), France (83\%), Finland (78\%), Estonia (72\%), New Zealand (70\%), Norway (69\%), Sweden (68\%), Denmark (65\%), Italy (64\%) and Iceland (49\%). From these statistics one can assume that the dropout rate in developed countries is comparatively minor, yet not negligible, but in the Indian sub-continent it is massive.

A recent report of O.E.C.D. (Education at a glance-2013) indicates results quite similar to above mentioned survey, the percentage of 25 to 34 age group of people who completed higher secondary level of studies is $83 \%$ in France, compared to $82 \%$ and $84 \%$ average of O.E.C.D. and E.U.-21 respectively. In this chart no data has been provided against Indian statistics, showing missing figures (m), perhaps due to unavailability of information.

Several actions have been taken both, by the French education department (Bulletin Officiel $n^{\circ} 23$ du 4 juin 2009) and the S.R.I-2010 ${ }^{7}$ of India for prevention of dropout. But still in India a comprehensive number of students drop out of school every year, moreover a

[^3]massive percentage of students never enrolled in educational institutions. In France although the students' dropout percentage is lesser than Indian, still it is not less than the average dropout percentage of E.U.

Now two questions arise: what are the main causes of students' dropout? Also what are the probable remedies related to the education system of India and of France?

Alison Kepner published a review (4/11/2006) in the journal "The spokesman review" on the probable causes of dropout, after having worked with 500 students in school dropout of Delaware, in U.S.A. She reported some major reasons of dropout which are as follows:

| Probable causes of student dropout | Percentage |
| :--- | :---: |
| Are not properly motivated | $69 \%$ |
| Not feeling concerned by the class | $47 \%$ |
| Entered high school with deficit knowledge | $45 \%$ |
| Tendency to absenteeism | $43 \%$ |

Table 1. Probable causes of student dropout (results obtained by Kepner 2006).
The causes of dropout depend mainly upon the socio-economic status, the educational priority provided by government, the parental involvement, the teacher-students ratio and various other factors. The survey result of S.R.I - 2010 shows that the major cause of unenrolment and school dropout in India is undoubtedly the 'poverty' or the poor economic conditions of families. $27.09 \%$ students in average give up their studies suffering with poverty, among which $25.28 \%$ are male and $28.97 \%$ are female. In the remedial strategy the scheme called 'midday meal' has been implemented by government of India, which has been evidently proved as a successful intervention for reducing dropout. But a similar strategy might not be successful in France because of the differences of socio-economic conditions between the two countries. In this study, we want to trace a single predictive factor of dropout which would be common in France and India.

Maryse Esterle, teacher at the I.U.F.M of Artois in France and researcher of E.U.K.N., commented that the causes of school dropout are multifactorial (problems at school, with family, peers, etc.) but that the most important factor is undoubtedly the accumulated deficiency of learning sciences at the beginning of the scholastic career. There is a close relation between basic learning skills and the student dropout. Knowledge of mathematics and language skills are the basic skills of education mentioned in the E.U seminar in 2000.

Sixteen quality indicators were chosen within which the basic skills in mathematics and reading expected from the students were explained as follows:

- (a) Mathematics: A solid grounding in mathematics, which helps to provide analytical skills, logic skills and numerical reasoning, is at the core of any curriculum. The principal challenges in relation to mathematics are to develop a teaching method which ensures that pupils have a positive attitude towards mathematics, encourages pupils to develop and maintain their knowledge in this area, and defines, if possible, the common skills and competences which European citizens should possess;
- (b) Reading: The ability to read and understand texts is a basic requirement for learning and for individuals' personal development and social integration. Curley, Sawyer \& Savitsky (1971), Stetler (1959), found that low academic achievement is one of the main causes of student dropout. More precisely it appears that lowered performances in either reading or mathematics tend to increase the likehood that a student would leave school. Basic education is the foundation of life-long learning and of human development on which countries may build systematically the further levels and types of education and training.

Now we can analyze the status of basic learning skill in Mathematics in France and in India. In India, from 2007 to 2009, at standard V (equivalent to CM 2 in France) students declined their ability to do a simple division from $41 \%$ to $36 \%$, (Report of A.S.E.R. 2010). Similarly in France, in 2008, at the end of CM $2,40 \%$ to $50 \%$ students could do efficiently a decimal multiplication. The ratio declined to $30 \%$ at the beginning of $6^{\text {ème }}$, at the time of being admitted at "collège", (Education \& formation, $\mathrm{n}^{\circ} 79$, December 2010). This fact shows that a major part of primary or elementary level students of both countries is facing problems with mathematics.

The survey of PISA 2009 might be also an important document for this study because the sample of students taken by P.I.S.A. is aged between 15 years 3 months to 16 years 2 months, which is very nearer to the age group of this study. The survey of PISA 2009 reveals that the proportion of students with difficulties in mathematics increases from $16.6 \%$ of 2003 to 22.5\% in 2009 in France. In 2009 the students who were retarded in reading were $7.9 \%$ compared to less than 5\% in 2003.

Let us have a look to Pratichi ${ }^{8}$ report, published in 2009 to understand the quality of basic education in India. This report provides an idea of the status of reading skills of primary

[^4]students of West- Bengal (a state of India in which was born the author of this thesis and in which he currently lives). Pratichi trust organized a survey among 322 primary students of standard III \& IV from different social groups. It shows that students who cannot read and cannot do the simplest arithmetic operations are as following in percentage

| Categories | Cannot read | Cannot do the simplest arithmetic operations |
| :--- | :---: | :---: |
| Scheduled Tribes (S.T.) | $28.6 \%$ | $48.6 \%$ |
| Muslims | $24.8 \%$ | $34.7 \%$ |
| Scheduled Castes (S.C.) | $12.5 \%$ | $20.5 \%$ |
| Others | $8.2 \%$ | $15.3 \%$ |

Table 2. Survey on ability of student vs caste (results obtained in The Pratichi Education Report II (2009)).
According to these statistics, S.T. and Muslim students are more affected in basic learning skills than the other groups of students. We found a similar situation in ZEP collèges in France.

In relation to the above comparison, we can represent a report of "L'Etat de l'école" ( $\mathrm{n}^{\circ} 16,2006, \mathrm{p} .40$ ) where it was predicted that $20 \%$ of the weak readers of PISA-2006 could drop out from school by 2010. The weak readers are the readers whose level was found the lowest in the assessment of reading aptitude test. This clearly signifies the correlation between deficiency of learning in basic skills and dropout. Snow, Burns \& Griffin (1998) showed that the reading problem in students arises mostly in the adolescence period and can be prevented by counseling and good instructions in the early childhood years. We must also take into account that researchers found negative effects due to grade retention. Shepard \& Smith (1989) studied the effects of retention on achievement, personal adjustment, self-concept and attitude towards school. The negative effect of grade retention is greater for achievement measures than for personal adjustment, self-concept and attitude towards school.

During late sixties in French education we found a lot of grade repetition. From 1960 to 2000, at ten years intervals, the rate of grade retention in CM-2 standard was $52 \%, 45.4 \%$, $37.3 \%, 27.7 \%$ and $19.5 \%$, with a progressive reduction. In the 'Right to education act' ${ }^{\prime}$, India government proposed to stop the grade retention up to standard-8. In this regard we should study elaborately the policy of Grade-retention.

Now let us mention the result of P.I.S.A.-2012 in comparison to France and India. France scored 495 in mathematical performance and ranked $23^{\text {rd }}$ in comparison to Sanghai (China)

[^5]with 613 points and ranked $1^{\text {st }}$, whereas the O.E.C.D. average was 494 and E.U.-21 average was 496.

Regarding to Indian performance, The Indian Express reported (9/3/2012) that India retired out of the 2012 round of PISA testing in August 2012. Probably due the bad result, or unavailability of proper response, Indian government was forced to postpone the program in mid-way.

In 2009, Himachal Pradesh and Tamil Nadu, two Indian provinces separately took part in P.I.S.A,'s mathematical assessment and scored 331 and 334 respectively for public sector students against 419-O.E.C.D. average. These results conclude to a huge range of disintegration of the skills for Indian students, in the area of their mobilization of their acquired knowledge to practical field.

Due to current trends of modernization, science and technology should undoubtedly get more privilege in school curriculum of any country. As France is an industrial developed country, different technical courses were introduced much earlier in its education system than in India. C.A.P. (Certificat d'Aptitude Professionnelle) and B.T.S. (Brevet de Technicien Supérieur) were established in 1919 (Astier law) and 1959 respectively. On the contrary, technical education was introduced for the first time in India on the recommendation of Kothari commission (1964). In the field of science studies, an elaborate discussion is needed in order to understand why, probably due to lack of interest or proper counseling, a large number of students are deviated from science stream, a phenomena which can be called science dropout.

Education remains relevant as long as it maintains its dynamic character. Research, innovations and assessment activities not only enrich the knowledge but also are prerequisite to dynamism. As educational settings are changing throughout the world, the learner's profile and expectations are changing too. This study is an attempt to justify what should be considered as a knowledge in educational settings, how much and how the knowledge needs to be imparted in such settings, how effectiveness of the teaching learning process can be enhanced, how learners with different capabilities can be offered inclusive settings. These are questions of constant exploration and discussion.

In this regard, we will take into account the contributions of researchers who have probed and reflected upon a variety of issues of contemporary concern and interest. These include the study of creativity, assessment, historical perspectives of learning and cognition, remediation
of perceptual deficit among learning disabled people, influence of school and student variables related, student's achievement in mathematics, responsible environmental behavior, as well as relation between vocational interest and academic achievement, and educational development in Elementary Education.

In its $1^{\text {st }}$ chapter, this study explores the different social theories of education which have been successfully implemented in the education system of different countries by the world. Afterwards we review the educational trends of both France and India in comparison, and the successive educational changes. In so far as they are agents of social control and culture, the educational trends of a country play an important role in most societies and many present problems of educational field are supposed to have been planted in the past.

Psychology is a part and parcel of modern education. In this study adolescent characters and behaviors have been analyzed in so far as the peer-relation takes a major role in adolescent learning, and in many behavioral disabilities of the teen-ager which have been evidently proved as strong predictors of dropping out.

In its 2 nd chapter, this study focuses on how the definition of dropout is being changed according one country's educational profile. For investigating the cause of dropout one has to learn every detail about the different aspects of education system.

Accordingly this chapter highlights the school systems of India and France in a comparative study, which is centered on the manifestation of dropout at school and in society, its causes, its consequences, its measurement, its prevention and its remediation.

In relevance to the subject matter, surveys have been organized, based on the same questionnaires in consecutive academic years of 2010-11 and 2011-12 with $9^{\text {th }}$ grade students in India and France, and their results were compared to those of previous surveys in certain issues).

In the 3rd chapter, data of the surveys have been summarized and statistical results have been enlisted in quest of causes of dropout and its probable remedies.

From the very beginning of our research we have been asking ourselves if the chosen methodology was adequate to the subject, due to the huge differences existing between the two countries. A French common saying argues that comparison is not reason. Qualitatively and quantitatively, India and France appear frankly incommensurable, and we were and are yet completely aware of this evidence.

Anyway, a lot of reasons could be alleged on behalf of the use of comparative methodology in investigating school dropout, some external to the subject, some more
directly related to it. As a matter of fact, in this beginning of $21^{\text {st }}$ century, the country scale has ceased to be the most adequate to discuss social, political and economical problems, which claim to be approached in a global way in order to receive global responses. This is a first external argument.

A second is offered by our research field: education. As related to human mind, and to human way of transmitting knowledge, which is part of human culture, it is undoubtedly dealing with universal features, which have already been firmly established by psychologists and sociologists, and are surveyed on large scales in order to disclose their regularity in spite of diversity of societies and individuals. Even the transition from informal education supplied by familial and professional context to school institutionalized education, is an universal feature, which can be experienced by every child who goes to school for the first time, or every country who creates his own school system.

Among the internal causes which prescribe the comparison as a research device for studying dropout, there is first history of education systems, which is different for each country and affects education policies. Then we have the geopolitical environment and the history of migrations, which let to explain more specific features and mutations, and finally the meta-research about research devices, the results being depending upon facts observed but also tools used.

Let us add that, for a researcher in education sciences who dedicates himself to India study, India summarizes and joins together the two types of arguments. The country is so broad, diverse and crowded that one cannot be acquainted with him without comparing the states, the populations, the cultures, which compose him. In consequence the results of the innumerable surveys and assessments undertaken for that purpose need on their turn to be collected, compared, crossed, put in prospect each with other. Of course, the same treatment is required by France, as any other country, but seems less evident.

That is what we have striven to do in the present study, seeking less new facts than new ways of sharing knowledge about facts, as far as we remain convinced that research on school dropout needs a collective effort from all countries, and deserves a special place in bilateral cooperation, as it exists between India and France.

## Introduction générale

L'éducation contribue au développement de l'humanité dans de nombreux domaines. Elle rend les gens plus productifs grâce à l'apprentissage et l'acquisition de compétences, améliore la santé et la nutrition, enrichit la vie et favorise le développement social par le biais de la cohésion sociale. L'expansion des économies régionales, nationales et internationales dans un marché mondial a favorisé l'importance de l'éducation comme un facteur primordial. Elle permet aux jeunes adultes d'entrer dans la population active et de profiter de l'essor économique, ainsi que d'avoir part aux avantages sociaux, sanitaires et autres liés à l'éducation et aux emplois de catégorie supérieure.

Voilà pourquoi le décrochage scolaire qui intervient dans l'éducation formelle compromet grandement ces possibilités et est associé à de nombreuses conséquences personnelles et sociales défavorables, notamment la pauvreté, la prison, le chômage et les bas salaires. Le décrochage scolaire affecte non seulement la vie et les possibilités de ceux qui la vivent, mais aussi a d'énormes implications économiques et sociales pour la société en général.

Éviter l'extension du décrochage scolaire devrait être une question de priorité pour tous les pays du monde. La France et l'Inde sont respectivement un pays développé et un pays en voie de développement, confrontés au même problème dans des dimensions et perspectives distinctes. En Inde, le pic de décrochage intervient entre le niveau-1 et le niveau -8. En France on le repère entre la $3^{\text {ème }}$ et la $2^{\text {nde }}$ (qui correspondent aux niveaux 9 et 10 de l'OCDE). En Inde l'amendement constitutionnel qui fixe la durée de l'enseignement obligatoire a été prévu pour aller de 6 à 14 ans, en France, il s'étend de 6 à 16 ans.

Afin de relever le défi que représente le décrochage scolaire, les décideurs politiques dans le domaine de l'éducation comptent souvent sur des recherches approfondies dans ce domaine. La recherche en éducation cherche à établir les causes et les effets, ou au moins la co-relation entre les politiques éducatives, les méthodes pédagogiques et les résultats de l'apprentissage. Pour faciliter le processus de la prévention du décrochage, de nombreux travaux de recherche ont été mis en œuvre dans le passé récent, provoquant des changements progressifs dans l'éducation. Par exemple, le redoublement a été sévèrement réduit dans les différents pays du
monde, parce qu'il avait été établi que c'était le prédicteur de décrochage le plus important, comme l'établit M. Roderick dans «Path of dropping out» (1993) ${ }^{10}$.

Les travaux de recherché de Commer et Haynes (1992) ont suggéré que la participation des parents contribue à améliorer les performances scolaires, le comportement et les processus d'apprentissage des élèves académiquement faibles. Selon un autre travail récent de la physiologiste américaine Fiona Roberts, l'Amérique produit une génération de «garcons perdus » ${ }^{11}$ qui ont tendance à être les victimes d'un usage excessif d'Internet et des jeux vidéo, ce qui les conduit à quitter l'école au milieu de leurs études.

L'alphabétisation est l'un des principaux indicateurs pour juger de l'état de l'éducation d'un pays. Maintenant, nous allons discuter de l'état de l'alphabétisation dans le monde. Selon les statistiques de l'UNESCO, 796 millions d'adultes dans le monde en 2008 souffraient de compétences de base insuffisantes en littéracie, parmi lesquels les deux tiers étaient des femmes et 67 millions d'enfants étaient à l'école. La Déclaration Mondiale sur l'Éducation pour tous (WDEFA), Thaïlande, Mars 1990, a adopté une résolution fixant la satisfaction des besoins d'apprentissage de base assurant l'éducation pour tous (EPT) en 2015. Le défaut de prise de conscience de la nécessité de l'alphabétisation et la progression du scénario du décrochage scolaire partout dans le monde pourrait imposer un grand défi pour atteindre l'objectif visé par l'UNESCO pour 2015.

En tant que pays en voie de développement, l'Inde est parvenue récemment à améliorer significativement le contexte de l'alphabétisation. Le rapport du recensement de $2011^{12}$ indique une moyenne de $73,80 \%$ de personnes alphabétisées (dont $82,14 \%$ d'hommes et 65,46\% de femmes). Mais l'Inde est encore loin derrière le statut de l'alphabétisation de la France qui avoisine les $100 \%$, et de son taux d'inscription scolaire.

Ces statistiques actuelles d'alphabétisation de l'Inde montrent un meilleur résultat à la fois pour les hommes et pour les femmes $(6,9 \%$ de plus pour les hommes et $11,8 \%$ de plus pour des femmes) par rapport à 2001. Pourtant il y a un analphabétisme important en Inde, dont l'éradication appelle une action radicale de la part du gouvernement et une sensibilisation de la conscience populaire.

[^6]Les statistiques de la situation actuelle de l'alphabétisation et de l'éducation des adultes en France ont été divulguées lors de la rencontre régionale de l'UNESCO de Lyon (2005). Le directeur de l'A.N.L.C.I. (Agence Nationale de Lutte Contre l'Illettrisme) a rapporté que, selon l'enquête menée par IVQ (Information et Vie Quotidienne) de 2002-03, 12\% des personnes âgées de 18 à 65 ans en France métropolitaine ont de graves problèmes de lecture. Le rapport révèle en outre que $7 \%$ à $10 \%$ d'entre elles étaient encore dans le système scolaire. Évidemment, le taux d'alphabétisation, le taux d'inscription scolaire et le statut de l'éducation des adultes jouent un rôle de premier plan en ce qui concerne le décrochage scolaire.

Notre travail de recherche sur la prévention du décrochage scolaire des élèves de 14-15 ans, a commencé durant l'année scolaire 2009-2010 à l'I.U.F.M ${ }^{13}$ de l'Université de NiceSophia Antipolis, France.

Le but ultime de cette étude est de déterminer les causes et les remèdes possibles au décrochage scolaire dans le secondaire inférieur en France et en Inde. Selon les informations données par "Le projet académique de Nice" ${ }^{14}$ (2009) en France, et la S.S.M. (Sarba Sikha Mission, 2008-09) en Inde, le taux national de décrochage scolaire des deux pays était respectivement de $11 \%$ et de $25,1 \%$ pour les élèves âgés de 14-15 ans.

Selon les statistiques de l'Académie de Nice en France, en 2008, le taux de décrochage scolaire pour les élèves ayant quitté l'école avant la $3^{\text {ème }}$ (niveau 9 de l'O.E.C.D) était de $11 \%$ au niveau national et de $15,4 \%$ par l'Académie of Nice (qui est formée du département des Alpes-Maritimes- 06, et du département du Var- 83). En 2012, ces statistiques sont devenues $15 \%$ pour la moyenne nationale et $15,1 \%$ pour la moyenne pour l'Académie de Nice.

Le site de l'Union européenne (Eurostat) informe qu'en 2010 en Europe, il y a eu 12,8\% des élèves âgés de 18 à 24 qui ont décroché, surtout au niveau de l'enseignement secondaire inférieur. Au cours des dix dernières années, le décrochage a légèrement réduit (il était de $13,3 \%$ en 2000). L'analyse statistique montre d'ailleurs que, si le pourcentage des filles en décrochage scolaire est en baisse ( $10,3 \%$ en 2010 comparativement à $11,9 \%$ en 2000), le pourcentage des garçons en décrochage scolaire a légèrement augmenté ( $15,4 \%$ en 2010 contre $14,8 \%$ en 2000). En 2000 les taux de décrochage en France et dans l'E.U. étaient respectivement de $13,3 \%$ et $17,6 \%$ (avec une différence de $4,3 \%$ ). Mais en 2010 le taux de

[^7]décrochage pour la France était de $12,8 \%$ et pour l'E.U. de $14,1 \%$ (avec une différence réduite à $1,3 \%$ ).

En observant ces statistiques on remarque que sur dix ans, la prévention du décrochage scolaire affiche de meilleurs résultats pour l'ensemble de l'Union Européenne que pour la France. Ces statistiques montrent aussi que, de 2001 ( $13,5 \%$ ) à 2005 ( $12,2 \%$ ), le pourcentage du décrochage a été réduit en France. En 2008, le taux de décrochage (11\%) était le plus bas jamais atteint; ensuite il s'est mis à monter progressivement, ce que le ministère de l'éducation considère comme une situation alarmante. De plus, les statistiques montrent que le taux de décrochage scolaire dans les ZEP $^{15}$ est presque trois fois supérieur à celui des autres écoles en France.

En Inde, selon le rapport de l'ISR-2010, 6,94\% des enfants n'allaient pas à l'école. En 2006 et 2009 , ce ratio était de $4,7 \%$ et $3,2 \%$ respectivement. En 2009, la proportion de décrochage scolaire était de $25,98 \%$, parmi lesquels $1,1 \%$ d'étudiants avaient terminé leur scolarité au niveau 1. D'après ce rapport, on peut comprendre pourquoi, en Inde, la prévention de l'abandon scolaire est un grand défi pour les éducateurs et les dirigeants. L'enjeu est non seulement de prévoir une stratégie pour empêcher le décrochage scolaire, mais aussi pour améliorer l'état de l'effectif scolaire au moins du niveau primaire. Dans le système d'éducation de l'Inde, nous trouvons des différences sensibles dans la progression des niveaux d'éducation selon la caste, la religion et l'âge. Par exemple, dans le rapport de l'ISR, le nombre le plus élevé d'enfants non scolarisés dans le groupe des 6-13 ans, se trouve chez les musulmans ( $7,67 \%$ ), suivis par les castes répertoriées $(5,96 \%)$, les tribus répertoriées $(5,6 \%)$ et les autres basses classes ou OBC $(2,67 \%)$. Cette inquiétante augmentation du décrochage scolaire des élèves à la fois en France et en Inde est suffisante pour motiver un chercheur à travailler sur ce domaine et à trouver les moyens de relever les défis qu'il représente.

Le taux d'achèvement international de la scolarité secondaire est également un indicateur important pour l'évaluation de la situation de décrochage scolaire à travers le monde, qui varie largement. Une enquête a été menée par Marie Arneburg, le ministère norvégien de l'éducation, en 2009, avec la coopération de l'OCDE («Taux d'achèvement dans l'enseignement secondaire supérieur» www.regjeringnen. De no11602009.pdf). Pour les 12 états membres de l'OCDE les statistiques donnent les taux d'achèvement du secondaire

[^8]supérieur suivants: Israël (90\%), Etats-Unis (88\%), Pays-Bas (84\%), France (83\%), Finlande (78\%), Estonie (72\%), Nouvelle-Zélande (70\%), Norvège (69\%), Suède (68\%), Danemark ( $65 \%$ ), Italie ( $64 \%$ ) et Islande ( $49 \%$ ). De ces statistiques, on peut conclure que le taux de décrochage dans les pays développés est relativement mineur, mais pas négligeable, alors que dans le sous-continent indien, il est massif.

Un rapport récent de l'O.E.C.D. (Regards sur l'éducation, 2013) indique des résultats assez semblables à l'enquête mentionnée ci-dessus. Le pourcentage de personnes de 25 à 34 ans qui ont achevé leurs études dans l'enseignement secondaire supérieur est de $83 \%$ en France, contre $82 \%$ pour la moyenne de l'OCDE et $84 \%$ pour l'E.U.-21 respectivement. Dans ce rapport, aucune donnée n'a été fournie sur les statistiques indiennes, la ligne de l'Inde indiquant un ( m ), peut-être en raison de l'indisponibilité de l'information ( $\mathrm{m}=$ missing $=$ manquant).

Plusieurs actions ont été entreprises à la fois par le ministère de l'éducation français (Bulletin Officiel n ${ }^{\circ} 23$ du 4 juin 2009), et par le S.R.I- $2010^{16}$ en Inde pour la prévention du décrochage scolaire. Mais il y a encore en Inde un nombre important d'élèves qui abandonnent l'école chaque année. Plus encore, un pourcentage massif d'élèves n'a jamais été inscrit dans aucune institution scolaire. En France, bien que le pourcentage du décrochage scolaire soit inférieur à celui de l'Inde, il n'est pourtant pas inférieur à la moyenne du décrochage scolaire européenne.

Maintenant, deux questions se posent: quelles sont les principales causes de l'abandon scolaire des élèves ? Et aussi quels sont les remèdes possibles liés aux systèmes d'éducation de l'Inde et de la France ?

Alison Kepner a publié une étude (4/11/2006) dans "The spokesman review" sur les causes probables du décrochage scolaire, après avoir travaillé sur 500 élèves décrocheurs du Delaware, aux U.S.A. Elle a identifié quelques causes majeures du décrochage qui sont les suivantes:

[^9]| Causes probables du décrochage scolaire | Pourcentage |
| :--- | :---: |
| N'ont pas de motivation correcte | $69 \%$ |
| Ne se sentent pas concernés par ce qui se <br> passe en classe | $47 \%$ |
| Sont entrés au collège avec un déficit de <br> connaissances | $45 \%$ |
| Ont une tendance à l'absentéisme | $43 \%$ |

Table 1. Causes probables du décrochage scolaire (résultats obtenus par Kepner 2006).
Les causes de l'abandon scolaire dépendent principalement de la situation socioéconomique, de la priorité donnée à l'éducation par le gouvernement, de la participation des parents, du ratio enseignant-élève et de divers autres facteurs. Le résultat de l'enquête de l'ISR-2010 montre que la principale cause de non-inscription et du décrochage scolaire en Inde est sans doute la «pauvreté» ou les mauvaises conditions économiques des familles. $27,09 \%$ des étudiants en moyenne abandonnent leurs études parce qu'ils souffrent de la pauvreté, dont $25,28 \%$ de garçons et $28,97 \%$ de filles. Dans la stratégie de remédiation, un dispositif appelé «repas de midi» a été mis en œuvre par le gouvernement de l'Inde. Il est apparu comme une intervention efficace pour réduire l'abandon scolaire. Mais une stratégie similaire pourrait ne pas être couronnée de succès en France en raison des différences de conditions socio-économiques entre les deux pays. Dans cette étude, nous voulons retrouver un facteur prédictif de l'abandon qui serait commun en France et en Inde.

Maryse Esterlé, enseignante à l'IUFM d'Artois en France et chercheur de EUKN, a montré que les causes de l'abandon scolaire sont multifactorielles (problèmes à l'école, avec la famille, les pairs, etc.), mais que le facteur le plus important est sans doute le déficit cumulé de l'apprentissage en sciences au début de la carrière scolaire. Il existe une relation étroite entre les compétences d'apprentissage de base et le décrochage scolaire. Les compétences mathématiques et les compétences linguistiques sont les compétences de base de l'éducation mentionnées dans le séminaire de l'UE en 2000. Seize indicateurs de qualité ont été choisis au sein desquels les compétences de base en mathématiques et en lecture attendus des étudiants ont été expliquées comme suit:

- (a) Mathématiques : Une solide formation en mathématiques, ce qui contribue à fournir des compétences d'analyse, de logique et de raisonnement numérique, est au cœur de tout curriculum. Les principaux défis en relation avec les mathématiques sont de développer une
méthode d'enseignement qui assure que les élèves ont une attitude positive envers les mathématiques, encourage les élèves à développer et à maintenir leurs connaissances dans ce domaine, et définisse, si possible, les qualifications et les compétences communes que les citoyens européens devraient posséder.
- (b) Lecture : La capacité de lire et comprendre des textes est une exigence fondamentale pour l'apprentissage et le développement personnel des individus et pour l'intégration sociale. Curley, Sawyer et Savitsky (1971), Stetler (1959), ont trouvé que la faible réussite scolaire est l'une des principales causes de décrochage scolaire. Plus précisément, il apparaît que les performances faibles autant en lecture qu'en mathématiques ont tendance à accroître le risque qu'un élève quitte l'école. L'éducation de base est le fondement de l'apprentissage tout au long de la vie et du développement humain. C'est sur elle que les pays peuvent édifier systématiquement les autres niveaux et types d'éducation et de formation.

Maintenant, nous pouvons analyser l'état des compétences de base en mathématiques en France et en Inde. En Inde, de 2007 à 2009, au niveau v (équivalent au CM2 en France), la capacité des élèves à faire une simple division a diminué de $41 \%$ à $36 \%$, (Rapport de l'ASER 2010). De même, en France, en 2008, à la fin de CM 2, seulement $40 \%$ à $50 \%$ d'étudiants parvenaient à réussir une multiplication décimale. Le ratio baissait à $30 \%$ au début de $6^{\text {ème }}$, au moment de l'admission au collège, (Éducation et formation, $\mathrm{n}^{\circ} 79$, Décembre 2010). Ce fait montre que la majeure partie des élèves du primaire ou du secondaire inférieur des deux pays est confronté à des problèmes avec les mathématiques.

L'enquête de PISA 2009 pourrait être aussi un document important pour cette étude parce que l'échantillon d'étudiants choisi par PISA est âgé de 15 ans 3 mois à 16 ans et 2 mois, ce qui est très proche du groupe d'âge de cette étude. L'enquête de PISA 2009 révèle qu'en France, la proportion d'élèves ayant des difficultés en mathématiques a augmenté de 16,6\% en 2003 à $22,5 \%$ en 2009. En 2009, les élèves avec des retards de lecture représentaient $7,9 \%$ de la population scolaire alors qu'ils étaient moins de 5\% en 2003.

Jetons à présent un coup d'œil au rapport Pratichihi ${ }^{17}$, publié en 2009, afin de prendre la mesure de la qualité de l'éducation de base en Inde. Ce rapport donne une idée du statut des compétences de lecture des étudiants du primaire du Bengale Occidental (un état de l'Inde dans lequel est né l'auteur de cette thèse et dans lequel il vit actuellement). La fondation

[^10]Pratichi a organisée une enquête sur 322 élèves du primaire des niveaux iii et iv issus de différents groupes sociaux. Le rapport montre que les élèves qui ne peuvent ni lire ni réaliser les opérations arithmétiques les plus simples sont distribués comme suit :

| Catégories | Ne savent <br> pas lire | Ne peuvent réaliser les opérations <br> arithmétiques les plus simples |
| :--- | :---: | :---: |
| Tribus répertoriées (S.T.) | $28,6 \%$ | $48,6 \%$ |
| Musulmans | $24,8 \%$ | $34,7 \%$ |
| Castes répertoriées (S.C.) | $12,5 \%$ | $20,5 \%$ |
| Autres | $8,2 \%$ | $15,3 \%$ |

Table 2. Rapport sur les capacités des étudiants suivant leur castes (résultats obtenus dans The Pratichi Education Report II (2009)).

Selon ces statistiques, les élèves des tribus répertoriées et les élèves musulmans sont davantage affectés dans leurs compétences de base que les autres groupes d'élèves. Nous trouvons une situation comparable dans les collèges de ZEP en France.

Nous pouvons mettre en relation avec la comparaison ci-dessus un rapport de «L'Etat de l'école» ( $n{ }^{\circ} 16,2006$, p. 40) où il était prédit que $20 \%$ des faibles lecteurs de PISA-2006 pourraient décrocher d'ici 2010. Les faibles lecteurs sont les lecteurs dont le niveau a été trouvé le plus bas dans l'évaluation du test d'aptitude à la lecture. Cela signifie clairement qu'il existe une corrélation entre la carence de l'apprentissage des compétences de base et le décrochage scolaire. Snow, Burns et Griffin (1998) ont montré que le problème de la lecture chez les élèves se pose surtout à la période de l'adolescence et peut être prévenu par des dispositions et un enseignement approprié dans les années de la petite enfance. Nous devons également tenir compte du fait que les chercheurs ont constaté des effets négatifs dus au redoublement.

Shepard et Smith (1989) ont étudié les effets du redoublement sur la poursuite des études, l'adaptation personnelle, le concept de soi et l'attitude envers l'école. L'effet négatif de redoublement est plus élevé sur la poursuite des études que sur l'adaptation personnelle, le concept de soi et l'attitude envers l'école. A la fin des années soixante nous avons trouvé beaucoup de redoublement dans le système éducatif français. De 1960 à 2000, de 10 ans en 10 ans, le taux de redoublement au CM2 a été de $52 \%, 45,4 \%, 37,3 \%, 27,7 \%$ et $19,5 \%$, avec une réduction progressive. Dans l'acte du «Droit à l'éducation» ${ }^{18}$, le gouvernement de l'Inde a

[^11]proposé de supprimer le redoublement jusqu'au niveau-8. À cet égard, il nous faudra étudier minutieusement les politiques de redoublement.

Maintenant, citons les résultats de l'enquête PISA 2012 par rapport à la France et l'Inde. La France a obtenu un score de 495 dans la performance mathématique et se classe au $23^{\text {ème }}$ rang derrière Sanghai (Chine) classé $1^{\text {ère }}$ avec 613 points, considérant que la moyenne de l'OCDE était de 494 et la moyenne de E.U.-21 de 496.

En ce qui concerne les résultats de l'Inde, l'Indian Express du 9/3/2012 rapportait que l'Inde s'était retirée de la campagne de tests PISA 2012 en août 2012. Probablement en raison du mauvais résultat, ou de l'impossibilité de fournir une réponse correcte, le gouvernement indien a été contraint d'ajourner le programme à mi-chemin.

En 2009, l'Himachal Pradesh et le Tamil Nadu, deux provinces indiennes avaient pris part séparément à l'évaluation mathématique de PISA, et avaient obtenu respectivement des scores de 331 et 334 pour les élèves du secteur public, contre un score moyen de 419 pour les pays membres de l'OCDE. Ces résultats permettent de conclure à un fort niveau de déperdition des compétences de base pour les élèves indiens, dans le domaine de la mobilisation des connaissances acquises pour les appliquer à un champ pratique.

En raison des tendances actuelles de la modernisation, la science et la technologie devraient sans aucun doute être davantage privilégiées dans les programmes scolaires de tous les pays. Du fait que la France était un pays industriellement développé, différents cursus technologiques ont été introduits dans son système d'éducation bien plus tôt qu'en Inde. Le C.A.P. (Certificat d'Aptitude Professionnelle) et le B.T.S. (Brevet de Technicien Supérieur) ont été établis respectivement en 1919 (loi Astier), et 1959. Au contraire, l'enseignement technique a été introduit pour la première fois en Inde sur la recommandation de la commission Kothari (1964). Dans le domaine des études scientifiques, une discussion détaillée est nécessaire afin de comprendre pourquoi, probablement en raison du manque d'intérêt ou de conseils appropriés, un grand nombre d'étudiants se détournent des études scientifiques, un phénomène qui peut être appelé «décrochage scientifique».

L'éducation reste pertinente tant qu'elle conserve un caractère dynamique. La recherche, les innovations et les activités d'évaluation non seulement enrichissent les connaissances, mais sont également un préalable à leur dynamisme. A un moment où les structures éducatives sont en train de changer dans le monde entier, le profil et les attentes de l'apprenant changent aussi. Cette étude est une tentative pour justifier ce qui devrait être considéré comme une
connaissance dans les structures éducatives, en quelle quantité et comment les connaissances doivent y être transmises, comment l'efficacité du processus d'enseignement-apprentissage peut être améliorée, comment les apprenants avec des capacités différentes peuvent bénéficier d'une prise en charge inclusive. Ce sont des questions qui doivent constamment être explorées et discutées

À cet égard, nous allons prendre en compte les contributions des chercheurs qui ont approfondi et réfléchi sur un ensemble de sujets qui ont un intérêt et une importance particulièrement actuels. Ceux-ci comprennent l'étude de la créativité, l'évaluation, les perspectives historiques de l'apprentissage et de la cognition, la remédiation aux déficits de perception chez les élèves en situation de handicap, l'influence de l'école sur l'élève et les variables qui y sont associées, la réussite des élèves en mathématiques, l'apprentissage d'un comportement responsable envers l'environnement, ainsi que relation entre l'enseignement professionnel et la réussite scolaire et le développement de l'éducation dans l'enseignement primaire.

Dans son $1^{\text {er }}$ chapitre, cette étude explore les différentes théories sociales de l'éducation qui ont été mises en œuvre avec succès dans le système d'éducation de différents pays dans le monde. Ensuite nous passons en revue les grandes orientations de l'éducation en France et en Inde et les changements éducatifs successifs, en les comparant. Dans la mesure où elles sont des agents de contrôle de la société et de la culture, les orientations éducatives d'un pays jouent un rôle important dans la plupart des sociétés et de nombreux problèmes actuels du domaine de l'éducation trouvent leurs racines dans des décisions qui ont été prises dans le passé.

La psychologie est une partie intégrante de l'éducation moderne. Dans cette étude, les personnages et les comportements des adolescents ont été analysés dans la mesure où la relation avec les pairs joue un rôle majeur dans l'apprentissage de l'adolescent, et dans de nombreux troubles du comportement de l'adolescent dont il a été prouvé qu'ils étaient de forts prédicteurs de décrochage.

Dans son chapitre 2 , cette étude se concentre sur la façon dont la définition du décrochage est modifiée par le profil éducatif d'un pays. Pour enquêter sur la cause du décrochage on doit tout apprendre des différents aspects du système éducatif.

Par conséquent, ce chapitre met en lumière les systèmes scolaires de l'Inde et de la France dans une étude comparative, qui est centrée sur la manifestation du décrochage à l'école et
dans la société, ses causes, ses conséquences, sa mesure, sa prévention et sa remédiation. En rapport avec le sujet, des enquêtes ont été organisées, sur la base des mêmes questionnaires dans les années scolaires consécutives de 2010-11 et 2011-12 avec les élèves de $9^{\text {ème }}$ année en Inde et en France, et leurs résultats comparés pour certaines questions.

Dans le chapitre 3, les données des enquêtes ont été résumées et les résultats statistiques exploités pour enquêter sur les causes du décrochage scolaire et de ses remèdes possibles. Dès le début de notre recherche, nous nous sommes demandé si la méthode choisie était adéquate, en raison des énormes différences qui existent entre les deux pays. Un dicton français fait valoir que comparaison n'est pas la raison. Qualitativement et quantitativement, l'Inde et la France semblent franchement incommensurables, nous étions et sommes encore tout à fait conscients de cette évidence.

Quoi qu'il en soit, de nombreuses raisons pourraient être alléguées en faveur de l'utilisation de la méthodologie comparative dans la recherche sur le décrochage scolaire, certaines extérieures au sujet, certaines plus directement liée à lui. En réalité, en ce début du $21^{\text {ème }}$ siècle, l'échelle du pays a cessé d'être la plus adéquate pour discuter des problèmes sociaux, politiques et économiques, qui demandent à être abordés de manière globale afin de recevoir des réponses globales. Ceci est un premier argument externe.

Un deuxième est offert par notre domaine de recherche : l'éducation. En tant qu'il regarde l'esprit humain, et la façon propre à l'homme de transmettre des connaissances, qui fait partie de la culture humaine, il est sans aucun doute aux prises avec des caractéristiques universelles, qui ont déjà été fermement établies par les psychologues et les sociologues, et font l'objet d'enquêtes sur de grandes échelles afin de révéler leur régularité en dépit de la diversité des sociétés et des individus. Même le passage de l'éducation informelle fournie par le contexte familial et professionnel à l'éducation institutionnalisée de l'école, est une caractéristique universelle, qui peut être vécue par chaque enfant qui va à l'école pour la première fois, ou chaque pays qui crée son propre système scolaire.

Parmi les causes internes qui prescrivent la comparaison comme un dispositif de recherche pour étudier l'abandon, il y a d'abord l'histoire des systèmes d'éducation, qui est différente pour chaque pays et affecte les politiques d'éducation. Ensuite, nous avons l'environnement géopolitique et l'histoire des migrations, qui permettent d'expliquer les caractéristiques plus spécifiques et les mutations; et enfin, la méta-recherche sur les
dispositifs de recherche, les résultats étant en fonction de faits observés, mais également des outils utilisés.

Ajoutons que, pour un chercheur en sciences de l'éducation qui se consacre à l'étude de l'Inde, l'Inde résume et réunit les deux types d'arguments. Le pays est si vaste, diversifié et peuplé que l'on ne peut pas se familiariser avec lui sans comparer les états, les populations et les cultures qui le constituent. En conséquence, les résultats des innombrables enquêtes évaluations entreprises dans ce but ont besoin à leur tour d'être collectées, comparées, croisées, et mis en perspective les uns avec les autres. Bien sûr, le même traitement est exigé par la France, comme tout autre pays, mais semble moins évident.

Voilà ce que nous nous sommes efforcés de faire dans la présente étude, à la recherche moins de fait nouveaux que de nouvelles façons de partager les connaissances sur les faits, pour autant que nous restons convaincus que la recherche sur le décrochage scolaire a besoin d'un effort collectif de tous les pays, et mérite une place spéciale dans la coopération bilatérale, tel qu'elle existe entre l'Inde et la France.

## Chapter 1

## Trends of education system and dropout problem in the context of France and India

### 1.0. Introduction

The term 'education' indicates a social transformation ${ }^{19}$ (L'évolution pédagogique en France, 194-197, 198-201). In a second sense it refers too to a social institution, an interesting topic for the study of sociologists. This includes teaching of formal knowledge such as reading, writing, and arithmetic, as well as teaching other things such as morals, values, and ethics. Education prepares young people to entry society and is thus a form of socialization.

Emile Durkheim pointed out the educational systems as a reflection of underlying changes in society because these systems are constructed by the society, which naturally seeks to reproduce its collectively held values, beliefs, norms, and conditions through its institutions. Thus, as time unfolds, the educational systems come to contain the imprint of past stages in the development of society, as each epoch leaves its imprint on the system. By uncovering these imprints and analyzing them, the development of a society can be reconstructed from the beginning.

Sociologist James Coleman, in a classic study done in 1966 and known as "Coleman Report", looked at the performance of over 150,000 students and found that student's background and socioeconomic status were much more important in determining educational outcomes than the differences in schooling resources, such as per pupil spending. He also found that socially disadvantaged black students benefited and did better in school when they were in racially mixed classrooms rather than black only.
B. Bernstein's "On the classification and framing of educational knowledge" (Power and ideology in education, 1977, 85-115), was a seminal contribution to the study of educational

[^12]institutions as agents of cultural transmission. He considered that there are three major concerns of researches working within the interpretative framework: curriculum, pedagogy and evaluation. Curriculum defines what counts as a valid knowledge, pedagogy defines what counts as a valid realization of knowledge and evaluation defines what counts as a valid realization of this knowledge in the learning of students.

Bandura (1977) and Hill (2002) in their social learning theory established a neobehaviorist approach of the learner. They pronounced the traditional behavioral views on learning incomplete as they ignore about the social influences on learning. For social cognitive theory, both internal and external factors are important. Personal factors and behaviors are seen as introducing to the process of learning. For cognitive theory, internal and external factors are equally important. In this theory all the three factors, i.e. personal, social and behavioral, are constantly interacting each with other. Here is a graphical model of representation of the relations between the three major factors:


Figure 1. Representation of the relations between the three major factors influencing learning (from Bandura 1977 and Hill 2002).

The above figure shows the interaction of person, environment and behavior in learning settings (Schunk, 1999). Social factors like models, instructional strategies or feed-back (elements of the environment for the students) can affect student's personal factors such as goals, sense of efficiency for the task attributions (beliefs about causes for success and failure) and process of self-regulation such as planning, monitoring and controlling distractions.

Now let's discuss about the globalization of education. The appointment of international commission on education for the $21^{\text {st }}$ century by UNESCO ${ }^{20}$ was the landmark which gave direction to the emerging scope of education. In the conference of UNESCO (1996), some recommendations were given under the titles: 'Learning: The treasure within', 'Learning to become' and 'Learning to live together'. Consequently in next study we are trying to find out the root causes of the dropout's problem by initiating the discussion upon what is education in a broad sense and by collecting findings and outcomes of researches upon educational systems.

### 1.1. Education in a broad sense

The word 'education' is derived from a Latin word "educere" which signifies "to drive to" and is originated from sanskrit ${ }^{21}$ "vidya", which means "learning". "Educate" means "to draw forth from within". This was largely displayed in the teaching methods of a Greek philosopher, Socrates, Plato's teacher. In this regard, the famous observation of Swami Vivekananda ${ }^{22}$ should be mentioned: "Education is the manifestation of perfection already in man. Like fire in a piece of flint, knowledge exists in the mind. Suggestion is the friction which brings it out".

Socially determined learning and training ultimately provide with benefits both individuals and society. It is formally designated as conventional or formal education. But the education received from institution for the purpose of educating children is not the totality of education phenomena. Nature is the man's earliest educator. In course of primitive man's struggle for existence, man acquired the art and science of adjustment, which is education. Eventually education may be classified by its nature as follows:

[^13]- (A) formal or conventional type of education,
- (B) informal or unconventional type of education.

A student grown up within the school environment needs also informal education to develop him physically, mentally, socially and emotionally and become a perfect man of the future. Rousseau ${ }^{23}$ (1712-78), the famous philosopher, brought revolution in the field of education. In his essay Emile (1762), he urged that children should be given sufficient freedom and scope of play in their education. He believed that nature teaches a child in its own way. Rousseau's another contribution was to divide the ages of childhood in several divisions and clarify the psychological needs of child.

Another renowned philosopher of France was Voltaire (1694-1778). He also believed that nature controls a lot of factors in children's education. But, opposing Rousseau, he was a defender of arts and sciences as improving human nature and capacities. He argued for an extension of education, hoping greater literacy would free society from ignorance (www.biography.com/people/voltaire). In Wordsworth, we find Rousseau's well-known fundamental tenets. He had the same semi mystical faith in the goodness of nature as well as in the excellence of the child and his ideas on education were almost identical. Wordsworth's evaluation was that "nature provides us ample opportunities to connect with those wellsprings of wisdom inside us that may have become obscured by daily preoccupations" ((www.bartleby.com > ... > William Wordsworth).

Education reflects the character and the socio-political, cultural and economic condition of a country. There is diversity among the different education systems, but today, in the time of globalization, countries are coming closer to each other by sharing or exchanging the latest trends and theories of education. So it is inevitable to discuss the problems of education system through interaction and interconnection between the different countries. Education is a continuous process. From the beginning of civilizations and of human history, it has continued to develop, diversify and extended its reach and coverage. Every country should

[^14]use its resources to develop its education system in order to express and promote its unique socio-cultural identity as well as to meet the challenges of the time. As human body gets nourishment from food, educational nourishment similarly must reach to all sections of people, irrespective of class, caste, sex, religious faith, social status, so that they might be civilized, become sensible human beings, who set a high value on life. By "education", we generally mean learning imparted from books in any institution by conventional ways of learning. This is a narrow definition of education. Some famous quotations have been added regarding the connection of education and growth of society (source book: 'Education in India' by J.P.Banerjee, p. 458):
-"What sculpture is to a block of marble, Education is to the soul" (Joseph Adams, 16911761);
-"A teacher affects eternity he can never tell where his influences stops" (Henry Adams, 1838-1918);
-"I like a teacher who gives you something to take home to think about besides home work" (Edith Ann, 1874-1956).

From the views of the above mentioned Indian and western educationists, philosophers and pedagogists, it can be summarized that the education should be viewed in a broad sense, which has a vast impact on society and country, and here we have synthesized what should be the aims of education in broad sense:

- Education is that which, by creating necessary conditions, brings out the perfection that is already in man.
- Education prepares one for a specific skill necessary for living, by utilitarian and specialized instruction and training.
- Education is a process of development from childhood to adulthood.
- Education is a general process through which personality is shaped and expressed.
- Education is that which helps the individual to achieve improved adjustment.

Now before discussing the problematic in the field of education, it is necessary to view the theories of education and their contribution to educational research.

### 1.2. Research in education and its findings

Over the last generation, educational research has succeeded, coming from the humblest margins of the social sciences, to occupy a central position in sociology, as well as to receive considerable attention from economists, historians, and anthropologists. A parallel growth in the use of the research for educational policy making has been no less evident. To attempt a general appraisal of this branch of scholarship and its application, is to embark on a formidable task, not only because of the sheer volume of the relevant literature, but also because we write at a time when the relation between thought and political action is an unusual if not unprecedented bone of contention.

In the research process, researcher needs a sufficient knowledge of various kinds of research processes and their products. In the present case the needed knowledge is distributed on three academic disciplines: philosophy of science, history of science and research methodology. The research procedure of most academic disciplines follows the dictates of the scientific method in many instances; only tools of research are different. The biologist gathers data by way of microscope; the sociologist does likewise through questionnaire. From this stage, the basic procedure of each is the same, to process the data, interpret them and reach a conclusion based on actual evidence. So before going to the research work of this study we should get the knowledge of eminent sociological theories of the past, and of theories which have contributed recently in education field.

From $17^{\text {th }}$ to $19^{\text {th }}$ centuries, there were full of evolving social and economic ideas. Our views upon the social structure of urban society came about through the development of ideas taken from the past revolutions. As the Industrial Revolution progressed throughout the world, so did the gap between social classes. The development of a capitalist society was a very favorable goal for upper classes. By using advanced methods of production introduced by the Industrial Revolution, they were able to earn a substantial surplus by ruling the middle class, thus improving their way of life, while the middle class's one was exploited and degraded. At this time in history, social theorists like Emile Durkheim and Karl Marx challenged the aspect of social structure in their works.

Emile Durkheim, who is known as a functionalist, states that everything serves a function in society and his main concern is to discover what is that function. On the other hand Karl Marx, a conflict theorist (J. Karbel \& A. H. Halsey, 1977, 28), stresses that society is a
complex system characterized by inequality and conflict that generate social change. The classifying of schools and traditions of thought inevitably conducts to oversimplify a complex social reality, but it is also indispensable to coherent exposition. Our remarks on the outstanding trends, theories, and preoccupations of recent works can therefore be grouped under the following headings:

| (1) Functionalist theories of education |
| :--- |
| (2) Economic theory of human capital |
| (3) Methodological empiricism |
| (4) Conflict theories of education |
| (5) New sociology of education |

Table 3. Classification of the outstanding trends, theories, and preoccupations in researches of education.

## (1) Functionalism

It is the oldest, and still the dominant theoretical perspective in sociology and many other social sciences. This perspective is built upon twin emphases: application of the scientific method to the objective social world, and use of an analogy between organism of the individual and society. The emphasis on scientific method leads to the assertion that one can study the social world in the same ways as one studies the physical world. Thus, functionalists see the social world as "objectively real", observable with such techniques as social surveys and interviews. Furthermore, their view concerning social sciences assumes that study of the social world can be value-free, in that the investigator's values will not necessarily interfere with the disinterested search for social laws governing the behaviour of social systems. Many of these ideas go back to Emile Durkheim, the great French sociologist, whose writings form the basis for functionalist theory. Durkheim was himself one of the first sociologists to make use of scientific and statistical techniques in sociological research (1951).

The functional theory concluded that education serves many important functions in society.

- First, it socializes children and prepares them for life in society. This is not only done by teaching "book knowledge," but also teaching society's culture, including moral values, ethics, politics, religious beliefs, habits, and norms. We have seen before that disadvantaged
black students benefited and did better in school when they were in racially mixed classrooms rather than black only classrooms. This ignited controversy still continues today.
- Second, education provides occupational training, especially in industrialized societies such as the United States. Unlike in less complex societies or in the United States prior to 1900 when most jobs and training were passed on from father to son, most jobs in the United States today require at least a high school education, and many professions require a college or post-graduate degree.
- Third, among the major theoretical perspectives which have different views and interactions on education, the functional theory peculiarly insists upon the third function that education serves, which is social control and regulation of deviant behavior. By requiring young people to attend school, this keeps them off the streets and out of trouble.


## - (2) Human capital theory

Theodore W. Schultz, an American economist, Nobel laureate in 1979, introduced "Human capital theory" in 1961. The core thesis of the human capital theory is that peoples' learning capacities are comparable to other natural resources involved in the production process. When the resource is effectively exploited, results are profitable both for the enterprise and for society as a whole. From its inception in the United States, the human capital theory suggested that education or training raises the productivity of workers.

Education imparts useful knowledge and skills, and raises workers' future income by increasing their lifetime earnings (Becker, 1964; Becker and Mincer, In J. Karabel, \& A.G. Halsey (Eds.), Power and ideology in education, 1977). This theory provides an explanation which links investment in training and workers wages. It also draws a crucial distinction between general education and firm-specific training. Over the past thirty years or so, hundreds of studies have been conducted to estimate Rates Of Return to Education (RORE). Most such studies show that formal schooling is a crucial factor in explaining variations of salary and wages in well developed countries (Cohn \& Addison, 1998).

The following chart flow shows that vocational training and on-the-job training combined with formal education system tends to improve resources of human capital, resulting in the increment of wages for the individual and ultimate benefit for the G.D.P. of countries:


Figure 2. Representation of the improving resources of human capital under three factors.
Comparative studies have been conducted in some less developed countries, focusing on investment in formal education (Psacharopoulos, 1985; 1994). While formal education has expanded rapidly in many countries, a large portion of human capital accumulation in the forms of on-the-job training and other modes for working adults actually takes place both inside and outside the workplace. The adult education development in developed countries in recent years has focused on a strengthening of vocational training to meet the needs of skill development across all occupational strata in the global economy (Belanger \& Tuijnman, 1997). Studies realized in some developing countries find that a mix of education and training is proper for skill acquisition and that there are multiple paths to skill development for a given occupation (Middleton, Ziderman, \& Adams, 1993; Ziderman \& Horn, 1995). A study of education provision in Shenzhen (China) shows that both on-the-job training provided by firm and adult education financed by employees offer substantial means to develop vocational technical skills (Xiao \& Tsang, 1994). They provided education and training to about 2.07 million of head counts versus the workforce of 2.5 million during the period of 1980-1996 (Xiao, 1998 a: 13). Given that education and training programs for working adults have experienced significant expansion, it is important that they can be included in estimations of returns to education and training. These Chinese researchers' paper attempts to estimate the effects of formal education, on-the-job training, and adult education both on employee's performance and salary growth with data from a survey conducted in Shenzhen in 1996 (Xiao \& Tsang, 1999).

From this, one can say that, if school's dropout causes the distortion of student's human capital, education system of a country should build strategies including 'vocational training' and 'adult learning' to prevent dropout. In 2009 the government of India adopted some new
'vocational training programs'. In these schemes students are provided training after standardviii and standard-x. Similarly in the same year, French education department constructed a bunch of remedies for the prevention of student dropout (Bulletin Officiel du Ministère de l'Éducation Nationale, 2009, n ${ }^{\circ}$ 23, 4 juin).

A similar model was chosen by a special committee set up by Abu Dhabi education council. They found in their recent research work that the conventional education system had failed to extend the number of the pupils. More than one in three Emirati adults in the capital had not completed high school education, and those who wanted to return to school (for tertiary education) were discouraged by the existing learning environments (Report of 'The national' newspaper of Abu Dhabi in 13/12/2011). Thus, special courses for adult education and training have been organized by government.

## - (3) Methodical Empiricism

Empiricism is the logical consequence of positivism for research process, a study based on observation or experience rather than theory or logic. Halsey's 'action research' program (1972) in British educational priority areas was very much similar to the empirical method. Methodical empiricism has made a considerable contribution to the advancement of educational research especially on the problem of schooling and social inequality (J. Karbel \& A.H Halse, 1977, p.18). When researchers embark on a research project, they have to decide what knowledge to produce and how to produce it. So they need to know what kinds of knowledge products are required and what kinds of research processes can be used (Kantorovich, 1993, p.11; Singleton, Straits \& Straits, 1993, p.18). For example, when Ohm embarked on his famous research project to find the empirical law of electric current variation with voltage, he had to be aware that people need empirical laws, and that empirical laws can be produced by means of inductive research processes. Similarly, when Darwin embarked on his famous research project on the theory of evolution, he had to be aware that people need theories, and that theories can be established by means of deductive research processes.

Therefore, by analogy with manufacturing management, researchers need knowledge of different types of research processes and of knowledge products. Since this is knowledge about knowledge, it may be called 'meta-knowledge'. For convenience of access, all our meta-knowledge should be concentrated in a single academic discipline. But that is not the case. Instead, our meta-knowledge is scattered across three different disciplines, namely History of Science, Philosophy of Science and Research Methodology.

## - (4) Conflict theory of education

According conflict theory, society is the seat of a struggle for dominance among social competition groups (classes, genders, races, religions, etc.). The primary cause of social problems, according to the conflict theory's perspective, is the exploitation and suppression of subordinates by dominants. This theory is very much influenced by Karl Marx's 'capitalism theory'. School in the society ${ }^{24}$ might be a powerful agent of socialization, if power is transmitted from strongest groups to the others. Many conflict theorists demand that school can reduce inequality without broader change in the society.

The conflict theory looks at the disintegrative and disruptive aspects of education. Its theorists argue that education is unequally distributed through society and is used to separate groups (based on class, gender, or race). Educational level is therefore a mechanism for producing and reproducing inequality in our society. According to the conflict theorists, educational level can also be used as a tool for discrimination, such as when potential employers require certain educational credentials that may or may not be important for the job. It discriminates minorities, such as working-class people - those who are often less educated and less likely to have credentials because of the discriminatory practices within the educational system.

## - (5) New sociology of education

Keddie's (1971) article "Classroom Knowledge" (in J. Karbel \& A. H. Halse, 1977, p. 53) is an excellent expression of the interests of the 'new' sociology of education, which, in its search for processes involved in the production of academic failures, "looks simultaneously at teacher-student interaction, the category used by educators, and the organization of the curriculum". Careful observation of teachers both inside and outside the classroom reveals that the concepts they hold, though often in contradiction with their aims as educationalists, influence their relation with people in the classroom.

For example, the teacher is going to vigorously deny that ability is associated with social class and, then proceed in concrete cases to suggest the most intimate relation between social background and academic capacity. The concept of normal people in a given ability enables

[^15]the teacher to categorize students about whom he has little direct knowledge and, accordingly, to treat identical students' behaviors in a radically different fashion depending upon the category in which the students are placed. What counts as knowledge when suggested by an A (high ability) pupil may be dismissed as error or incomprehension in the case of a C (low ability) pupil. The differential treatment of pupils categorized in different abilities is, in turn, facilitated by a system of streaming (exchange between high ability pupil and low ability pupil) that provides students with readily available labels. The internal structure of the school is thus shown to be closely related to a process of categorizing pupils which conditions interaction between student and teacher. Through the use of interpretative approach, Keddie, (N. Keddie, Classroom knowledge, 1970) is able to show how the educators' socially constructed concepts systematically influence their behaviors in the classroom. The outcome is "the differentiation of an undifferentiated curriculum" (N. Keddie, The organization of classroom college, 1971, p. 143), and it is clear from Keddie's account that the nature of the differentiation impedes academic achievements of lower-stream and lower-class students.

Close to the new sociological approach, or even considered as part of it, the symbolic theory of education focuses on interactions during the schooling process and the outcomes of those interactions. For instance, interactions between students and teachers can create expectations on both parts. The teacher begins to expect certain behaviors from students, which in turn can actually create these very behaviors. This is called the 'teacher expectancy effect'. For example, if a white teacher expects a black student to perform below average on a math test when compared to white students, over time the teacher may act in ways that encourage the black students to get below average math scores.

There are a number of historical analysis of educational change in Durkheim's L'évolution pédagogique en France (1969), but perhaps the most remarkable is Durkheim's examination of the social basis of pedagogical ideals during the Renaissance. He closes his analysis of educational change during the Renaissance by this assertion "a pedagogical transformation is always the results and the sign of a social transformation that explains it" (translation: une transformation pédagogique est toujours la résultante et le signe d'une transformation sociale qui l'explique), (Émile Durkheim, L'évolution pédagogique en France, p. 131). In the field of education of modern world, the evolution of educational theories corroborates this idea, but also her contrary: if the idea spread out, she can change the society. Education then becomes factor of social change.

### 1.3. Significance of the historical background in the educational systems

The current trends of education of a country reflect the life of the nation. To realize current trends of education, one has to read the ancient history and find about revolutions and changes of the education system of the country. Education also expresses the present values, demands and needs of life. Moreover she shows the path of life in future. Mobilisation or evolution are expected in the education system of any country according to the modern education trends. A crisis arises when a conflict happens between static and decadent culture on the one hand and the dynamic demands of life on the other hand, between spiritual and material bases of life, between tradition and progress, between system and values. Problems of education emerge through gaps left by historical development of society and education. History solves many of such problems but simultaneously new questions arise. The root of many of our current problems of education can be discovered in the developmental history of education. This justifies including a section about 'history of education' in this current study. So in our next comparative study we will discuss the matters, dividing them in four stagesAncient, Mediaeval, Modern, and Recent period of education in France and India.

### 1.3.1. Indian education from ancient to modern period

The Ancient Education in India was rich and glorified. The period indicated by some historians takes place from 2000 B. C. (which is the beginning of the Vedic period ${ }^{25}$ ) to 1500 A. D. The Ancient Indian education system was the Aryan education's one which emphasizes upon spirituality mixed up with non-Aryan achievements in arts, aesthetics, constructive excellence and emotional exuberance, all representing the distinctive culture and education character of the ancient India. Gurukul or Asramik schools were one of the special features of the ancient education system in which the student stays in his teacher's house throughout his education period to achieve knowledge and other life skills. Gurukul schools had their annual calendar and their daily working time-table. Working days, study hours, time and methods were pre-fixed. Natural calamities, inauspicious phenomenal signs or other reasonable grounds led to suspension of studies for the day. As 'Gurukul' was the salient feature of the Hindu education system, 'Vihara' was the special character of the learning institution of Buddha throughout India. In the ancient period, education, culture and religion were much

[^16]interrelated each with other. The Brahmanic education (representation of Hindu culture) was mainly composed of four parts: Vedas, Brahmana, Aranyakas and Vedanta. There were six parts in Vedanta named: Siksha (phonetics), Jyotisha (astrology), Kalpa (law and rituals), Chhanda (the science of rhyme), Niructa (etymology) and Vyakarana (grammar). The Brahmanic education was the perimeter of the religious, social, political, economic and environmental conditions of Vedic-Brahmanic Indian life.

With Hindu religion, Buddhist culture and education were also flourishing in that age. Hiuan-Tsang (602-664 A. D.), the most famous of the Chinese pilgrims in India, witnessed the co-existence of Buddhist and Brahmanic learnings in India. The University of Taxila (the oldest university in the world) and the University of Nalanda were two world's famous educational institutions representing hindouist and buddhist cultures and educations of those days. One of the salient results of the ancient education system in the field of mathematics was the invention of 'decimal', 'zero' and 'algebra'. Ayurveda was the first concept of medical treatment by medicinal plants introduced by Charak. Susruta was the pioneer of plastic surgery. The Vedic age is specially credited with the freedom it had granted to women. They enjoyed the privilege of receiving education. The learned women of Vedic age were called 'Brahmavadinis'. Vedic India produced a host of mythological characters such as 'Sabitri', 'Gargi' and 'Maitreyee'. In late Vedic period 'Upanishad' was the main source of knowledge, and the language of study was Sanskrit.

Now we will give some references from the book Education in India (published by Central library, $15 / 3$ Shyma charan de street, Kolkata-700073, p. 95) about the unique achievements of the ancient education system of India in the field of medical science.

Lord Ampthill (Education in India, p. 95) said that the Hindu sastras contain also a sanitary code, and that Manu, the great law giver, was the greatest of sanitary reformers ever since. William Hunter ${ }^{26}$ commented: "the Materia Medica of the Hindus embraces a vast collection of drugs belonging to the mineral, vegetable and animal kingdoms, many of which have now been adopted by European physicians'".

Sir W. Hunter said also that the Hindu medicine is an independent development. Arab medicine was founded on the translation from the Sanskrit treaties made by command of the

[^17]Khalif of Bagdad (950-960 A.D). European medicine down to the $17^{\text {th }}$ century was based upon the Arabic and the name of 'Charaka' repeatedly occurs in Latin translations of 'AbuSina', 'Abu-Rasi', 'Abu-Sirabi.'

Prof. Weber disclosed that in the Vedic period animal anatomy was evidently thoroughly understood, as each part has its own distinctive name (p. 95, Education in India).

The Buddhist education was introduced by Ashoka ${ }^{27}$ (304-232 B.C) in Karnataka (India). Muslim and British Aggressions initiated mediaeval period of education in India, just as in France the mediaeval education was initiated by foundation of large number of church schools. In India 'Shales' or temple schools were established between 954-1141 B.C. Md. Ghori, founder of Delhi (1194), who initiated Sultana-Dynasty, was also the founder of school in India. Sultana Rizia (1236-1240) established 'Muizzi’ college. Nasiruddin (1246-1266) founded a college in Jalandhar. Giasuddi Balban (1266-1287) established a royal library. Babar's (1526-1530) 'Shuhrat-i-am’ (public works department) published gazettes and built schools. Firoj Saha Tuglok (1351-1388) sent his 12,000 slaves to a vocational training. Akbar (1556-1605) decided that arts and science curriculum would be revised and emphasised on mathematics and astrology. Aurangajeb (1659-1707), the Muslim ruler, ordered to spread Muslim culture and education throughout India. From $15^{\text {th }}$ to $18^{\text {th }}$ century, Sanskrit learning institutions were enriched in Nadia (West-Bengal, India). In 1853 the British Parliament, for the first time, instituted an inquiry into the state of Indian education. This resulted in the famous Wood's Dispatch of July 1854, proposing the establishment of Universities at Calcutta, Bombay and Madras whose functions were to hold examinations and to code degrees. The dispatch enunciated as aim of education the diffusion of the Arts, Sciences, Philosophy and Literature of Europe. It laid down that the study of Indian languages was to be encouraged and that English language should be taught wherever there was a demand for it. It also recommended that a number of high schools should be set up for mass education.

For Indian education and culture, $18^{\text {th }}$ century, which was in Europe Age of Enlightenment, was perhaps the age of darkness. At this time, Muslim rule was disintegrated and East India Company had not yet been established fully. The result was an unprecedented political chaos and confusion.

[^18]The Bengali Raja Ram Mohan Roy ${ }^{28}$ (May 22, 1772- September 27, 1833) was indicated as a pioneer who brought 'Renaissance' in Indian education. He was a social, religious and educational reformer who challenged first traditional Hindu culture and indicated the line of progress for Indian society under British rule. French "Société Asiatique" elected him in 1824 to an honorary membership. Ram Mohan viewed education as a tool to implement reform. He believed that students should learn English language and science for modernisation and to cope with the latest changes in education field around the world. At his own expense he established an English college in Calcutta in 1815. He also criticised the government's policy opening only 'Sanskrit colleges'. The government agreed his decision after his death. He also emphasised to increase the importance of subjects like Mathematics, Geography and Latin in the curriculum. 'Gaudiya- Byakaran' (grammar) written in Bengali is the best of his prose works. Later, Rabindranath Tagore and Bankim Chandra Roy followed his foot-steps.

### 1.3.2. Ancient to modern educational trends in France

In the ancient times France was part of the Celtic territory known as 'Gaule'. Its present name is derived from the Latin 'Francia' which means the country of Franks. According Corbeill (2001, p. 261) ${ }^{29}$, "modern education and pedagogical strategies in the west can be traced at least as far back as the days of the ancient Greeks and Romans. The traditions of discussion and debate were core features of classical education, first elevated by the Greek philosophers and then overlaid with Roman ideas". The earliest known European educational system derived from the education system of ancient Greece. So the education systems of ancient Greece and Rome are the preliminary indicators of future education systems of Europe. Some historians ${ }^{30}$ have divided the ancient times of Europe-civilisation as following:

- Archaic period: 800 B. C. to 500 B. C.
- Hellenic period: 500 B. C. to 300 B. C.
- Hellenistic period: 300 B. C. to 50 A. D.

[^19]In the archaic period, development of the Greek language was flourishing. During $5^{\text {th }}$ to $4^{\text {th }}$ century B. C., education in Greece was private (except in Sparta). Anybody could open a school and decide the curriculum. But the education system of Sparta was completely different. At the age of seven, boys were taken away from home to live in military barracks. The famous school of Plato: Academy (428-348 B. C.), was established in the classical period. In the early Roman society, before $6^{\text {th }}$ century B. C., children were taught by their parents at home. Mothers taught her sons before the age of seven. Girls were taught by their mothers about housework (spin and sew). Later, from $2^{\text {nd }}$ century B.C., Romans adopted some principles of Greek education. They started to send their boys and some girls in schools at the age of 6-7. Students learned to read, write and count in school. At the age of 12-13, boys of elite society went to 'Grammar schools', where they studied Latin, Greek, grammar and literature. At the age of 16, some boys went to study in 'Rhetoric schools' to become orators, but poor students could not prepare their studies, as the education was not free.

In Golden age many renowned prose writers like Cicero (80-43 B. C.), Augustine (27 B. C. to 14 A. D.) and poets like Virgile (70 to 19 B. C.) established their fame in the area of language and literature. Silver age (14-120 A. D.) came after Golden age. The influence of Rome as a country made Latin the common language of southern and eastern Europe (giving further Italian, French, Spanish, Romania and Portuguese). In 768 A. D. emperor Charlemagne was crowned as king of Franks. He established a 'palace school' and invited and imported many educators from different parts of world. So Charlemagne was the first to introduce a widespread education system in France although it was mainly restricted within elite society, and was religious in nature. Medieval period extended from 840 to $15^{\text {th }}$ century in France.

During $11^{\text {th }}$ century various church schools were established. In $13^{\text {th }}$ century Paris University "La Sorbonne" was formed. The year 1436 was marked by the invention of printing press by Gutenberg. Renaissance worked as a bridge between medieval to modern education in Europe. During Renaissance, a large number of humanists made their immense contribution in education, art and culture, music, painting and quickened the modern era in Europe. Renaissance (named from "re" = "again", and "naissance" = "birth") played an important role for the modernisation in Europe. Its first centre in Europe was Italy.

In 1539, French replaced Latin as an official language of Europe. Many urban protestant schools were established (1541). The first Jesuit College was established in 1556. The French Renaissance covers various stages from the invasion of Italy by Charles VIII in 1494 to the murder of Henry IV in 1610. Many artistic, literary and technological developments arrived in France from Italian Renaissance, such as the early exploration of new world. Renaissance kept flourishing in France but unfortunately the French war of religion between Huguenots and Catholics did immense harms to the country.

### 1.3.3. Comparative study of Indian and French education from ancient to modern times

When comparing both countries, we see that 'Indian Renaissance' flourished at least two centuries after Europe or France, that is at the middle of $18^{\text {th }}$ century. In India, Akbar was the first Muslim ruler who attempted to bring some renovation of the education system of India in science, language and mathematics. But most of the Muslim rulers wanted to restrict the process of Hindu learning. On the contrary they wanted to spread Muslim education and culture in their ruled territory. Under the British rule, a first effort (Wood's dispatch) was made to build a so-called curriculum in order to make the natives experienced civil servants who can perform a clerical job. In brief, although India was enriched by different cultures, it was not successful in capturing the inheritance of its unique ancient education, especially in the field of science and technology until $18^{\text {th }}$ century.

In the first phase of mediaeval period we see the influence of religion dominance over education both in France (Catholic Church) and India (Hindu temple, Muslim mosque, Buddhist sangha). But Jesuits were banned from France in 1685 after a financial scandal. In 1762 veterinary school of Lyon was established, it was a secular institution. In 1791 church schools were closed. In 1793, the French Revolution made primary school free and compulsory until the age of 13 . High school in France was created in 1802. After the first republic, Napoleon made a comprehensive change in education system of France. He formed "lycées" which were separate for boys and girls. The curriculum of boys' lycées was extensive in comparison to girls' lycées. It comprised Ancient languages, French, Mathematics, Physics, History and Logic. So equity of education in gender was not sustained at the time of Napoleon's ruling. In 1828 first nursery school started. "Baccalauréat" written examination first started in 1841.

### 1.3.4. Comparative study of modern Indian and French educations

According to some historians, initiation of modern education was launched by Jules Ferry (1885-1914) in France and by W. W. Hunter (1880-1882) in India. The main incidents happened in the field of education after $19^{\text {th }}$ century were as follows.

In France, Jules Ferry introduced secular and free education with the laws called by his name in 1881 and 1882. In 1889, "École maternelle" (quite different from German 'kindergarten', as involving real learning) made its first appearance. In 1896, decision was taken to construct one university by academy. In 1905 church was separated from state by Combe's law. C.A.P, Certificat d'Aptitude Professionnelle, first diploma from secondary school for vocational education, started from 1911. In 1936, the age of compulsory education extended from 13 to 14. And B.T.S., 'Brevet de Technicien Supérieur', first diploma from university for vocational education, was created in 1959, the same year the French president Charles de Gaulle decided to extend the compulsory education to 16 .

In India, Hunter commission (1884) in a report of Indian education department urged that 'the mother tongue should be the medium of instruction, and education should be secular in government school'. The most remarkable act of the commission was in the field of qualitative development of primary school. Vedic college of 'arya samaj' was established in Lahore (1886). In 1902 there were 145 colleges and 5 universities, increased to 231 colleges and 12 universities in 1931. Sadlar commission (1917-1919) was built to facilitate the teaching and research in higher level. Hartog committee (1929) first drew attention raising the question of wastage and stagnation in the field of Indian education during British rule. It was found by the "all India women's education conference" (1927) that only $2.5 \%$ girls were in school and only $3 \%$ women were literate throughout the country. The "National education movement" started in this period in two stages, first in Bengal (1905-1907) and secondly (1920) throughout India. The movement started as a protest against Curzon's decision of 'university commission', which demanded that further no new university would be build in India. As a result of this national movement, several non-governmental educational institutions were established.

In France, Falloux's ${ }^{31}$ law came in effect from 1863, with a creation of elementary separate girl schools. Secondary school for girls was established in 1867. In 1872 ten thousand students were studying in France. In the same period, British parliament, for the first time, instituted an enquiry into the state of Indian education. This resulted in the famous Wood's dispatch of July 1854, proposing the establishments of universities of Kolkata, Bombay and Madras, and the building of sufficient high schools for the mass. In a brief, the education system of France in this stage had undergone through a successful revolution by setting technical schools (C.A.P. /B.T.S) and also increased number of students enrolment in gross (40,000 students in 1911 and 75,000 students in 1936). In India before independence, the movement and revolution of education was hampered due to the educational policy and national movements. In 1921 the total number of national schools in India was 1349 with enrolment strength of 78,571.

### 1.3.5. Education trends since recent decades

We will now look at the recent educational trends after the formation of fifth 'French republic' (1958) and independent India (1947). While comparing the current educational trends of both countries, one can see many significant changes and reforms which we will show from 1950 to 2006.

- 1950-1960: During this decade in France, B.T. ('Baccalauréat Technologique') was created in 1951. Massification in education happened and compulsory education extended to 16 years in 1959. In the same year 'Debré's law' came into effect in which state made a contact with private educational institution. In 1960, Modernization Act of agricultural education created agricultural colleges and schools ('collèges et lycées agricoles' in French).

After India's freedom in 1947, some abrupt changes have been brought in order to construct a new planning for the renewal of old English adopted education system. Mudaliar commission ${ }^{32}$ was formed in 1952. In its recommendation, the pattern of traditional education system was transferred to $5+3+4$ (primary+ secondary+ higher secondary) systems. It was the second committee which worked after University commission (Radhakrishnan) in secondary level since India got freedom.

[^20]1961-1971: In France, a new pattern of higher secondary was created: collège from 11 to 15 age groups, and lycée from 16 to 18 age groups. The School map ("carte scolaire") was formed in 1963.

The Creation of I.U.T ('Institut Universitaire de Technologie') in 1966 was another remarkable event. The 'Baccalauréat technologique' was created in 1969.

In India, after Mudalior commission, the biggest of all India education commissions: Kothari commission ${ }^{33}$ was formed in 1964. They recommended 4 years of lower and 3 years of higher primary, 3 years of lower and 2 years of higher secondary. Kothari commission made its recommendations in every possible sector of Indian education, and most of which were executed by Indian government.

- 1972-1982: In France, the creation of the D.E.U.G ('Diplôme d'Études Universitaires Générales'), diploma certifying the first two years of university, happened in 1972. Haby's law ${ }^{34}$ came into effect in 1975. The Z.E.P. ('Zones d'Éducation Prioritaire’) were established in 1982 to support schools in socially deprived areas.

In India a new syllabus for primary school began in 1981. New education policy was published in $20^{\text {th }}$ August, 1985 .The $6^{\text {th }}$ education plan came to effect from 1980 to 1985.

- 1985-2000: In France, the 'Baccalauréat Professionnel' was created in 1986. Due to democratisation and easy access to the university, the number of students' enrolment increased ( $31 \%$ bachelors of total students in 1986 converted $62 \%$ in 1998). But the number of students' dropout ( 54,000 in 1997) increased apprehensively from 1995. The double cycle of college is converted in three-cycles ( $6^{\text {ème }}$ : cycle d'adaptation, $5^{\text {ème }}$ and $4^{\text {ème }}$ : cycle central, $3^{\text {ème. }}$ : cycle d'orientation) in 1994.

In India, in five years (1992-1997), the number of students' enrolment increased comprehensively in all the levels of education (from primary to secondary).

[^21]| Students increase (in millions) | 1991-92 |  | 1997 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Boys | Girls | Boys | Girls |
| Primary (1-5) | 10.09 | 4.24 | 10.53 | 5.05 |
| Upper primary (6-8) | 3.44 | 1.30 | 6.11 | 2.97 |
| Total: Elementary (1-8) | 13.53 | 5.54 | 16.64 | 8.02 |

Table 4. Students increase in India from 1991 to 1997 (from India: Report: Part II: Analytic Section - UNESCO, http://www.unesco.org ).

Elementary education extends from standard-i to standard-viii in which there are two gradations (primary and upper primary). Hence the total number of students existing in primary and upper primary level equals to the total number of students in elementary level. The above statistics prominently indicate the percentages of boys and girls enrolment in education system. Girls' participation is more or less $50 \%$ against boys in primary level. But we observe that in upper primary level, girls' participation reduces to $1 / 3$ of boys in 19911992. Then in 1997, it climbs to about $50 \%$ of boys. This clearly indicates that the percentage of girls' participation has been increased in proportion to boys in upper primary level in 1997 compared to 1991-1992.

We observe from above statistics a clear picture of Indian education, firstly the increase of girls' enrolment in primary, then the reduction of dropout in primary and elementary school. But the huge rate of girls' dropout from primary to elementary education caused headache to education department. D.P.E.P. (District Primary Education Programme) was initiated in 1994 for a wider and equal spread of primary education.

- 2000-2010: By the "revival of priority education", sufficient Z.E.P. "collèges" were provided in France. New curriculums were adapted in ' 91 ', ' 95 ', ' 02 ', ' 05 ', ' 06 ' and in ' 08 ' in primary school, and ' 95 ', ' 99 ', ' 01 ', ' 05 ', ' 06 ' and ' 09 ' in secondary school.

In India, "Sarbo-Siksha-Avijan" (S.S.A.) started in 2007 with the aim to reduce the dropout rate in elementary level. "Midday meal Scheme", a program providing free lunch to students, also started for the same goal in 1960s, extended to most of the states in 2001. Some
good results have been already recorded in the field of student's dropout from some recent statistics of education department.

In this comparative study we observed some evolutionary changes with the chronological increase of education. France has to always remember Napoléon for his great effort to establish a new trend in education for elite society, although he was criticized for his discriminant outlook for girls' education.

In Indian field of studies, we must remember contributions of some eminent personalities, without which India could not have achieved a respected position particularly in higher studies. Let us quote few names of some renowned educationists, reformers or administrators.

Warren Hastings established the Madrasa of Calcutta in 1781 for the development of Muslim society. In the other part, to develop the culture and education for Hindu society, the Sanskrit college of Varanashi was established by Jonathan Duncan in 1792.

Iswar Chandra Bidyasagar (1820-1891) was the first to compose books for primary studies in Bengali. He paid a great contribution to female studies. He paid also an immense contribution to widows' marriage, and gave himself an example by marrying his own son with a widow. In 1854, Charles Wood prepared a dispatch on an educational system for India which came to be called the "Magna Carta of education" in the country. According to Wood's scheme, the government needed to spread Western education through English language in higher education but vernacular primary schools should be set up in rural areas. Another recommendation was a grant-in-aid system to encourage the involvement of private enterprises. A department of public instruction was also recommended for each of the 5 provinces. Universities were set up in Calcutta, Bombay and Madras. Teachers training colleges and promotion for the education of women were two other major remarkable proposals of Wood. Most of the submitted proposals were implemented during the British period.

Rabindranath Tagore (1861-1941) was the founder of two unique institutions, devoted to experimental education: Santiniketan (for all type of theoretical studies and fine arts) and Sriniketon (in the field of technical studies).

Mahatma Gandhi (1869-1948) developed his views about education in adopting "Buniyadi Shiksha" (Basic education) for elementary stage education after the freedom of India.

Rishi Arabinda Ghosh (1872-1950) synthesized through his writings eastern and western educations and philosophies of his time.

Swami Vivekananda (1863-1902) was a leading thinker in the field of modernization of Indian education. His ideas on education were much more modern than those of educationists prevailing of his period. He laid special stress on technical education and industrial training which have become an essential part of education of modern India.

Maulana Abul Kalam Azad (1888-1958) was the first education minister of independent India. He was also the first to raise the issue of the National System of Education which is today the bed-rock of the National Policy on Education (1986) updated in 1992. The concept implies that, up to a given level, all students, irrespective of caste, creed, location or sex have access to education of comparable quality. All educational programs, he said, must be carried out in strict conformity with secular values and constitutional framework. He stood for a common educational structure of $10+2+3$ throughout India and for a right to Education Bill. He also sought to make free and compulsory education a fundamental right. Today's "Right of Children to Free and Compulsory Education Act" or "Right to Education Act" (2009) was the successful implementation of the thinking of Maulana Kalam Azad.

Dr. Sarbapalli Radhakrisnan (1962-1967) was the second president of India. He was a great philosopher and made a considerable contribution in the field of Indian education. His birthday is celebrated as "Teachers' day" in India.

The first commission in independent India was the University commission (1948-49), which decided a bunch of proposals for modernization of higher studies in India. Mudaliar commission (1952-53) is regarded as the first secondary education commission appointed by the government of India in $27^{\text {th }}$ September under the leadership of A. Lakshmanaswami Mudaliar, former vice-chancellor of Madras University. Mudaliar commission put forward the idea of multipurpose school and recommended the $8+3$ pattern of secondary education. General education for all was proposed up to standard-viii, and for the next three years it was divided into three streams: science, arts and commerce.

The pattern proposed by Mudaliar commission has been in effect up to 1976. Then it was changed according the opinion of Khotari commission. In view of increasing national development and building up a truly democratic society, the government of India considered the necessity of a survey and examined the entire field of Indian education in order to realize a well-balanced and integrated system of national education capable of making a powerful contribution to all aspects of normal life. A commission was appointed under the chairmanship of Dr. D. S. Kothari. This commission decided an implementation of the pattern $(10+2)$ of secondary education system of India still enforced.

To conclude this study of the history of education in both countries, it can be obviously said that the modernisation of education began much before in France than in India. This comparison shows huge disparities regarding the evolution from ancient to recent educational trends of the two countries. At the time of medieval period, Europe was the centre of various educational and cultural movements. The Renaissance initiated from Italy emphasized this progress. The 'Indian Renaissance' or movement for modern education started much later, in the middle of 18th century, the gap being of more or less 200 years.

### 1.3.6. French-Indian relationship concerning education

A collaboration of France and India on a comparative study of school dropout would be very much interesting because democracy and priority in elementary education are common factors to both countries. To perform a successful study, it is necessary to consider the bilateral relations in general and within the scope for an Indian students' enrolment in the area of higher studies in France and vice-versa.

The relation between France and India started to grow up when the French East India Company bought Pondichéry, a small coastal village, from the sultan of Bijapur in 1673. French missionaries rapidly joined the tradesmen, and began to develop educational efforts. But after a mortal contest with British, French East India Company restricted its activity mainly to South India (Mahé, Karikal, Madras and Pondichéry) and Chandannagar. It has been reported that this company established efficient secondary school to impart liberal education and also recruited Portuguese and Indian teachers.

In 1947 France established diplomatic relations when India achieved independence. Both countries negotiated the peaceful transfer of Pondicherry and the other enclaves to India, which was completed by 1954.

In 1998, French President Jacques Chirac made a high-profile visit to India, expressing his desire to build an "ambitious relationship," Chirac saluted India as "a nation which has affirmed its personality on the world stage". In January 2008, French President Nicolas Sarkozy visited India and was the chief guest at India's Republic Day parade. Sarkozy expressed a desire to be able to visit India each year. In September 2008, Indian Prime Minister Dr. Monmohon Singh made a major visit to France that led to the establishment of Indo-French trade in nuclear technology.

With the globalisation in the field of higher studies, scope has been increased for the students in international exchange programme. India and France also agreed to intensify cooperation in the field of culture and scientific research. In 2005, the Indian institute of management (E.M.M.A) of Amedabad and a business school of Paris (E.S.S.E.C) signed a double degree agreement programme. In 2008, in a joint statement of both countries, it has been announced that would be established (1) one "Indian culture centre" in Paris, (2) international laboratories, (3) one Indo-French university. This educational collaboration facilitates the study of students in the field of technology and enhances the exchange of students in educational sectors. In E.M.M.A programme since 2004, 1200 Indian students have been selected to pursue their educational programme in Europe. In Maharastra, Tamilnadu and Chandannagar (in West Bengal), students of secondary and higher secondary level can learn French as first or second optional subject. In some south states, students prefer to learn French as a second language instead of Hindi, considered as more difficult. Moreover, there are at least three grand French lycées in major cities of India (Mumbay, Pondichéry and Bangalore). It is a signal for the increase of students in the field of exchange study program.

During the visit of France's president in December, 2010, in India, bilateral relations grew. In the field of collaboration in higher education, research, and Science and Technology cooperation, much has been improved. Through a M.O.U (Memorandum Of Understanding), the India-France educational exchange programme has been established more firmly, providing Indian students with more scholarships. Memorandums were signed between Indian

Institutes of technology of Khargpur, Bombay, Chennai, Kanpur, Delhi, Guwahati and Roorkee, and Paris Tech, a consortium of 'Grandes Écoles'; and between IIT- Bombay and the "Groupe des Ecoles des Mines". A research programme in higher studies has also been proposed with the Telecom Institute of Paris. A M.O.U. on Indo-French collaboration establishing an Indian Institute of Technology in Rajasthan is being finalized. The number and scope of M.O.U. signed between Indian and French Universities and private institutions has crossed the 300 marks in several disciplines including new ones (heritage conservation, digital archiving etc.) for students and faculties exchange. A M.O.U. has been signed during the visit of President Sarkozy in December 2010, between Grenoble 3 University and IGNOU (Indira Gandhi National Open University) in Delhi, for promoting the study of French language.

This same year, a number of scholarships has been offered by the French government to Indian students for studying French language, science and technology, industrial training, hotel Management, Public Administration, Fine Arts, Mass Communication, etc., and the number of Indian students studying in France has gone up to 2200. French authorities have provided land for extending the 'Maison de l'Inde' in Paris.

In the year 2011-2012, 2550 Indian students came to France. The framework for bilateral educational cooperation is provided by the Educational Exchange Programme (EEP), which includes mutual recognition of degrees, bolstering the research programme and increasing student-scholar research mobility through a flexible visa regime signed in 2007 by Joint Secretary, Department of Higher Education, Ministry of Human Resource Development and Secretary, Cooperation and Culture, French Ministry of Foreign Affairs (MFA). In January 13, 2012, India and France have decided to set up a virtual institute for applied mathematics in order to take up joint research projects in the area. An agreement to set up the virtual institute has been signed between the Department of Science and Technology and the National Centre of Scientific Research (CNRS) of France. The new initiative will benefit from the participation of six institutes for India led by the Indian Institute of Science (I. I. Sc), Bangalore. The University of Toulouse will be the leader institute for France. Besides the initiative in mathematics, both sides also signed agreements to renew cooperation in the field of immunology and informatics ${ }^{35}$.

[^22]At the beginning of 2013, UBIFRANCE, the French trade commission in India informed some new bilateral collaborative programmes which are as follows:

1. The French and India Nuclear Energy 2013 summit on November 27 to 29 will bring together more than 30 high-performing French companies from the nuclear sector. The French agency for international business development in partnership with the G.I.I.N. (French Nuclear Industry Association).
2. UBIFRANCE would organize a dedicated event on Indian internal security on the IFSEC exhibition which will be held from December 4th to 6th 2013 in Delhi (India Expo centre, Greater Noida).

From the above discussion one can realise how the social reforms influence the educational reforms and strategies of different countries and how the current status of education systems of India and France achieved a modernization followed by the different historical stages of evolution, i.e. ancient, mediaeval and recent.

In his article 'Importance of history' (2001-02), David Crabtree, (msc.gutenberg.edu) explained that discussion of history in education is important because it helps us to understand the existing system of education. Analyzing the history, we can come to a sound understanding of the past that will tell us much about the problems we now face. And we can better appreciate the most specific features of the different social systems inherited and their consequences upon education.

India and France have a first common point: they are modern democracies and both experienced a revolution which conducted to question established social order, and to remove the most flagrant privileges and injustices, France at the end of $18^{\text {th }}$ century, India two centuries later.

If we want to trace the root cause about the current reservation policy of minority and caste system in India, we have to analyze the social system of 'Arya samaj'. In ancient era, there were four divisions of populations named Bramhin, Khatrya, Baisha and Sudra. Those who belong to the Sudra caste (i.e barber, cobbler etc.), had no right on education, they only served the upper three classes. After independence, Indian government constructed some constitutional rights of reservation for them in government service and in educational field for
their upliftment and bringing them in the mainstream. In France, the great revolution of 1789 has brought the so-called "Abolition des privilèges" and imposed new universal values such as liberty, equality and fraternity, and also, for the first time, secularity ("laïcité"), typical of the French exception until our days, making the national principle surpassing and preserving the liberty of faith for all.

Hence the second common point between India and France appears to be their interest in free and compulsory education for all, and their willingness of making participate in national development people left behind such as women, and underprivileged minorities. But due to the difference of surface and of geographical and historical features, the realization of educational programs faced specific obstacles.

Indian subcontinent is divided in various states and each state has its own mother language and cultural traits. Unlike French education system, Indian education policies are under the responsibility of state and central joint venture. This is the reason why the Indian education system lacks uniformity as different states inculcate different policies and curriculums especially in primary education. Instead, French educational system has often deserved blame for undervaluing local cultures and preventing provincial languages from being handed down.

A third common point between the two countries is the excessive students' dropout, related both to democratization of education and to social needs of a vocational training. Excessive students' dropout in the education system arises a question mark on the planning of the specific education system and deficit of successful evolutionary progress. For globalization and modernization of an education system, theoretical knowledge should to be channelized in practical field. In this regard, introducing vocational courses to increase participation in school is a long standing feature of education policy of France. For example in early 1960 , nearly half of all secondary school students were enrolled in vocational courses (Delion, 1973, "School dropout and completion", Lamb, S. 2011, www.springer, com).

After independence of India, first implementation of vocational education in large scale has been introduced in 1974 in the recommendation of Kothari commission, but instead of giving special emphasis on the area's demand it was most of the time restricted to some common project (as making soap, wooden manufacturing, etc.).

Recently (2009-10), Indian government has introduced a broad curriculum reform. Technical or vocational courses have been introduced in the curriculum as supplementary branches to the mainstream of education system (i.e. agriculture, fisheries, electrical, etc.). This system already existed in the early part of the past century in French education system in the form of CAP (1911) or BT (1959).

Poverty, population explosion, deficit of social consciousness and improper implementation and application of educational planning are the root causes of excessive student's dropout in India. In France, although the status of student's dropout problem is not as acute as in India, still it is not less than the average dropout rate of E.U. Like other joint ventures, serious and frequent discussions should be commenced between India and France about various educational policies, curriculums (where sufficient cultural diversities should be explored through education) and students' dropout, so that both countries might benefit from this exchange program.

### 1.4. Factors influencing education system

Learning in an education system does not take place in isolation; rather it is extended in a mandatory way according to the advancement of the society, which must ensure that all learners receive an adequate educational environment, and an economic and emotional support. The mission for every school should be to educate students to equip them to become "knowledgeable, responsible, socially skilled, healthy, and contributing citizens" (Greenberg et al., 2003, Facing the school dropout dilemma, www.apa.org ).

Conger \& Elder (1994) and McLoyd (1998) determined that high-SES (Socio-Economic Status) students show higher average levels of achievement on test scores and stay longer than low-SES students (Woolfolk. A., Educational psychology, 2004, publisher: Pearson education, Singapore, p.158). As a third world country, India has a huge deficiency in fundamental educational infrastructures. Here we are trying to incorporate a comparative analysis of the SES-factors to detect their effect on education.

### 1.4.1. Some basic features which influence the education system externally

| Topics | India | France |
| :--- | :---: | :---: |
| 1. Population | 1.21 billion (2011census <br> report) | 65 million (2011) |

Table 5. Comparison of population, educational budget, and G.D.P, between France and India (from http://data.worldbank.org/indicator/NY.GDP.PCAP.CD and wikipedia).

The above discussed comparison represents a huge disparity between the two countries regarding the main factors (i.e. population, educational budget, and G.D.P) which contribute to construct a successful teaching environment in the education system of a country. India is a thickly populated country and its educational budget is considerably low compared to France. Its teacher/ student ratio is not enough satisfactory to bring a good environmental support for the students in the education system.

Let's discuss now, minutely some basic features of school systems, influencing the overall growth of illiteracy and dropout, and resulting in unemployment in both the countries.

### 1.4.2. Some basic features which influence the educational systems internally

The demonstration below proclaims that a French student has to spend long hours of a working day in college (lower secondary school in India) compared to an Indian student, and that an Indian student has to attend more school days in a year than a French student. Indian schools are rarely co-educational schools (except central board school as C.B.S.C and I.C.S.C), while all schools of France became co-educational schools in 70's. The most alarming cause of the learning deficiencies of the students in India might be the teacher student/ratio. Sometimes it is so inadequate and irrational that one can realize why personal guidance for students becomes quite impossible for teachers, and why ultimately a big
number of students are constrained to leave school with severe learning deficiencies, having being deprived of suitable response to their needs.

| Topics | India | France |
| :--- | :--- | :--- |
| Compulsory education | 6 to 14 years | 6 to 16 years |
| School hours (in college in <br> France \& lower secondary <br> level in India) which run in <br> day | 11 a.m. to 4-30 p.m. | 8a.m. to 5 p.m. |
| Recess hours within school <br> hours | Half an hour between 1 p.m. to 2 p.m. | Two hours from <br> 12 p.m. to 2 p.m. |
| Types of school in gender <br> basis | Single-sex schools (31,623, 40,034) are <br> more numerous than co-educational <br> schools (9, 59,339), statistics of 2002, <br> www.ncert.nic.in | All <br> coeducational. |
| Teacher/students ratio ${ }^{36}$ | $1: 25$ | $1: 40$ or more |
| Holidays in a school calendar <br> year | 65 days | 117 days |

Table 6. Comparison of basic features regarding education between France and India (from en.wikipedia.org/wiki/Secondary_education_in_France, and Education system in India, www.schome.ac.uk).

The irrational teacher/student ratio in India compared to France is mostly the main barrier to set a good academic environment in most of the government sponsored education institutions. Before going to the root of problem (i.e. student's dropout), we need to recall elaborately the educational aims of each grade in the education systems of both countries.

### 1.4.3. Hierarchy of Indian education

The constitutional right of India lays down that all the educational planning and strategies are built under the jurisdiction of State (province) and Indian government in a joint venture. Secondary education in India is composed of 5 academic years (equivalent to college level of education in France which extends to 4 years starting from $6^{\text {ème }}$ to $3^{\text {ème }}$ ) and higher secondary

[^23]education which extends to 2 academic years (corresponding to the 3 years of the 'lycée' in France).

Pre- Primary: Children between 3 to 5 years study in nursery (pre-primary) school. It is split in two levels, lower kindergarten and upper kindergarten. At this stage pupils are experienced to the knowledge of school life and are taught to read and write some basic words. This stage is equivalent to the French "école maternelle".

Higher studies of university education consisting of graduation and post-graduation.


Higher secondary (11 and 12) in the ages of 16 and $17^{\text {th }}$.


Secondary (9 and 10) in the ages of 14 and $15^{\text {th }}$.


Upper primary level (6 to 8) in the ages of 11 to $13^{\text {th }}$.


Lower primary ( 1 to 5 ) in the ages of 6 to $10^{\text {th }}$.

Table 7. Hierarchy of Indian education system.
Primary: Primary education in India ${ }^{37}$ extends to five years from standard 1 to 5 . Students from 6 to 11 ages study in the classes from $1^{\text {st }}$ to $5^{\text {th }}$ standard, which correspond to French "école élémentaire". Students preparing their studies from standard-6 to 8 levels belong to upper primary level. In Indian situation, students' dropout is calculated on the basis of upper primary. According to the view of Indian education system, all strategies against dropout are composed aiming at upper primary level, because the dropout rate decreases in a considerable range after standard class-viii.

[^24]Secondary: $9^{\text {th }}$ and $10^{\text {th }}$ standard education levels are generally recognized as secondary education. In this level students are offered the same curriculum for all, as in French "college".

Higher Secondary: In this grade level, students study in $11^{\text {th }}$ and $12^{\text {th }}$ standard. In France this level of education is called "lycée" and extends from $2^{\text {nde }}$ to Terminale (3 years).

Undergraduate: Through this stage a student goes in higher education, which terminates in college. There are different streams in undergraduate courses and this diversification depends on the subject selection accessed by the students for the continuation of their studies. For medical students, this stage is for four and half years plus one year of compulsory internship, while a simple graduate degree can be attained in three years. In French education system once a student successfully passed the "baccalauréat", he is allowed to access university. Graduation (corresponding to French licence and British bachelor's degree) is the first step of university education, which is composed of 3 years courses. Some students go in a different stream after secondary education choosing a technical field. This takes 2 years corresponding either to CAP or BEP in French education system. In France, students with highest results can be admitted in "classes préparatoires aux Grandes Écoles". French "Grandes Écoles" are attained through a very selective entrance examination at the end of the second year of "classes préparatoires". Some of them as "École Polytechnique", "École Centrale or École Nationale d'Administration" are internationally renowned. They are very selective and admit very few students issued from low economical power classes.

Postgraduate: After completing graduation a student may opt for post-graduation for further education. Higher Education in India provides an opportunity to specialize in a field and includes technical schools (such as the Indian Institutes of Technology), colleges, and universities. In India, there is much diversity in the nature of schooling and their controlling authorities are as follows:

- SSLC (Sishu Siksha Learning Center), in which the vast majority of Indian schoolchildren are enrolled, which runs under the control and supervision of state government;
- Central Board of Secondary Education (CBSE);
- Council for the Indian School Certificate Examinations (CISCE) board;
- National Open School and International schools. These schools mimic the schools in the West in pattern and syllabus and are considerably more expensive than regular schools. According to the latest Government Survey undertaken by NUEPA (National University of Educational Planning and Administration) in the 2005-2006 academic sessions there were 1,124,033 schools in India. For 2010-11, data received were of 1.36 million schools spread over 637 districts across 35 States \& UTs. Pre-primary education in India is still not a fundamental right, with a very low percentage of children receiving preschool educational facilities. The largest source of pre-primary education in India is Integrated Child Development Services (ICDS).

In the absence of significant government provisions, private sector (reaching to the relatively richer section of society) has opened schools. There are two stages in kindergarten named lower kindergarten (LKG) and upper kindergarten (UKG). Typically, in a LKG class, children aged 3 to 4 years are taught.

A UKG (upper kindergarten) class receives children aged 4 to 5 years. After finishing upper kindergarten, a child enters in Class-1 (Standard-1) of primary school. Kindergarten is often an integral part of regular schools. Younger children are also put into a special Toddler/Nursery group at the age of $2-2 \frac{1}{2}$. It runs as part of the kindergarten. However, "crèches" and other early care facilities for the low privileged sections of society are extremely limited in number. There are some organized players with standardized curriculums such as the Shemrock Preschools (India's first play school), which concern a very small share of the population. Overall, the percentage of student's enrolment in pre-primary classes in India was of $58.13 \%$ in 2011, according to the World Bank (www.tradingeconomics.com ).

If we compare with French pre-primary education we found that according to the information of September 2005, (www.understandfrance.org) 70\% French children are admitted in pre-primary at the age of 2 , and $100 \%$ at the age of 3 .

During the $8^{\text {th }}$ five-years educational planning of India, the target of universalization of elementary education was divided into three broad parameters: Universal Access, Universal Retention and Universal Achievement, i.e. making education accessible to every children, making sure that they pursue education and finally achieve goals. As a result of education programs, by the end of $2000,94 \%$ of Indian rural population had at least one primary school within one kilometer and $84 \%$ had upper primary schools within 3 km . Special efforts were taken to enroll SC/ST (Schedule Caste and Schedule Tribes) and girls in the school. Enrollment in primary and upper-primary schools has been considerably increased since the
first five-year plan. In 1950-51, only 3.1 million students had enrolled for primary education. In 1997-98, this figure increased to 39.5 million. The number of primary and upper primary schools was 0.223 million in 1950-51 and this figure was converted into 0.775 million in 1996-97.

In $2002 / 2003,82 \%$ of children in the age group of $6-14$ were enrolled in school but a target of $100 \%$ students' enrolment has been set by the government of India at the end of this decade. To achieve this goal, Government of India launched Sarva Shiksha Abhiyan to provide help for the dropout students. S.S.A is a comprehensive government scheme to maintain midday meal and every scheme which has been related to education system of India since 2001. Intervening to prevent dropout, Government of India has taken several schemes as:

- Committee for creating parental awareness;
- Impulse Community mobilization;
- Economic incentives;
- Announcement for minimum Levels of Learning (MLL);
- District Primary Education Program (DPEP);
- National Program of Nutritional Support to Primary Education (Mid-day meals Scheme);
- National Elementary Education Mission;
- Media publicity and advocacy plans.

The $86^{\text {th }}$ Constitutional Amendment Act was passed by the parliament to make the Right to Elementary Education a fundamental right and a fundamental duty. However, the poor infrastructures especially in the remote village schools in India are credited with having maintained a high dropout. DISE (2005-2006), represents an apprehensive situation regarding poor infrastructures of education which is a barrier to set up a progressive education planning for the future. Let's represent some salient features of the status and drawbacks of Indian education according to the statement of education department.
$9.54 \%$ of the schools remain single classroom-school and $10.45 \%$ schools lack any classroom. The average pupil teacher ratio for the Country is 1.36 , with significant variations to the upper end. $8.39 \%$ schools are single teacher schools and $5.30 \%$ schools have more than 100 children for each teacher. $30.87 \%$ schools lack female teachers. Only $10.73 \%$ schools have a computer. Although in this century, the education system has undoubtedly undergone
through significant progress, a lot of needs have still to be subsidized to enhance the learning of children from scheduled caste (Dalit) families, scheduled and primitive tribes and religious minorities. Girl's enrolment in school still continues to lag behind that of boys, while availability, primary and upper primary schools have to be extended or created. Access to higher education remains a major issue in rural areas (especially for girls).

Government high schools are usually taught in regional language, although some (especially urban) schools use English medium. These institutions are heavily subsidized. Even study materials (such as textbooks, notebooks and stationery) are seldom subsidized. Government schools follow the state curriculum. There are also few private schools providing secondary education. These schools usually either follow the State or the national curriculum. Some top schools provide international qualifications and offer an alternative international qualification, such as the IB program or A Levels programs. Recently, the Constitution (Eighty-sixth Amendment Act, 2002, inserted article 21-A in the Constitution of India) has ensured for free and compulsory education all the children in the age group of 6 to 14 years as a fundamental right in such a manner that the State, by law, must protect the right to education of a child. Amendment of the Right of Children to Free and Compulsory Education (RTE) Act, 2009, represents the consequential legislation envisaged under Article 21-A. It means that every child has a right to get full time elementary education of satisfactory and equitable quality in a formal school. RTE has implemented right of children to free and compulsory education till completion of elementary education in a neighborhood school; and right of children to "free and compulsory education".

Act clarifies 'compulsory education' as meaning obligation of the appropriate government to provide free elementary education and ensure compulsory admission, attendance and completion of elementary education to every child in the six to fourteen age group. 'Free' means that no child shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing elementary education. Besides it demarcates the duties and responsibilities of appropriate Governments, local authority and parents in providing free and compulsory education, and sharing of financial and other responsibilities between the Central and State Governments. And it lays down the norms and standards relating inter alia to Pupil Teacher Ratios (PTRs), buildings and infrastructure, school-working days, teacher-working hours.

Act provides the provisions to admit a child to an age appropriate class. It declares for a rational deployment of teachers by ensuring that the specified pupil teacher ratio is maintained for each school, rather than just as an average for the State or District or Block, ensuring that there is no urban-rural imbalance in teacher postings. It provides for appointment of appropriately trained teachers, i.e. teachers with the requisite entry and academic qualifications. It also provides for prohibition of teachers for non-educational work, other than decennial census, elections to local authority, state legislatures and parliament, and disaster relief.

Act prohibits (a) physical punishment and mental harassment; (b) screening procedures for admission of children; (c) capitation fee; (d) private tuition by teachers and (e) running of schools without recognition.

Act ensures about the construction of curriculum in consonance with the values enshrined in the Constitution, and which would ensure the all-round development of the child, building on the child's knowledge, potentiality and talent and making the child free of fear, trauma and anxiety through a system of child friendly and child centered learning.

Article 21-A and the RTE act came into effect on $1^{\text {st }}$ April 2010. Let's hope that with the implementation of this RTE-act, India will make significant progress confronting all the problems intellectually.

### 1.4.4. The different educational levels of France

Since a long era French education system is reputed to be one of the oldest and famed in the world. It's a highly centralized and organized system. Jules Ferry (1832-1893) at the time of the third republic (1870-1940) is considered as the pioneer who built the 'so-called' true foundation of French education system. He implemented free and compulsory education for all and moreover brought secularism in education.

From 1959, free and compulsory education was implemented from the age of 6 to 16. In France, the definition and planning of educational policy is the responsibility of government, except for 'the fundamental principal of education' determined by the law voted by the parliament. French education system is based on three major principles: compulsory schooling up to 16 years of age, free public service, and non-denominational teaching (according to the 1905 law separating church and state, schools are to be neutral and non-
confessional). The basic principles governing general educational policy are set out in the 1989 framework law, which considers that education is a national priority. It fixes a number of principles governing school and university life in all its aspects, the functional and training of staff, the operation of schools and universities and the assessment of education system. In French education system every child is entitled to attain a state school from age 3 up to the age of $16^{\text {th }}$, but school is mandatory only from the age of 6 .
Indeed, most children attain nursery school quite often from the age of 2 (in this case they attain nursery school for four years). French nursery school called "école maternelle" is divided in three grades named "les petits", "les moyens" and "les grands". Mostly oriented in the first years as a play-school, it becomes at the end a real pre-primary school, preparing to acquire academic knowledge. Curriculum includes first steps of reading, writing, numeracy, world, nature and foreign languages' discovering.

### 1.4.4.1. The three degrees of French educational system

French education system is one of the oldest and reputed in world- which means also very traditional and attached with ethnic pride. It's also one of the most highly centralized and organized. As most of educational systems it presents three divisions:

- First degree: from nursery school to lower secondary school (that is from "maternelle" to "college").
- Second degree: corresponding to higher secondary level, in France "lycée".
- Third degree: post - secondary and university level, including in France, "université" and "grandes écoles".

Until 2007-08, the elementary school ("école élementaire") lasts for five years with three different consecutive levels of grades and concerned age groups:

- Primary course (CP) in the age of 6 years,
- Elementary course (CE1 and CE2) in the age of 7 and 8,
- Middle course (CM1 and CM2) in the age of 9 and 10.

Nowadays primary schools are divided in two cycles: Basic learning (CP, CE1) and Consolidation (CE2, CM1 and CM2).

Secondary education of France (collège and lycée) lasts for seven years starting from "sixième" ( $\left.6^{\text {ème }}\right)$ to "seconde" $\left(2^{\text {nde }}\right)$.

From $6{ }^{\text {ème }}$ to "Terminale", grades are counted in the reverse order as $6,5,4$ etc. Collège (lower secondary level) is composed of four classes: $6^{\text {ème }}, 5^{\text {ème }}, 4^{\text {ème }}$ and $3^{\text {ème }}$. French collège session starts from early September and runs until the end of June. School day starts from 7.55 to 5-30. There is a lunch break from 12 to 2 P.M. Each school day consists of ten periods except Wednesday which is a half school day. In France, students have to face many unit tests which are generally counted off 20 marks. The "bulletin trimestriel" is a card reporting results which is sent to parents at the end of each of the three annual terms. "Conseils de classe" composed by teachers, administrators and representative of students and families, meet at the end of each term, discussing about students' progress and allowing them to be moved up to the next class. Twice a year parents can meet with teachers. First at the beginning of September or October parents meet in a class with the teachers and before or after Christmas parents get another chance to meet the teacher individually. 'French' and 'Math' extra classes ${ }^{38}$ are organised for students with learning difficulties. 'Levels of three stages education, ${ }^{39}$ are highly centralized with a nationwide curriculum, imposed by the ministry of education, which ensures national uniformity. Even private schools follow a curriculum similar to state organised educational institutes.

### 1.4.4.2. Learning aims and objectives in Mathematics (from Maternelle to Lycée)

L'école Maternelle (nursery school): is not a compulsory part of formal education but most of the French kids join nursery school at the age of 2. The children in Maternelle acquire social and manual skills through games, drawing, storytelling, acting, music and other related activities. Introduction to the letters of the alphabet and handwriting begins in the final year of Maternelle. Then children become eligible to enter primary section.

Here are the following sections of nursery school:

| Name of grade | year | Age group |
| :--- | :---: | :---: |
| Petite section | 1 st | $2-3$ years |
| Moyenne section | 2 nd | $4-5$ years |
| Grande section | 3 rd | $5-6$ years |

Table 8. The three sections of the French nursery school.

[^25]Curriculum of "écoles maternelles" focuses on initial learning, exploration of the child's environment, manipulation and play being the main activities. Five main objectives have been set out:

- 1. Language at the heart of learning.
- 2. Live together.
- 3. Act and express oneself with the body.
- 4. Discover the world.
- 5. Sensitivity, imagination and creation.

There are no 'real mathematics' taught at 'école maternelle' but young children get in a mathematical way of thinking. They build their first knowledge about numbers, geometrical shapes and magnitudes and get acquainted with structuring space and time. The activities they are involved with also contribute to develop logical thinking in terms of comparing, classifying, organizing and using symbols. Numbers become a tool for checking quantities and remembering them. First learning about numbers takes into account results of numerous research works in psychology and didactics.

Children are taught the verbal numerical chain (at least up to 30) and use it to count things. Since 2010, the skills acquired at "école maternelle" are assessed by teachers with a list of tests provided by the Department of education. Pre-math skills evaluated included in the objective 'Discover the world' are: 'Discover shapes and sizes' (Découvrir formes et grandeurs), 'Approximate sizes and numbers’ (Approcher les grandeurs et les nombres) 'Locate in time' (Se repérer dans l'espace), 'Locate in space' (Se repérer dans le temps).
"L'école primaire" (primary school) : is for children aged 6 to 11 years and equivalent to the grade of 1 to 5 in U.S.A school and 2 to 6 grade in U.K. It is transitory between nursery and lower secondary stage. The grade levels of primary are:

| Name of grade | Year | Age group |
| :--- | :---: | :---: |
| Cours Préparatoire (CP) | $1^{\text {st }}$ grade | $6-7$ |
| Cours Élémentaire 1 (CE1) | $2^{\text {nd }}$ grade | $7-8$ |
| Cours Élémentaire 2 (CE2) | $3^{\text {rd }}$ grade | $8-9$ |
| Cours Moyen 1 (CM1) | $4^{\text {th }}$ grade | $9-10$ |
| Cours Moyen 2 (CM2) | $5^{\text {th }}$ grade | $10-11$ |

Table 9. The five sections of the French primary school.

In primary section children are taught ${ }^{40}$ French (reading, writing, grammar, vocabulary, spelling and expression), Mathematics, Science and Technology, History and Geography, Civic education, Artistic expression and Physical education. In CE1 and CM2, students sit for a country wide national assessment on French language, Sciences and technology and mathematics, conducted by teachers in each school. They use for that the test-books CE1 and CM2 provided by the Department of education, with a large part devoted to math exercises. Near the end of CM2, children are asked for their pre-inscription form for college. Since 2011, the test has been separated from pre-inscription, in order to assess skills more precisely. At the time, the minister of education, Luc Chatel, explained that it has been done to avoid confusion between assessment and examination. At the end of CM2 (consolidation) students should have acquired the following mathematical skills:

- 1. Exploiting numerical data: At the end of cycle-3, pupils must be able to solve most problems involving the four operations on integers, addition and subtraction of decimal numbers by an integer;
- 2. Integers: The main aim of this stage is that the students can do basics of decimal numeration and basic arithmetic (finding double halves, quadruples, quarter and recognize multiple of 2 and 5).
- 3. Fractions and decimal numbers: Fractions are defined with the reference to the division of a unity, $4 / 3$ is describe as 'four times the third of the unity';
- 4. Space and geometry: Using tools like ruler, set-squire and compass, students should learn triangle, square, rectangle, rhombus and circle.
"Le Collège" (lower secondary school): receives pre-adolescents aged 12 to 16 years and equivalent to the grade of 6 to 9 in U.S.A school and 7 to 10 grade in U.K. It is transitory between primary and upper secondary stage. The grade levels of "Collège" are:

| Name of grade | Year | Age group |
| :--- | :---: | :---: |
| Sixième (6 ${ }^{\text {ème }}$ ) | 1st | $11-12$ |
| Cinquième (5 $\mathbf{5}^{\text {ème }}$ ) | 2 nd | $12-13$ |
| Quatrième (4 $\mathbf{4}^{\text {ème }}$ ) | 3 rd | $13-14$ |
| Troisième (3 ${ }^{\text {ème }}$ ) | 4 th | $14-15$ |

Table 10. The four sections of the French lower secondary school.

[^26]At the beginning of their session students received their schedule and meet all their subject teachers. Usually there are different teachers for each subject. One is called Professor Principal (teacher advisor). Parents have to sign in different aspects in the beginning of the year (as about students mid-day lunch in school, conveyance, need to be present or not at the beginning or ending in school if class is not provided for the students). At the beginning of Sixième ( $6^{\text {ème }}$ ) a central national assessment is organized and the end of Troisième ( $3^{\text {ème }}$ ) there is a national examination (Brevet) which is not compulsory and allows the students to access the gateway in next grade level (Seconde), which is the first level of Lycée. From the last year of collège ( $3^{\text {ème }}$ ) students have to choose for their further studies between technical class (Formation Professionnelle) or traditional lycée.

At the end of Troisième ( $3^{\text {ème }}$ ), following knowledge in Mathematics should have been acquired by the students:

- 1. Geometrical work: Triangle and trigonometric relationships in the triangle with different values (sin, cos), Pythagorean formula is given to measure the distance between two points with use of their co-ordinates. Thales theorem is extended to the reciprocal implication.
-2 . Numerical work: problem solving is still the main goal of this part of syllabus, as well as square root and different problems.

All the data about skills acquired are collected in a document called: the "Livret de l'élève" (student's personal assess book). It is used for assessing and orientating students.

### 1.4.4.3. Lycée and vocational guidance

Lycées are the advanced stage of secondary education (collèges being the lower) ${ }^{41}$ and the preparatory stage to higher study. Post collège education in France comprises three years course conducted in lycée, at the end of which students take part in a national examination called "baccalauréat". Three indicators ${ }^{42}$ are published to judge the result of lycées for the institution or students:

- 1. The rate of success of the students in Final Upper Secondary examination called Baccalauréat.
- 2. The rate of access in $2^{\text {nd }}$ and $1^{\text {st }}$ degrees.
- 3. The proportion of successful candidates to baccalauréat with respect to those leaving without the diploma.

[^27]Students can choose any of the three courses preparing for baccalauréat (general, technologic or vocational). At the end of $2^{\text {nd }}$, students of general lycée best classified in mathematics can choice S (sciences section), which gives the best and most varied opportunities for further studies. SE (economical sciences) allows less choice, (even if it leads both to economical and human sciences studies). At least $L$ (literature) is restricted to literature ad languages studies. Higher education in France starts after passing baccalauréat. Students thus access in university education level ('enseignement supérieur'), required years of which are generally shown by years added after baccalauréat. As an example, Licence is coded bac +3 (which is B.sc/B.A/B.com honours of 3-years in India).

The 1993 law lays down the principle under which all young persons are offered vocational training before leaving the educational system, whatever level they might reach. Most school are run by the state or a local authority (private schools usually have a contact with the state and are more or less similar in organisational structure. Most teachers are civil servants). In the republic system, parents rarely have the option for choosing the school for their children; school assignment depends on where one lives. This can be a reason why some students go to private school. The school programs including curriculum, content, objectives, activities, time, and organization are the same for all students (equality of service). Special attention is taken for the students who have great difficulties in learning (SES /SEGPA). Here we represent some courses after the end of college ( $3^{\text {ème }}$ ) and higher- secondary (Lycée) level.

1. B.E.P. - Vocational study certificate
2. B.P. - Professional certificate
3. B.T.M - Patent technical trade
4. B.E.A.P.- Vocational studies certificate agriculture
5. BAC PRO.- Professional Baccalauréat
6. C.A.P. - Certificate of qualification
7. C.A.P.A. - Certificate of professional agriculture


Figure 3. Lycée and vocational guidance (from http://notredamelm.free.fr/orientat/orientat.htm).

### 1.4.4.4. Universities and "Grandes Ecoles" ${ }^{43}$

French universities are open to all the students who have passed their baccalauréat. However, while some types of degree course are open to all comers (notably courses in arts faculties and social sciences), scientific and medical courses are usually only open to students who have passed a scientific baccalauréat. There are approximately 250 grandes écoles where country's future elite is turned out. The most successful are «Écoles d'ingénieurs» and «Écoles de commerce». The most prestigious are the ultra-specialized Écoles Normales Supérieures (ENS), Écoles Nationales Vétérinaires (ENV), École des mines, École des Ponts et Chaussées, École Nationale de chimie, Telecom, École polytechnique, École Nationale d'Administration (ENA) and Institut d'Études Politiques (IEP) are the places where are trained the future political leaders and state administrators.

### 1.5. Educational policies and infrastructures

According to the last results of research in education, changes in instruction methods recognize the needs of individual students and their varying learning styles (Stainback \& Stainback, 1992). Nevertheless, at a macro-level, educational structures are the same for all. But we know that some students cannot bare the excessive duration of a school day, some

[^28]don't remember what they have learnt after two months of summer holidays, and some, often more numerous, are disadvantaged by the assessment methods.

These students do not have the opportunity to achieve their potential (Pugach \& Warger, 1996) because they do not learn like everyone else; they often see themselves, as do their teachers, as failures (http://www.scopexcel.org, p. 31-32). We have to keep in mind all these eventualities when comparing the structures and educational policies of both France and India, opposite to other countries worldwide.

In this section of study, school holidays, curriculum, study hours, evaluation process and their consequences upon students learning will be discussed in the context of French and Indian education systems.

### 1.5.1. Secondary school holidays worldwide ${ }^{44}$

| Countries | Working <br> days | Countries | Working <br> days/weeks | Countries | Working <br> days/weeks |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Australia | 200 days | Ireland | $179-183$ days | Spain | $175-180$ days |
| Canada | $180-200$ <br> days | Japan | 35 -weeks | Sweden | 40 weeks |
| U-K | 190 days | Korea | 220 days | Switzerland | 38 weeks |
| France | 180 days | Northern <br> Ireland | 200 days | Singapore | 40 weeks |
| Germany | $188-208$ <br> days | Netherlands | 200 days | South <br> Africa | $195-200$ days |
| Hungary | 185 days | New- <br> Zealand | $190-197$ days | U.S.A | 180 days |
| Italy | 200 days | Scotland | 190 days | India | 220 days <br> (according to <br> RTEact-2009) |

Table 11. Secondary school holidays worldwile (from ${ }^{44}$ ).
Clarification: In few Asian countries (Japan, Korea, Singapore, India), secondary school runs more than 200 days in a year. In France, U.S.A and Spain, it is nearly 180 days, in India 220 days in a year but most of secondary schools of the world run more or less 190 days in a year.

[^29]
### 1.5.2. Holidays in French collège and Indian secondary school

Under the provision of education code (D-521-1 to D-521-7) there are following holidays in a French collège per annum (up) and in an Indian secondary school ${ }^{45}$ (down):

| Occasion | Holidays |
| :--- | :---: |
| Toussaint $^{46}$ | 12 days |
| Christmas | 15 days |
| Winter | 15 days |
| Spring | 15 days |
| Early summer | 60 days |

Table 12a. Holidays in French collège (D-521-1 to D-521-7).

| Occasion | Holidays |
| :--- | :---: |
| Dussehra | 10 days |
| Public holidays | 17 days |
| Regional holidays | 8 days |
| Summer vacation | 30 days |

Table 12b. Holidays in secondary school (from ${ }^{45}$ ).
We see that total holidays are of 117 days for France and 65 days for India. The difference is not unimportant and may have a lot of consequences in terms of school schedules, tiredness, stress, and lost of capacities for students as well as teachers.

### 1.5.3. Winter and spring holidays which differ in three zones in France:

Intermediate school holidays are echeloned in order to regulate travellers' flows and rationalize railway and plane transports. The purpose is above all to help economic development of winter sports stations for winter holidays, and sea stations or touristic cities for spring holidays.

[^30]We give the dates of 2013-2014 academic year:

| Zone | Area | Winter holidays | Spring holidays |
| :---: | :--- | :--- | :---: |
| A-zone | Caen <br> Grenoble <br> Lyon <br> Montpellier <br> Nantes <br> Rennes <br> Toulouse | Saturday March 1 to <br> March-17 | April 26 to May 12 |
| B-zone | Nice <br> Amiens <br> Dijon <br> Lille <br> Poitiers <br> Reims | February 22 to March <br> 10 | April 19 to May 5 |$\quad$| April 12 to April 28 |
| :--- |
| C-zone |

Table 13. Winter and spring holidays in France.

[^31]

Figure 4. The different academies and school zones in France (from https://en.wikipedia.org/wiki/Education_in_France).

Due to diversity of socio-economic-environmental conditions of the three zones, there is some dissimilarity in the time schedule of holidays, which is quite natural.

Let's now discuss about the width of international schooling scheduled in comparative study.

### 1.5.4. Curriculum ${ }^{48}$ and study hours in secondary education of France

| Subjects | $\mathbf{6}^{\text {ème }}$ | $\mathbf{5}^{\text {ème }}$ | $\mathbf{3}^{\text {ème }}$ | $\mathbf{4}^{\text {ème }}$ |
| :--- | :---: | :---: | :---: | :---: |
| French | 5.5 | 4.5 | 4.5 | 4.5 |
| Maths | 4 | 4 | 4 | 4 |
| History, <br> Geography <br> and civics | 3 | 3 | 3 | 3 |
| $1^{\text {st }}$ foreign <br> language | 5 | 4 | 4 | 4 |
| Physics | 0 | 1.5 | 2 | 1.5 |
| Biology | 1.5 | 1.5 | 1.5 | 1.5 |
| Technology | 1.5 | 1.5 | 2 | 1.5 |
| Art and music | 2 | 2 | 2 | 2 |
| Sport | 4 | 3 | 3 | 3 |
| $2^{\text {nd }}$ foreign <br> language | 4 | 4 | 4 (depends on language) | 4 (depends on language) |
| Latin (option) | - | 2 | 3 | 3 |
| Greek <br> (option) | - | - | 4 | 4 |

Table 14. Curriculum and study hours in secondary education of France ${ }^{48}$.
Curriculum and period schedule in a week for class ix in India (equivalent to $3^{\text {ème }}$ of France):

| Subjects | Periods |
| :--- | :---: |
| (1) First languages | 9 |
| (2) Second language | 6 |
| (3) Mathematics | 6 |
| (4) Physical science | 3 |
| (5) Life-science | 3 |
| (6) History | 3 |
| (7) Geography | 3 |
| (8) Optional elective | 1 |
| (9) Life style education | 1 |
| (10) Environmental study | 1 |
| (11) Remedial feedback lesson and peer learning | 6 |

Table 15. Curriculum and period schedule in a week for class ix in India (from W.B.B.S.E).
According to instructions of W.B.B.S.E (West-Bengal board of secondary education), a student of class -ix has to attain 44 classes including Environmental study class, which was

[^32]included by the supreme court of India to aware future citizen about the danger of pollution, an upcoming problem of tomorrow's world, especially for third world countries.

### 1.5.5. Comparison in curriculum and study hours in the grade of French $3^{\text {ème }}$ and Indian ix

| Subject | French collège | Indian secondary school |
| :--- | :--- | :--- |
| Routine of studies in a <br> week | 36 hours | 44 classes (classes vary <br> from 45 minutes to 1 hour). |
| Proportion of first <br> language vs mathematics | $9 / 8$ | $9 / 6$ |
| Proportion of science in <br> total syllabus | $1 / 6^{\text {th }}$ including physics, life- <br> science and technology | $1 / 7^{\text {th }}$ including physics and <br> life science |
| History \& geography | Subjects included in same <br> book | Subjects included in <br> different books |
| Art and music | Included | Included |
| Civics | Not included in syllabus but there is a <br> subject of life-style which <br> is assumed to be the same <br> as civics |  |
| Sports | 3 hours per week | Provision of sports class <br> has been abolished |
| E.V.S <br> science) | Included |  |

Table 16. Comparison in curriculum and study hours in the grade of French 3ème and Indian ix.
In this comparative study we found that in the curriculum of Indian education, art, music and technology subjects are missing. Similarly life-style and environmental science classes have not been included namely in French curriculum, even if Circulaire n ${ }^{\circ}$ 2007-077 March $29^{\text {th }} 2007$ enjoined that every subject matter must have a share in Sustainability education (in French, E.D.D. for "Education au Développement Durable"). Expanded research work should be done regarding which would be ideal curriculum and study hours in a secondary school.

### 1.5.6. Process of evaluation in Indian secondary school and French college

Evaluation is one of the most important and inevitable parts of the learning process. Constant vigilance is necessary to keep track of educational progress in areas of teaching, learning, writing and testing. Unfortunately, curriculum of many schools is so heavy and congested that there are hardly any possibilities to arrange sufficient testing for the students
and review of the curriculum. Dempster (F. N. Dempster (1993), "Exposing our students to less should help them learn more", Phi Delta Kappan, 74, p. 433-437), proposed to include fewer topics and explore them in greater depth in order to allow more time for review, testing and feedback so that students knowledge could be increased.

The different provinces of Indian schools follow separate procedures of evaluation. In this study we have used the program instruction of secondary board of education of 2012 to the schools of West-Bengal to conduct $1^{\text {st }}$ unit test ${ }^{49}$. From the following statement one can see that the unit test (only the instruction of first unit test has been shown) of secondary schools is fully controlled by the board of the state.

| Academic Session | No. of Unit Test | Time Frame | Marks allotted for classes <br> V- VIII | Marks allotted for class IX | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | First | $1^{\text {st }}$ week of March 2012 | 20 marks including 10 for base line survey for $1^{\text {st }}$ Language, $2^{\text {nd }}$ Language, Maths. and if necessary for other subject(s). | 20 marks including 10 for base line survey for $1^{\text {st }}$ Language, $2^{\text {nd }}$ Language, Maths. and if necessary for other subject(s). | For each subject. Base line survey on previous competencies on 10 marks for $1^{\text {st }}$ Language, $2^{\text {nd }}$ Language, Maths. and if necessary for other subject(s). |

Figure 5. Date and marks divisions of $1^{\text {st }}$ unit test, WBBSE -2012, (from wbbse.org/notice.htm).
Here we will discuss about the way the evaluation is conducted throughout the year of Indian ix (corresponding to French $3^{\text {ème }}$ ).

| examination | Time schedule | Marks allotted |
| :--- | :--- | :---: |
| $1^{\text {st }}$ unit test | $1^{\text {st }}$ week of March | 20 |
| $2^{\text {nd }}$ unit test | $1^{\text {st }}$ week of May | 20 |
| Remedial test for week students | $3^{\text {rd }}$ week of May | 20 |
| $3^{\text {rd }}$ unit test | $3^{\text {rd }}$ week of June | 30 |
| $4^{\text {th }}$ unit test | $2^{\text {nd }}$ week of August | 20 |
| $2^{\text {nd }}$ remedial-test for week students | $2^{\text {nd }}$ week of September | 25 |
| $5^{\text {th }}$ remedial | $3^{\text {rd }}$ week of October | 10 |

Table 17. Date and marks divisions of the five unit tests, WBBSE -2012, (from wbbse.org/notice.htm)..
Annual examination in secondary school is calculated on the basis of 90 written marks and 10 oral marks. Final obtained marks of a student are calculated on the basis of $50 \%$ of unit test $+50 \%$ of annual examination (written + oral). There is an academic council who is

[^33]responsible to allow a student to be promoted in higher class on the basis of his achieved marks throughout the year. At the end of class standard -X, a national examination (Madhyamic) ${ }^{50}$ is conducted by W.B.B.S.E. The following eight papers are evaluated on the basis of written examination 1. First language: $1^{\text {st }}$ and $2^{\text {nd }}$ paper, 2. English, 3. History, 4. Geography, 5. Physical science, 6. Life science, 7. Mathematics.

Students are evaluated by the notes obtained to written examination, to which must be added the notes obtained to oral examination, out of 800 marks ( 10 oral marks being allotted in each subject). After completion of $10^{\text {th }}$ grade, it is mandatory for a student to take part to a national wide examination (Madhyamik) to get access in higher secondary level of studies.

Let us report now on notation system and examination procedures in French collège. There is no fixed schedule for class tests throughout the year in French collège. Subject teachers are given sole authority to conduct the unit tests ('contrôles'). Generally 20 marks are allotted for each unit test and sometimes it is given in the basis of home-work. Generally 10 marks out of 20 are considered as a pass mark. High marks or encouraging marks are generally not often given.

The obtained marks of a pupil are recorded on a report form and sent home at the end of each term. There are three terms progress reports known as 'bulletins trimestriels'. The marks recorded in each subject are usually a mathematical average of all the marks obtained by the student during the term. Marks are now also available to parents 'online', parents are given a password so that they can check marks and other details in internet. If any new student does not speak or speaks little French, marks are not allotted in subjects he does not master due to his lack of linguistic competence (such as French) because that would be unfairly low.

Before the three term reports are sent home, all the teachers meet with school administrator to discuss the work and progress of each student in the class. This is called 'conseil de classe'. Two parents and pupils representative also attend the meeting. At the end of the academic year teachers sum up the works, progress and attitude of each student and then a general comment is added to each report. Then a meeting is called at the end of the year to see whether or not the pupil seems to be performing well enough to be promoted in the next class. The final decision recommending the unsuccessful students to do the year again in

[^34]same class is known as 'redoublement'. If the council recommends doing the year again, it should not be really come as a surprise, since warning about the work and progress of the child have been issued at the previous council. Marks are also recorded and sent home at half term in the first and second terms but not in the shorter summer term. The marks are sent to keep parents informed of how their wards are doing at school. The report which contains no comments is called a 'relevé de notes'. There are no 'conseil de classe' before this interim marks are sent home. Twice the year parents can meet the teachers, the first class meeting takes place in September or early October. Here the teachers explain their ways of working with the class and their expectations with the pupil during the year. The second round of meeting is just before or after Christmas. Here the parents get a chance to meet the teachers individually and discuss progress of their works.

Brevet examination (DNB-diploma national du Brevet) is conducted at the end of $3^{\text {ème }}$ in college. The Brevet, also called 'Brevet d'études fondamentales', is encompassing a requirement to secure a fundamental knowledge in key subjects and a report on their conduct at school. In some collèges in the final year there is greater specialization in either information technology or vocational work, in which case the award is either Brevet technologique or Brevet professionnel. The Brevet examination itself consists of three papers of French language, Math and a single paper of History/Geography/civics. Marks of written examinations in each subjects are provided by 40 marks and 200 marks are collected from the unite tests of passed year. Pass mark is 160 which is $50 \%$ of total marks (320). The award of the Brevet (which is made by an external body under the guidance of 'l'inspecteur d'académie' (province schools' inspector) provides automatic access to lycée (higher secondary study).

Whilst success in the exam is certainly influential, the 'conseil de classe' (a committee of teachers, officials, parent representatives and school pupil representatives) will make a recommendation regarding what they consider the best interest of the child. The expressed wishes of the parents will be taken into consideration in coming to this decision. In the event of disaccord between the 'conseil de classe' and the wishes of the parents, the final decision rests with the head-teacher.

### 1.5.7. Comparison between secondary examination (India) and Brevet (French)

| Topic | Secondary examination | Brevet examination |
| :--- | :---: | :---: |
| Assessed written numbers | 800 | 320 |
| Written subjects of <br> examination | 8 -subjects | 3-subjects |
| Organised after the class | Standard 10 | $3^{\text {ème }}$ (standard- ix) |
| Pass marks | $34 \%$ | $50 \%$ |
| Importance | Needed for pursuing further <br> education. | Optional examination. |

Table 18. Comparison between secondary examination (India) and Brevet (French).
Disparities above show how evaluation procedure in French education tends to be simpler, with the result, of course, of releasing students from the phobia of examination.

### 1.6. Administrative control of the education sector by educational reforms and surveys

Every country has its own infrastructure to manage the educational concerns throughout the territory. A successful education system should maintain a central administrative work and a decentralization of some planning strategies into local administration.

### 1.6.1. Administrative control of the education system in India

The Human Resource Development of India is the controlling and decision making authority of the education system of India. Following are the educational boards and administrative organization working under central education department for the extension and expansion of education. The Central Board of Secondary Education (CBSE) is the main governing body of education system in India. It has control over the central education system. It examines and looks after the functioning of schools accredited to central education system. The Council of Indian School Certificate Examination (CISCE) is a board for Anglo Indian Studies in India. It conducts two examinations 'Indian Certificate of Secondary Education' and 'Indian School Certificate'. The Indian Certificate of secondary education is a k-10
examination for those Indian students who have just completed class $10^{\text {th }}$ and the Indian school certificate is a k-12 public examination conducted for those studying in class $12^{\text {th }}$. Other structures exist:

- State Government Boards: Apart from CBSE and CISCE each state in India has its own State Board of education, which looks after the educational issues.
- National Open School: It is also known as National Institute of Open Schooling. It was established by the Government of India in 1989. It is a ray of hope for those students who cannot attend formal schools.
- International School: It controls the schools, which are accredited to curriculum of international standard.
- SSA: The main goal of this program was that all children of 6-11 years of age should complete primary education by the year 2007 and all children of 6-14 years of age should complete eight years of schooling by 2010. This plan covers the whole country with special emphasis on girl education and education of Scheduled Caste (SC) and Scheduled Tribe (ST) children, and children with special needs. The SSA centers are mainly opened in those areas which do not have any school or where schools are very far off.
- National Program for Education of Girls at Elementary Level (NPEGEL), Kasturba Gandhi Balika Vidyalaya (KGBV) and Mahila Samakhya Scheme are special girl oriented programs.
- DPEP: This program was launched in 1994 with the objective of universalizing primary education. Its main features are Universal Access, Universal Retention and Universal Achievement. It aims that the primary education should be accessible to each and every child of school going age. Once a child is enrolled in school he/ she should be retained there. The final step is achievement of the goal of education.

The main components of these programs are construction of classrooms and new schools, opening of non-formal schooling centres, setting up early childhood-education centres, appointment of teachers, providing education to disabled children, reviewing further scope.

These programs has been successful to a large extent as 160,000 schools and 84,000 alternative schools have been opened and work is going on for the construction of new buildings of 52,758 schools in which 420,203 disabled students will be taught.

The National Bal Bhavan was opened in 1956 with as aim the overall developing of personalities of children of all strata of society irrespective of their caste, creed, religion and gender. It supplements school education by helping children to learn by using games and natural environment. Other important endeavours taken up by Indian government for the development of education in India include Navodaya Vidyalaya Samiti, Kendriya Vidyalaya Sangathan, Integrated Education for Disabled Children, and N.C.E.R.T. ${ }^{51}$

### 1.6.2. Administrative control of the education system in France

Majority of schools in France are controlled by the government with their instructions given on internet by a legal press organ called "Bulletin Officiel": $86.4 \%$ of primary and $79 \%$ of secondary schools are regulated by state education department. Three inspectoral corps are entrusted with very broad responsibilities for evaluation at national level. They are called Inspection Générale de l'Éducation Nationale (IGEN, traduction: General Inspection of National Education), Inspection Générale de l'Administration de l'Éducation Nationale et de la Recherche (IGAENR, traduction: General Inspection of Administration of National Education and Research), and Inspection Générale des Bibliothèques (IGB, traduction General Inspection of libraries).

Furthermore, two territorial inspectorates are also involved in educational interaction. They are Inspecteurs de l'Éducation nationale (IEN), whose responsibility is to visit primary schools and monitor the performance of teachers, and Inspecteurs d'académie - Inspecteurs pédagogiques régionaux (IA-IPR), responsible for marking rules in the disciplines taught in collèges and lycées.

The decision taken by French education policy that there must be no unique dress code nor uniform for the students in the school might be implemented in India, taken into account the great economical inequalities of the country. Every child attends school until the end of collège (specific educational facilities as SES or SEGPA are provided within collèges for pupils who have great difficulties). Since 1982, France has undertaken considerable decentralization policies in education system. This has radically changed the respective powers of the State departments and of the territorial authorities.

The central role in educational policy making is played by the state. It is responsible for ensuring that public services are properly run, and for maintaining the consistency of

[^35]education. Eventually the state decides the educational policies and curriculum, and is also responsible for recruiting, training and managing staff. The State also decides the status and operating rules for teaching establishments, and allocates the necessary teaching and administrative posts. The following is the precise description of classification of the state different authorities who control the education system.

At the top level is the Ministry for National Education and Research. The central administration comprises the general inspectorates, the private office, ten large Directorates and a delegation, all responsible for implementing Government policy under the guidance of the Minister. Each directorate is responsible for planning and regulating its area of education. The Ministry for Agriculture and Fisheries is in charge of agricultural education, the Ministry of Labour and Solidarity has an important role in vocational training, and the Ministry for Sport and Ministry of Culture contribute to the organization of educational programs for young people.

Educational administration in regional level is called "rectorat d'académie". It is an administrative sub-section of the Ministry of Education, which is headed by a recteur, who is appointed by decree. An 'académie' can regroup two 'départements' or more. France is divided into 25 académies (plus 5 including Corsica and overseas territories) that roughly correspond to regional divisions. 'Départements' (France is divided into 96 départements) are in charge of lower secondary education. They are responsible for collèges (state or private secondary schools of lower level for all pupils having finished their primary education). These territorial authorities are dealing with school transport and building and maintenance of collèges. 'Régions' (France is divided into 22 régions) are in charge of upper secondary education. They are responsible for lycées (state or private secondary school), and for specialized establishments. The recteur has powers which cover every level of education, whether primary, secondary or higher, he must supervise the execution of the Minister's decisions and the implementation of all the legal provisions concerning education. He must also inform the Minister of the situation in his académie. In agreement with local authorities, he has power over the organization of primary education. He allocates posts among the various territorial authorities. Regarding organisation of secondary education, he participates in studies for prospective plans for training and investment, approves building programmes for schools and safety measures, and allocates certain educational materials.

At the local level the administration is called 'Inspection académique' and it corresponds to the department level. It's headed by an inspecteur d'académie, called 'Directeur

Académique des Services de l'Éducation Nationale' (DASEN) who is appointed by decree. He has responsibilities at all levels of education excluding higher education. He or she is subordinated to the recteur, and is responsible for implementing and directing the ministry's educational policy in the department. He is assisted by a group of education inspectors. The inspecteur d'académie has both administrative and educational duties. His administrative role gives him the power to decide the opening and closing of classes, and where to place schoolteachers. He also has the power to manage primary school staff and to inspect schools. Finally, he plays an important part in the preparation of the school year and in the definition of the department school network. His educational remit consists of introducing innovation in all areas and informing teachers and head-teachers in primary education. He has a more specific role in lower secondary education (collèges), in planning and directing schools (operating supervision) and in organizing school life (participation in the projected educational and investment plans, organization of examinations, and school attendance). His educational role is the same as in primary education.

### 1.6.3. Educational reforms

In this current discussion we want to discuss about some latest reforms in both India and France.

### 1.6.3.1. Current reforms in Indian education

In 2009, Indian education system revealed two major reforms under the guidance and supervision of Central education Minister Kapil Sibal. The first one was the announcement by the government to abolish compulsory CBSE Board exams from 2010-11 for $10^{\text {th }}$ standard, the second one was the successful implementation of Right to education act (RTE) education Bill, which was hanging for last four years. As usual we can say the landmark Act provides for free and compulsory education as a fundamental right of children in the 6-14 age groups.

### 1.6.3.2. Currents reform in French education

Some major current educational reforms have been realized in French education.

- Reforms in collèges: it has been proposed an educational support by people who can provide voluntary help after classes and who can help students with their homework or with sporting, artistic and cultural activities. The time bar has been scheduled for two hours duration at the end of the school day after classes, four times per week. At the beginning of 2008/09 academic year, it was widely adopted by all State collèges and private collèges which
have entered into a contract with the State, as well as by priority education elementary schools.
- Reforms in lycées: a group of reforms of lycées were launched at the beginning of the 2008/09 academic year to achieve the objective, set out in the 2005 orientation law, of $50 \%$ of an age group obtaining a university qualification. The first stage of that reform is the introduction of a new structure for the second class level, initially planned to apply from the beginning of the 2009/10 academic year. A pupil's timetable will consist of 30 hours (as opposed to 28 to 35 before) and the class of $2^{\text {de }}$ will comprise two semesters consisting of a common foundation of 21 hours per week of obligatory general education, the year being separated by a week which will be 'a period of review and orientation', as well as training exercises and orals. In the middle of each semester, a class board at which the pupils will review their difficulties together with their teachers will take place and, at the end of the semester, a 'real' board will take place to deal in particular with orientation. This arrangement will replace the present three quarterly boards.

In $7^{\text {th }}$ December, 2010, the French education minister Luc Chatel announced the result of PISA 2009 which showed a bipolarization ${ }^{52}$ of reading skills in 14-15 age group of students, emphasizing the gap between low and high-leveled students whose respective numbers had grown up significantly since PISA 2000. As consequences he announced a round of reforms:

- First level of action: Going back to basics: reform of the primary school programs regarding the common bases of knowledge and skills. Ongoing reform: literacy plan. Future reform: science plan.
- Second level of action: Personalizing teaching practice: personalized help in primary school. Ongoing reform: personalized help in high secondary school (lycée). Future reform: personalized help in low secondary school, beginning by $6^{\text {ème }}$.
- Third level of action : Personalizing means Institutional autonomy / Experimentation:

CLAIR program to fight against school violence and improve school climate (CLAIR standing for 'Collèges et Lycées pour l'Ambition, l'Innovation et la Réussite', translation: Collèges and Lycée for Ambition, Innovation, and Success). The Program was initiated in 2010 for 105 collèges and lycées within 10 académies. It was evaluated by the note 2011-069 June 2011 of IGEN and IGANER, which concludes to uncertain results though claiming the

[^36]necessity of pursuing innovation by changing curricula and teaching practices and generalizing the use of new technologies.

Since 1985, technological and vocational education has been growing in popularity within students. The following table clearly indicates how technological and professional courses in lycée became popular after 1990.

| Period | $\mathbf{1 9 5 0}$ | $\mathbf{1 9 6 0}$ | $\mathbf{1 9 7 0}$ | $\mathbf{1 9 8 0}$ | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 6}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Proportion of students <br> who have passed <br> baccalauréat | $4.8 \%$ | $11.3 \%$ | $20.1 \%$ | $25.9 \%$ | $43.5 \%$ | $62.8 \%$ | $64.3 \%$ |
| Students who have <br> passed general <br> baccalauréat | $4.8 \%$ | $11.3 \%$ | $16.7 \%$ | $18.6 \%$ | $27.9 \%$ | $32.9 \%$ | $34.8 \%$ |
| Students who have <br> passed technologic <br> baccalauréat |  |  | $3.4 \%$ | $7.3 \%$ | $12.8 \%$ | $18.5 \%$ | $17.2 \%$ |
| Students who have <br> passed professional <br> baccalauréat |  |  |  |  | $2.8 \%$ | $11.4 \%$ | $12.3 \%$ |

Table 19. Proportion of students who have passed all the types of baccalauréat ${ }^{53}$.

Above statistics ${ }^{53}$ show how the impact of industrialisation in France affected students' enrolment which grew up abruptly in the field of technology and professional courses in the 90s.

In 1990, the proportion of general baccalauréat in respect of professional and technologic baccalauréats was approximately 28:16 (40.5\% more students were found in general stream than in professional and technological courses). In 2006 the ratio of general and technical+ prof. baccalauréats was almost the same 34.8: 29.5). The students enrolment in professional course has been increasing compared to technological course from 2000 to 2006.

[^37]
### 1.6.4. Educational surveys

Sampling in educational research is generally conducted in order to permit the detailed study of a part, rather than the whole, of a population. The information derived from the resulting sample is customarily employed to develop useful generalizations about the population. These generalizations may be in the form of estimates of one or more characteristics associated with the population, or they may be concerned with estimates of the strength of relationships between characteristics within the population. Provided that the scientific sampling procedures are used, the selection of a sample often provides many advantages compared with a complete coverage of the population. These are, for example, reduced costs associated with gathering and analyzing the data, reduced requirements for trained personnel to conduct the fieldwork, improved speed in most aspects of data summarization and reporting, and greater accuracy due to the possibility of a more intense supervision of the fieldwork and of the data preparation.

Generally the sampling frame incorporates a great deal more structures than one would expect to find in a simple list of elements. For example, in a series of large-scale studies of Reading Literacy carried out in 30 countries during 1991 (Ross, 1991), sampling frames were constructed which listed schools according to a number. The sample design for this educational survey was based upon variables like size (number of students), program (for example, comprehensive or selective), region (for example, urban or rural), and sex composition (single sex or coeducational). The use of these stratification variables in the construction of sampling frames was due, in part, to the need to present research results for sample data that had been drawn from particular strata within the sampling frame (http://www.unesco.org/iiep ).

The completion of a scientific survey in a large field i.e. in the educational field of India and France is unconceivable, if we ignore the various surveys and educational reports which are available from education departments of states or from N.G.O. For this purpose we will analyze various reports regarding school related to socio-economic status which are available from different sources. First we will try to incorporate the status of West Bengal which might be regarded as a miniature form of India, by examining Pratichi report on primary education of West-Bengal ${ }^{54}$.

[^38]To know the dropout status in secondary level, one has to follow minutely the condition of students enrolment, of basic learning, the parents education level, the teacher-students ratio in not only secondary but also in primary level, as most of the problems which force a student to drop out of school start in the primary level. Here, to understand the status of primary education in West-Bengal and in India we shall follow the report of 'Pratichi trust' which is a N.G.O and made a comprehensive work on West-Bengal and in Bangladesh in the sector of education and health.

### 1.6.4.1. Report of the Pratichi Trust on primary education of West Bengal, a province of India



Figure 6. Writing skill of the primary students of West Bengal (from The Pratichi education report-ii, pratichi.org, table-6.1, p. 69).

Clarification: An assessment was made in the year 2008-09 for the students of standard iii and iv (equivalent to CE2 and CM1 of French elementary level). It indicated that the percentage of primary students who cannot write their name reduced to $4.7 \%$ (right in picture) compared to $30 \%$ (left) in 2001-02.

### 1.6.4.2. Number of villages without state primary school in West-Bengal

School community (infrastructure) is certainly related to the access to learning of an education system. According Drew (2004), the educative community of an education system is composed of a multitude of educating entities such as school, home, media, libraries and communicating agencies.

| Bakura | 78 | Hoogly | 62 | Murshidabad | 80 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| Bardhaman | 69 | Jalpaiguri | 37 | Nadia | 39 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Birbhum | 49 | Koch-Bihar | 36 | North24-Pgs. | 74 |
| Haora | 26 | Malda | 83 | South24-Pgs | 112 |

Table 20. Number of primary schools in some districts of West Bengal (from statistics provided by the Sarba Siksha mission of West-Bengal in 2007, http://ssa.nic.in/infrastructureprovisiondoc/national-evalaution-of-civil-works-documents/west-bengal/Main\ Report.pdf ).

So, there are many villages, without primary school in West Bengal, mostly in rural area. The $19^{\text {th }}$ district of West Bengal, South-24 parganas, is recognised as one of the most unprogressive districts in student literacy.

### 1.6.4.3. Primary schools with poor infrastructures in West-Bengal

| Name of district | Numbers of <br> Schools without <br> drinking water | Number of schools <br> without toilet | Proportion of <br> single teachers <br> schools |
| :--- | :---: | :---: | :---: |
| 1. Bakura: | 195 | 627 | 8.49 |
| 2. Bardhaman | 26 | 16 | 0.22 |
| 3. Birbhum | 45 | 4 | 4.89 |
| 4. Dakhin-Dinajpur | 19 | 6 | 2.68 |
| 5. Howrah | 129 | 207 | 3.65 |
| 6. Hoogly | 250 | 0 | 1.92 |
| 7. Jalpaiguri | 188 | 476 | 2.86 |
| 8. Koch-Bihar | 0 | 2 | 1.32 |
| 9. Kolkata | 192 | 133 | 6.64 |
| 10. Maldah | 114 | 435 | 1.27 |
| 11. Murshidabad | 0 | 364 | 1.42 |
| 12. Nadia | 1 | 0 | 1.74 |
| 13. North-24 parganas | 527 | 284 | 2.81 |
| 14. Paschim-Medinipur | 446 | 0 | 5.31 |
| 15. Purba-Medinipur | 273 | 135 | 7.32 |
| 16. Purulia | 397 | 1850 | 17.38 |
| 17. Siliguri | 0 | 1 | 0.25 |
| 18. South-24 Parganas | 231 | 520 | 3.38 |
| 19. Uttar-Dinajpur | 6 | 0 | 3.92 |
| State total | 3539 | 5522 | 4.41 |

Table 21. Primary schools with poor infrastructures in the districts of West Bengal (from statistics provided by the Sarba Siksha mission of West-Bengal in 2007, http://ssa.nic.in/infrastructureprovisiondoc/national-evalaution-of-civil-works-documents/west-bengal/Main\ Report.pdf ).

Clarification: Within the 19 districts of West-Bengal, Bakura, Purulia, North 24 parganas and South 24-parganas are behind other districts for essential preliminary infrastructures in primary education.

### 1.6.4.4. Dropout rate in primary (i to iv) and upper primary (v to viii) in West-Bengal

| Name of district | Primary level <br> (standard-1 to 5) | Upper primary level <br> (standard 6 to 8) |
| :--- | :---: | :---: |
| Bankura | $4.64 \%$ | $8.92 \%$ |
| Birbhum | $6.65 \%$ | $8.27 \%$ |
| Howrah | $4.7 \%$ | $7.22 \%$ |
| Kolkata | $4.1 \%$ | $6.1 \%$ |
| Jalpaiguri | $7.69 \%$ | $2.33 \%$ |
| Madinipur | $5.27 \%$ | $4.83 \%$ |
| Koch-Bihar | $2.8 \%$ | $5.66 \%$ |
| Malda | $15.29 \%$ | $3.89 \%$ |
| Murshidabad | $7.98 \%$ | $9.12 \%$ |
| Nadia | $7.8 \%$ | $8.6 \%$ |
| North 24-Parganas | $3.69 \%$ | $5.94 \%$ |
| South 24-Parganas | $9.42 \%$ | $9.01 \%$ |
| Siliguri | $10.1 \%$ | $3.68 \%$ |
| Uttar-Dinajpur | $23.38 \%$ | $6.35 \%$ |
| Total | $8.56 \%$ | $7.34 \%$ |

Table 22. Dropout rate in primary and upper primary schools in the districts of West Bengal (from statistics provided by the Sarba Siksha mission of West-Bengal in 2007,
http://ssa.nic.in/infrastructureprovisiondoc/national-evalaution-of-civil-works-documents/westbengal/Main\ Report.pdf ).

These statistics have been provided by the Sarba Siksha mission of West-Bengal in 2007.
The statistics of previous table show that, within the 19 districts of West Bengal, UttarDinajpur ( $23.38 \%$ ) and Malda ( $15.29 \%$ ) are the most affected by students' dropout in primary section (standard i to iv), and that South 24-pgs $(9.01 \%)$ and Murshidabad (9.12\%) are ahead in the list of students' dropout in upper primary (V to VIII) level.

### 1.6.4.5. Increasing the tendency of parental involvement in students' homework

The involvement of parents in home studies enhances students' aptitude to learning. In the next part of our study we try to discriminate how parents' interest is growing up and assists their child's homework.


Figure 7. Increasing the tendency of getting extra help from parents from home (according to The Pratichi education report-ii, pratichi.org, table-6.3, p. 80).

Explanation: In primary school, parents are showing more alerted and interested in assisting their kids for the preparation of homework. In 2001-02 the involvement was 56.6\% and in 2008-09 it was $71.1 \%$ (report of Pratichi trust, 2009).

How the status of school education is changing in West Bengal as well in India? Let's find it through the pen of a teacher who is also a mother of a primary student: Manisha Banerjee, Asst Teacher, Basapara Brahmankhanda Higher Secondary School, Nanoor Block, Birbhum, 2003 (The Pratichi Education Report II, pratichi.org, page-70):
"When I decided to shift my daughter from a semi-English medium private urban school to a government-run primary school in a rural area, strangely, I met with opposition from quite a number of my colleagues who are engaged in teaching the so-called backward rural students. For them it was as if I had been doing a criminal act in barring my child from getting quality education and also by including her among the 'first-generation learners'. Most were convinced that English-medium private schools which have mushroomed all over the state are the best places for quality education although nobody has checked their credentials or competency. It was as if quality education was synonymous with learning certain behavioral values and standards.

Personally, my motive was to free my child from the overburdened life of carrying loads of books and succumbing to private tuition for the rest of her life. I also wished to make her part of the real majority of India from which she was getting increasingly alienated within the privileged generation of learners inside the closed doors of the private school. She was as if
getting prepared to live in a different world far from the real which would certainly make her vulnerable in one way or the other. I wished to give her a permanent framework for learning, not artificial or transient. During her days in the private school, I felt she was developing some sort of a phobia for education as she was being taxed by lessons, discipline and the overwhelming attitude of competitiveness.

At the same time, it was for me a criminal act to put the school system which provides my bread and butter in an alien category where I can't send my own child. If there are "firstgeneration learners", we are also "first generation teachers" of the same learners. I, too, needed the chance to make myself worthy of them. It was a refreshing beginning for my child in the primary school where she is no longer burdened with loads of books and heavy doses of homework. In fact, one of the first things she pointed out to me was the teacher's patience in involving all the students in the teaching-learning process, giving extra attention to those who are trailing behind, thereby eliminating the extra baggage of homework. Since I myself was involved with the newly introduced concept of English language learning in the primary section, I was confident that the method, if properly implemented, will help the child learn the language in the best possible modern way of language learning. The fact that learning has to be participatory and joyful can be seen in the learning of vernacular languages as well. The methods applied are perfectly suitable for all children, irrespective of their backgrounds. Although there are still some lacunae in the system, as I find in the current syllabus of history for Class III (my daughter is in Class II at present), I think such problems should be taken care of soon. The problem of useless and unreal syllabi is much more complicated in the secondary section where I teach and needs to be addressed immediately. In fact, in order to maintain a continuation from the primary to the secondary, the whole education scenario needs a detailed investigation and a definite correlation should be established to make education fruitful. Otherwise, it will remain in the end a meaningless activity year after year as well as a system to eliminate the most and pass the selected few, aided by private tuitions and notebooks".

From the opinion of this teacher-mother and from the above selected statistics, we can conclude that, although the students' enrolment and the parents' involvement are gradually increasing in education sector, the infrastructure of education in India is still apprehensive and the dropout rate is still a matter of serious discussion for the educators.

### 1.6.4.6. Uprising tendency to take private tutors for study purpose in India

Here we are representing more information about the tendency to take extra help (private tutor) which is growing within the students in India. This is not only a factor influencing the loosing of the confidence in self-help for the student, it also indicates the inequity of the teaching system.


Figure 8. Increasing the tendency of getting extra help from parents from home (from The Pratichi education report-ii, pratichi.org, table-6.4, p. 80).

Clarification: The tendency to take private tuition is increasing in India. In 2001-02, $57.24 \%$ students of standard-3 and 4 of state primary school ( $23.94 \%$ of S.S.K-private school) were habituated to take private tuition. These figures jumped to $63.64 \%$ and $58.02 \%$ simultaneously in 2008-2009. Through the analysis of D.I.S.E. ${ }^{55}$, it was found that in the provinces of Andhra-Pradesh, Maharashtra and Uttar-Pradesh, private school enrolment rate is less than in the rest of India.

### 1.6.4.7. Survey of A.S.E. ${ }^{56}$ (Annual Status of Education Report)

A.S.E.R made its maiden survey in 2007. In 2011, ASER published several research reports of its educational surveys which had taken for object rural India. From these reports, we came to know that the percentages of students who could not read and could not do simplest mathematics were above $15 \%$ and $25 \%$ respectively. Now, these students are supposed to go through severe problems of learning deficiencies which should be prevented immediately if one wants to stop the growing of dropout's rate. Primary education of India is

[^39]going through a miserable condition due to insufficient schools, poor infrastructures, sanitation problems and inadequate teachers. There are sufficient causes for a parent to choose private school rather than a state school, especially in primary level.

This is why privatization is growing rapidly in India day by day. Although in private school students have to pay more than in the state school and there is no availability of midday meal, the craze for having one's children admitted in private school is increasing. Over the last six years, private school enrolment in rural India has gone up by $5.5 \%$ as a whole. In regions of the north part of India like Punjab, Haryana and Rajasthan, the students' enrolment in private sector increased recently by $20 \%$ to $25 \%$. In the east part of India (West-Bengal, Orissa) this enrolment is lesser for some traditional causes but in Bihar it is excessively high.

Here we represent a sample of survey of A.S.E.R to show the deficiency of basic ingredients for existence of people. It was made in Jaipur (Rajasthan) in 2011.

| VILLAGE INFORMATION SHEET |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| State Name |  | RAJASTHAN | Block name | TALORE |
| Distric! Name |  | JAIPUR | Village Name | BARGAON |
| Names of ASER Surveyors |  |  | ARJUN |  |
|  |  |  | SANGEETA |  |
| Dote of Suryey |  | 9 1/0\|2011 | Day of Survoy | SUNDAY |
| Please lick the relevant box |  |  | Did You See/Observe yourself?(Mark these answes based on your own otsorvation) |  |
| BASIC SERVICES | Pucca road leading to the viloge? |  | YES $\checkmark$ | NO |
|  | Electricity connection in the vilage? |  | YES | NO |
|  | Post office in the vilages? |  | Yes | NO |
|  | Phone/STD Boothe |  | YES | NO |
|  | Bank? (Any type) |  | YES | NO |
|  | Govt Ration/PDS shop in the village? |  | YES | NO |
|  | Ptimary/Sub Hecith Centre?/Govt., |  | yes | ${ }^{\text {NO }}$ |
|  | Private Heath Cinic? |  | Yes | $\mathrm{NO}^{\sim}$ |
|  | Computer Centre IInternet Cafe) |  | YES | NO |
|  | Equipment Facility using Solar Energy |  | YES | NO |
| $n$ <br> 0 <br> 0 <br> 0 <br> 0 | Govt Primary Schoot (5td. 1 to 4/5) |  | YES | NO |
|  | Govt Middele Schoou\|Std. 1 to 7/8) |  | YES | $\mathrm{NO}^{\mathrm{NO}}$ |
|  | Govt Secondary Schoolista. 1 to 10) |  | YES | $\mathrm{NO}$ |
|  | Private School |  | YES | NO |
|  | Anganwadi/Preschool |  | YES | NO |

Figure 9. Example of Village Information Sheet used for A.S.E.R. survey.

Each year since 2005, ASER has been assessing the various achievements of students in every rural district of the country. In every district, volunteers of ASER are conducting surveys. They are students of colleges and universities, NGOs, youth groups, women's organizations and others. It is estimated that close to 25,000 young people volunteers are being involved in ASER assessment every year. These social workers reach close to 300,000 households and meet more than 700,000 children annually. ASER's largest annual effort is to understand the status of schooling and learning of children in India. For carrying through such an effort to perform surveys correctly year after year, it is critical to focus on strengthening and improving internal processes. Training is one of the most important processes that help to equip the volunteers with skills necessary to conducting survey and assessing children.

### 1.6.5. Comparison of India and France regarding some main educational factors

Factors taking from different sources of information we have been composed the following parts.

### 1.6.5.1. Resort to private tuition for state schools' and private schools' students

Following chart of ASER-2011 shows how many students of standard-3 in state primary school are habituated to take private tuition compared to private school students.

| Name of state | State school students | Private school Students |
| :--- | :---: | :---: |
| Rajasthan | $22.6 \%$ | $4.7 \%$ |
| Uttar-Pradesh | $18 \%$ | $1.2 \%$ |
| Bihar | $29.9 \%$ | $42 \%$ |
| West-Bengal | $46.8 \%$ | $67.9 \%$ |

Table 23. Percentage of students taking private tuition in state school $v s$ private school (according to ASER2011).

Clarification: The resort to private tuition which, as we said before, reduces the selfbelieves of the students from the very beginning of their school carrier, is up growing in some states of India like West-Bengal, Bihar, Orissa and Jharkhand. In West-Bengal, this dependency is the highest as well for state school students (46.8\%) as for private school students ( $67.9 \%$ ).

In France, students rarely take private tuition especially in elementary school or college because there are lot of personalized help in school, for example the 'French-special' classes
and 'Mathematics-special' classes arranged for weaker students besides the mainstream of studies.

### 1.6.5.2. Students' enrolment in private and state schools in India and in France

Following statistics show how private school are going popular in some states of India.

| State | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ |
| :--- | :---: | :---: | :---: | :---: |
| Bihar | $49.7 \%$ | $42.3 \%$ | $43.9 \%$ | $29.9 \%$ |
| Rajasthan | $31.5 \%$ | $25.8 \%$ | $27.2 \%$ | $22.6 \%$ |
| U.P. | $24.5 \%$ | $23.3 \%$ | $26.5 \%$ | $18 \%$ |
| West-Bengal | $47.9 \%$ | $49.3 \%$ | $51.7 \%$ | $46.8 \%$ |

Table 24. Percentage of students in private school in India (according to ASER-2011).
Clarification: percentage of Private school has been increasing in West Bengal (except in 2011) but it is decreasing in Bihar, Rajasthan and U.P since 2008. As a consequence, the overall percentage of students who attend state schools has been decreasing apprehensively from 2008 to 2011.

In France, the state exercises a unique control over elementary and secondary levels of education. Most schools in France are run by the state or a local authority (private school usually have a contract with the state and a similar organization of structure) and most teachers are civil servants. All the programs including curriculum, content, objectives, activities, time organizations are controlled by the state.

Some flexibility has been introduced, at an experimental level in 2013 generalized in 2014 by the "Réforme des rythmes scolaires" ${ }^{57}$ (translation: Reform of school time-table) concerning time organization of primary school by local authorities. It has been decided that academic disciplines will be studied in morning classes with five mornings a week (instead of former four), while afternoon will be occupied by various sports and cultural activities provided by territorial authorities. But the legal obligation of providing equality of service for every citizen is still prevailing. In France, all the private schools, collèges and lycées are strictly bound down by the government and forced to give almost the same service (curriculum, teacher student ratio, study hours) as it exists in the state educational institution.

Students' enrolment in state schools in France

[^40]| Educational level | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8}-\mathbf{0 9}$ | $\mathbf{2 0 0 9 - 1 0}$ | $\mathbf{2 0 1 0 - 1 1}$ |
| :--- | :---: | :---: | :---: | :---: |
| Elementary | $90.6 \%$ | $90.3 \%$ | $90.3 \%$ | $90.1 \%$ |
| Secondary | $86.6 \%$ | $86.6 \%$ | $86.0 \%$ | $85.6 \%$ |

Table 25. Percentage of students in state school in France (Following Cereq 2010).
Clarification: From this comparative analysis it appears that in France state school remains prevalent, while in India the privatization of education is rapidly spreading throughout the country and government has no control on it. A student has to pay much more after enrolling in a private school than in a state school.

Six decades after independence, India is still struggling with shortage of student enrolment and a huge school' dropout. For this reason the educational standards and the educational level are to be compromised in state schools. This is why the private enrolment is increasing, under cover of maintaining the 'educational standard'. Private schools decide their own law, setting of curriculum, student's tuition fee and almost everything they intend to do.

In France private schools have a strict contract with state which prescribes them to follow almost the same curriculum, teacher student ratio as in state schools. Now a question arises, is the new generation of India emphasizing private school rather than state school only because of the question of educational status? No, sometimes they are forced to choose the private school because the state primary school and its teaching process hardly create a good and healthy environment for flourishing studies in the future. Private schools provide comparatively a better teaching environment in exchange of high expense.

### 1.6.5.3. Difference in students' reading skills in India and in France

To determine the status of 'dropout' in India and France we have established a statistical comparison of reading skills in the two countries, as their lack is regarded as an important parameter of school's dropout by the searchers in education science.

There are many debates regarding social backgrounds and school performances. PISA defines reading literacy as: understanding, using, reflecting on and engaging with written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society. PISA 2009 was focused on literacy skills, as PISA 2012 was focused mainly on mathematics. In PISA 2009, performances of several European countries like Sweden, Germany, Ireland, France, Denmark, United Kingdom and Hungary were below the O.E.C.D. average. If we take into account its mean performance (496), France has a disproportionately high percentage of students performing at level- 4 ( $32 \%$ ), but there are 15
scale degrees which separate the high performing students' quarter from the low performing one (PISA 2009, AT A GLANCE@ OECD -p. 51-55).

These statistics show that, a considerable percentage of students have been in great difficulty with their reading performance. But they show also that French school system has allowed schooling inequalities to grow up ineluctably from 2003, mainly between 2003 and 2006. PISA 2012 has confirmed this tendency, not only for mathematics, its principal aim, but also for written comprehension in which France has begun to regain, as it came to 505 marks (for an OCDE average of 496), coming back to its result of 2000, but with a enlargement of the gap between high performing and low performing students, each quarter gaining 4 marks.

Unfortunately, we have not the same statistics available for India, though we should better say not exactly the same statistics. For in some way, India has participated to PISA 2009 assessment ${ }^{58}$, more precisely to PISA $2009+$ assessment, a sort of PISA bis organized for first time invited partners. India was represented by two of its states: Himachal Pradesh and Tamil Nadu. Results were both catastrophic and delusive. They were catastrophic because the two states were classed at or near the very end. As deplores a commentator ${ }^{59}$ :

- In reading of the 74 regions participating in PISA 2009 or 2009+ these two states beat out only Kyrgyzstan;
- In mathematics of the 74 regions participating, the two states finished again, second and third to last, again beating only Kyrgyzstan;
- In science the results were even worse, Himachal Pradesh came in dead last, behind Kyrgyzstan, while Tamil Nadu inched ahead to finish $72^{\text {nd }}$ of 74.

Concerning reading skills, comparison between both states ${ }^{60}$ showed that students in Tamil Nadu attained an average score on the PISA reading literacy scale, significantly higher than those for Himachal Pradesh. As against 17 per cent of students in Tamil Nadu who had proficiency in reading literacy to participate effectively and productively in life, only 11 per cent students in Himachal Pradesh fell in this category.

Consequently, India "has backed out of Programme for International Student Assessment (PISA) slated for 2015", and "had also stayed away from the evaluation round in $2012^{61 "}$.

But one has not to forget that these counter performances were also delusive for certain reasons. The first which has been pointed is the problem of school language. Surprisingly,

[^41]though PISA 2009+ tests were administered in English, Hindi and Tamil in India, "the test scores of children in both Tamil Nadu and Himachal Pradesh who said the test language was not their first language were higher than the scores of children who said the test language was their first language!". One can guess that students may have put behind the notion of first language very different realities, or rather realities which differed from what was intended by the survey's authors.

A second reason which begs for cautiousness concerns school learning practices. Indeed reading skills are mostly based upon comprehension strategies. "If we begin testing for comprehension, understanding and the ability to think and reason out, there will be an incentive for schools, teachers and students to work towards honing those skills rather than the ability to reproduce the precise expected answer" said the author of the note published on the site Education in India. The difference of performances between Indian students of the two Indians states and Indian students from the Qatari Indian schools who have participated to PISA 2009+, has been also emphasized. Qatar has participated to PISA from 2006 and has been credited, in spite of its low results, of a significant progress in mathematics in 2009.

The third reason that pleads in favour of a more measured judgement is that even if PISA has already established a link between unfavourable socio-economic status and deficit of reading skill, in this precise case, the two states chosen were far below from the unfavourable socio-economic factors as conceived by OECD. For all these reasons, and also because the whole country was not involved but only two states not plainly representative of the average school population, we have considered that it was not possible to draw a comparison using the results of PISA 2009 and PISA 2009+. So we decided to refer to Pratichi report for the comparison between India and France regarding reading skills.

Survey results of Académie de Nice regarding the reading skills of French language (2008), ( $9^{\text {ème }}$ projet_academie_nice_20102014_livret_2, p. 9)


Figure 10. Results of Académie de Nice vs the average of France, regarding the reading skills of French language (from $9^{\text {ème }}$ projet_académie_nice_20102014_livret_2, p. 9).

Clarification: Survey report shows that students at the level of $6^{\text {ème }}$ (equivalent to $6^{\text {th }}$ grade in India) who have satisfactory or good performances in reading skills of French were $55.9 \%$ in Nice academy against $57.2 \%$ in national average.

Tutoring and reading skills in India:
Here we represent a survey report of Pratichi trust of 2007, which shows not only the poor reading skills of Indian students but also their dependency on private tutors.


Figure 11. Success in reading skills of Indian students (according to a survey report of Pratichi trust of 2007).
Clarification: The percentage of standard-5 children who cannot read a standard-1 text without being helped is $44.1 \%$ and those who have the capacity to do it without tutor are $35 \%$ (Survey report of Pratichi trust in 2007). We see that a massive percentage of students (35\%) of standard v (equivalent to French CM2) have only the capacity to read like students of level-1 (lowest grade, equivalent to French CP). The percentage reaches to $44.1 \%$ when they get the help of private tutor. Although there is a difference in parameters, comparison of students performance in reading skills between the two zones of West-Bengal in India and of Académie de Nice in France compared to the national averages shows that language skills are better in Académie de Nice (55.9\%) than in West-Bengal (44.1\%), in almost same grade level of students. Nevertheless the given measure of the reading deficit of French students regarding their level is less precise than for Indian students. We can suggest that for France the comparison of performances of lower performing students with the performances of previous grades' students should be interesting.

To go further in the comparison we can turn to more information. For India we have chosen the ASER's surveys. The ASER's surveys since 2005 to 2012 have been analyzed ${ }^{62}$ by

[^42]Banerjje R., Bhattacharya S. and Wadhwa W. They found that the level of basic learning skills of Indian students is gradually decreasing.

| Event | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :--- | :---: | :---: | :---: | :---: |
| Proportion of grade- 5 students <br> who can read grade level 2 text | $52.8 \%$ | $53.7 \%$ | $48.2 \%$ | $46.8 \%$ |
| Proportion of grade- 5 students <br> who can solve 3 digit by 1 digit <br> division problem of arithmetic | $38.0 \%$ | $36.2 \%$ | $27.6 \%$ | $24.8 \%$ |

Table 26. Level of basic learning skills of Indian students (According to Banerjje R., Bhattacharya S. and Wadhwa W.).

For France, we want to add another part of the survey report contained in the $9^{\text {th }}$ projet académique, p. 9).

In French language in $6{ }^{\text {ème }}$ level in the year 2009 , the $10 \%$ students with the best performances of the 'académie de Nice' were above the national average, but regarding the $10 \%$ students with the lowest performances, the result was reverse. It indicates a threat for the underachievers of Nice academy students who have more chance of dropout compared to other parts of France.


Figure 12. Results of Académie de Nice vs the average of France, regarding the French language (from $9{ }^{\text {ème }}$ projet_académie_nice_20102014_livret_2, p. 9).

We remark too that in mathematical ability, the national average of the most performing students was slightly higher than that of the Académie de Nice


Figure 13. Results of Académie de Nice vs the average of France, regarding mathematics (from $9^{\text {ème }}$ projet_académie_nice_20102014_livret_2, p. 9).

From this comparison we can first conclude that language skills and mathematics skills are firmly linked together and that their common decreasing is a sure predictor of school dropout. Then we can see more precisely that reading skills are a prerequisite for all other learning. So we ought to trace the field where deficiency of language learning is prominent and to take measure of it, as student dropout is immensely related with language learning.

### 1.6.5.4. Differences in economic status of students' families in India and in France.

Comparison of economic status of students' families between West-Bengal and the rest of India:


Figure 14. Comparison of economic status of students' families between West-Bengal and the rest of

$$
\text { India(from } \left.{ }^{79}\right) .
$$

Clarification: $32 \%$ people of India belong to the poverty level and $68 \%$ are above poverty level (A.P.L). In West-Bengal this condition is slightly improved. $24.94 \%$ are B.P.L and $75.06 \%$ A.B.P. As per statistics in India, highest school dropout (27\%) happens due to poverty. Hence this chart let us guess that the percentage of students' dropout in West-Bengal for reason of poverty should be less than the average of India, which will be examined in the next chapter.

Comparison of economic status of student's parents between the Académie de Nice and the rest of France, by the differences between $10 \%$ highest incomes and $10 \%$ lowest incomes:


Figure 15. Ratios of dropout of Académie de Nice vs the average of France (from $9{ }^{\text {ème }}$ projet_académie_nice_20102014_livret_2, p. 9).

Clarification: Differences of income between $10 \%$ richest and $10 \%$ poorest parents have been found, 6.4 \% in Alpes-Maritimes, 5.8 \% in Var, and 5.4 \% in France national average. One can see that the gap is significantly larger in the Académie de Nice than in the average of France, and larger in Alpes-Maritimes than in Var. Indeed, Var has a less developed economical status than Alpes-Maritimes, but it shows less social inequalities too. Therefore it can be assured that the economic condition of citizen and, consequently, of parents in the Académie de Nice is richer in average than in the rest of France. This is a point of similitude with West Bengal where the economical status of families is above average of the whole India. Anyway, these statistics show that a generally socially favored status of a population may hide great disparities, with the result, as we will see later, that school dropout may increase in disadvantaged children, even with good economical conditions for the whole school system.

### 1.6.5.5. Students' enrolment status in India and in France

In India, as per the Annual Status of Education Report (ASER) 2012, 96.5\% of all rural children between the ages of 6-14 were enrolled in school. Another report from 2013 stated that there were 229 million students enrolled in different accredited urban and rural schools of India, from Class I to XII, representing an increase of 2.3 million students over 2002 total enrollment, and a 19\% increase in girls' enrolment (Education in India, wikipedia).

India experienced a regular growing of its students' enrolment from the middle of $20^{\text {th }}$ century (Enrolment in Primary/Basic/Middle Education. http://www.indiaeducationstat.com.)

| Year | Primary (Lakh person ${ }^{\mathbf{6 3}}$ ) | Middle (Lakh person) |
| :--- | :---: | :---: |
| $\mathbf{5 0 - 5 1}$ | 192 | 31 |
| $\mathbf{6 0 - 6 1}$ | 350 | 67 |
| $\mathbf{6 8 - 6 9}$ | 544 | 125 |
| $\mathbf{7 9 - 8 0}$ | 716 | 193 |
| $\mathbf{8 9 - 9 0}$ | 973 | 322 |
| $\mathbf{9 9 - 2 0 0 0}$ | 1136 | 421 |
| $\mathbf{2 0 0 0 - 2 0 0 1}$ | 926 | 342 |

Table 27. Comparison between enrolment data from 2002 to 2009 for primary schools (from 'Schools Enrolment in schools rises 14 \% to 23 crore', Himanshi Dhawan, Jan 22, 2013, http://timesofindia.indiatimes.com ).

Despite the overall growth in enrolment, there is a cause for worry. A comparison of enrolment data from 2002 to 2009 for primary schools shows a drop in enrolment in Andhra Pradesh, Gujarat, Himachal Pradesh, West Bengal, Karnataka, Orissa, and Tamil Nadu. The decline in enrolment indicates that students at the primary level are shifting from state schools to private schools ('Schools Enrolment in schools rises 14 \% to 23 crore', Himanshi Dhawan, Jan 22, 2013, http://timesofindia.indiatimes.com).

The government has rolled out many plans to increase the percentage of elementary education. The plans such as 'Sarva Siksha Abhiyan’ (SSA), District Primary Education Program (DPEP), Operation Blackboard, Mid-Day Meal have been successfully implemented throughout the country.

The national policy of education (1986) and program of action (1992) initiated a baseline action for the universalization of education in India. The 'Right to education act' (2009) is a successful continuation of the previous actions. Applying of the above programs has much improved students' enrolment and school environment. Nevertheless we are still much away from the achievement of E.F.A (2015). In spite of the absolute value of the Human Development Index (HDI) for India, which was improved from 0.577 in 2000 to 0.611 in 2004 and further to 0.619 in 2005, the relative ranking of India has not changed much.

According to the report of the 2009-2010 academic session, there were $12,548,593$ students in France which represented about $20 \%$ of total population. Académie de Nice represented $3.1 \%$ of the total number, Académie de Versailles, the most important académie, $8.8 \%$. For 2012-2013 the national number of students was $12,672,900$, with an increasing of Versailles to $9 \%$ and a decreasing of Nice to 2.9 \%. (L'Éducation nationale en chiffres, 200910; 2012-13, MENES. Window Internet Explorer).

[^43]Statistics of students' enrolment of France indicate how students'enrolment in different grades progressed over the years (Le système éducatif, 2009-2010).

| Year | Pre <br> elementary | Total <br> primary <br> degree | Total <br> secondary <br> degree | Total <br> tertiary <br> degree | Total <br> students |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 9 8 1 - 8 2}$ | $2,456,500$ | $7,396,300$ | $5,309,200$ | $1,184,300$ | $14,346,900$ |
| $\mathbf{2 0 0 9 - 1 0}$ | $2,532,800$ | $6,647,100$ | $5.331,700$ | $2,316,100$ | $15,955,200$ |

Table 28. Statistics of students' enrolment of France (according to Le système éducatif, 2009-2010, Ministère de l'Éducation nationale, DEPP).

Below are more recent statistics of students' enrolment percentage in elementary education for France and Mayotte for school year 2011-2012.

| Students' age | Public | Private | Total | Enrolment rate (percentage) |
| :--- | :---: | :---: | :---: | :---: |
| 2 years | 69,206 | 21,878 | 91,084 | 11 |
| 3 years | 713,386 | 94,755 | 808,141 | 100 |
| 4 years | 731,711 | 97,781 | 829,492 | 100 |
| 5 years | 720,637 | 97,410 | 818,047 | 100 |

Table 29. Statistics of students' enrolment percentage in elementary education in France (according to Le système éducatif, 2009-2010, Ministère de l'Éducation nationale, DEPP).

Clarification: Above chart ensures about $100 \%$ students' enrolment at the age group of 3 and no dropout or retention in elementary level of studies.

We will deal now with the comparison of gross enrolment ratios in France and India.
Here we want to represent a recent statistics of World Bank regarding the gross enrolment in secondary education (http://data.worldbank.org). These provide statistics of total enrollment in secondary education, regardless of age, expressed as a percentage of the population of official secondary education age. Remark: GER can exceed $100 \%$ due to the inclusion of over-aged and under-aged students because of early or late school entrance and grade repetition.

| Country | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ |
| :--- | :---: | :---: | :---: |
| France | 110 | 110 | 110 |
| India | 61 | 65 | 69 |

Table 30. Statistics of the gross enrolment in secondary education in France and India (http://data.worldbank.org).

Above comparison demonstrates that regarding GER, France is saturated and static over years but there is huge scope for India for further improvement.

India and France are both democratic countries, where liberty is highest provided for citizen and it is reflected through their education policies also.

In India, the Right of Children to Free and Compulsory Education (RTE) Act, 2009, represents the consequential legislation envisaged under Article 21-A, and lays down that every child has a right to full time elementary education of satisfactory and equitable quality in a formal school which satisfies certain essential norms and standards.

The Preamble of the French Constitution of 1946 sets out that "the Nation guarantees equal access for children and adults to education, vocational training and culture". The French education system provides compulsory schooling free of charge for children aged 6 to 16 and a right to education starting at age 3 .

In this part of our study, we have observed that there are many differences regarding the SES factors and literacy rates between the two countries. It has been also exposed that private school and private tuition are spreading in India. In France private school is spreading too, but in lesser proportion and it remains ruled by national educational policy. Signs of weakness of the democratic educational policies facing financial difficulties and propagation of economical liberalism can be seen in both countries. The crisis of school system is becoming more and more evident in both countries, as well as its main result: the increasing of school dropout and of young people's unemployment.

According PISA (Education at a Glance 2013: OECD Indicators © OECD 2013, p.186), the effect of the financial crisis on education budgets is palpable in the OECD countries (France, Greece, Iceland, Ireland, Poland, Portugal, Slovak Republic, Slovenia, Spain and United Kingdom) which suffered substantial deficits of their general budget in 2010 and 2011. The survey also assessed the growing gap between rich and poor families, which widened the gap between high and low assessed students. India has one of the largest and most highly diversified economies in the world but, because of its massive population, it is in terms of earnings and gross national product (GNP per capita) one of the poorest countries in the world.

Although there are vivid differences in socio-economical status, students' enrolment and secondary completion rates between India and France, both countries face the challenge of
giving each citizen equal opportunity in accessing education in its domain, so that dropout might be reduced.

### 1.7. Psychological development in adolescent and its impact on learning

The term 'Psychology' is derived from an ancient Greek word, where 'psyché' means soul and 'logos' means science. The psychologist James Mill in the early $19^{\text {th }}$ has mentioned psychology as a branch of education.

The philosopher Plato defined psychology in education as the process of turning the eye of the soul. He emphasized the inclusion of psychology into education. In the Renaissance period, the Italian educationist Vittorio Da Feltre and John Comenius were the first to support the contribution of Psychology to child education. Rousseau was the pioneer of modern educational trend which has given the highest importance to child psychology.

Herbart (1776-1841) described mind as a mass resulting of experience and activity with physical stimuli assimilated into ideas. The theory of Herbart caused revolutionary changes and began to have some effect on school curriculum towards the end of $19^{\text {th }}$ century.

John Dewey (1859-1952), believed that psychology founds itself upon the concrete act of the child, organized and ordered towards an end, from which arises the orderliness of thought. Dewey's school put his theory into practice and introduced the use of psychological workshop.

All these definitions were given by philosophers-psychologists prior to the beginning of experimental psychology. According to the modern trends of education, three factors are supposed to be tightly related to each other, these are learner (child), teacher and curriculum (subject matter). In the past, greater emphasis was given on subject matter (curriculum) development and then to the teacher in the context of child education and mobility. The child, undoubtly the most important factor of education, was surprisingly neglected and kept in the background. In the opinion of modern educationists and psychologists, the child should remain in the centre of the educational domain.

Hence before imparting education, one must begin by studying students. In an educational concern teachers should play a dual role in teaching, to know both about their subject matters and about the nature of the learners. In the views of modern educationists (Clifford, 1984; Grinder, 1981), education should involve the methods of psychology for teaching in the
classroom and the observation of school life. Current methodologies of teaching are based upon the results of scientific investigations on a child's mind. Let us discuss how psychology can help a teacher to understand his students at the time of teaching.


Figure 16. Relationship between assessment, curriculum and counseling.
Assessment and student's counselling are the inevitable and interrelated parts of modern education system and can promote teachers to enhance the learning processes. Through the knowledge of psychology, a teacher can better handle the above concepts.

The construction of curriculums needs a good psychological support to build a logical sequence on a particular subject. A good curriculum should stimulate the constructive potentialities of the students. Hence, it should be built according to the needs of the students, in order to remove the psychological stresses of individuals. So a curriculum should be sufficiently flexible for corresponding to a given level of learners, though being adapted to the individual quality of students.

In the previous discussion of this study, we comprehensively compared socio-economic status factors, school curriculums, student's evaluation processes, reading skills in India and in France. Here we will try to determine what are the psychological impacts of the previous components which brought the gradual evolution of those education systems. In the next chapter, we shall discuss how the levels of academic achievements and rate of dropouts vary in different castes and religions of Indian students (S.C, S.T. and Muslims) and in the location of French students (ZEP Collèges versus other Collèges), and how all the economical, ethnical, or other detrimental factors impose their psychological effects to the students. Through this discussion we will try to determine what are the appropriate psychological findings associated with the learning disabilities of adolescent because this study is mainly concerned with a certain age group of secondary students: adolescents. Before, in this part dedicated to psychological study, we shall discuss how the factors like 'ethnicity', 'peer-
relation', 'motivation of adolescent learning', and 'self-estimation' influence the process of learning. But at the beginning, it should be find out how cognitive development is related with general intelligence and helps the students to be adapted to educational environment or learning.

### 1.7.1. Cognitive development

Four categorical developments are being observed in a human, namely physical development, personal development, social development and cognitive development. Cognitive development is the key of all learning procedure. Educational psychologists are interested in how people think, learn concepts and solve problems (Ausubel, 1963; Bruner, Goodnow \& Austin, 1956). In a classroom situation students are mostly found average in their intelligence, teachers often find a few students who are exceptional and perform better, in rare cases some student shows very slow development. Hence before to deliver instruction, the teacher must identify how cognitive development has flourished in a child.

In discussing about 'cognitive development' one must learn about the functions of the brain, because human brain is the coordinator and controlling authority for any type of physical and cognitive action. Many changes during development of a child are the results of growth and maturation. Maturation refers to changes that occur naturally and spontaneously through genetical program. The human inherent characteristics emerge progressively from its coming. Most of a person's physical developments also can be enlisted into this category. Other changes appear through learning, as individuals interact with their environment, which brings certain changes in a person's social development. But what's about the development of thinking and personality (cognitive development) ?

Most psychologists agree that in this area, both maturation and interaction with environment (nature) are important for cognitive development, which is controlled by brain and nerves. Hence before discussing cognitive development we should learn about the structures of brain and nerves, which is the controlling centre of cognitive development. This part of this study might interlink 'Biology' and 'Education'.

### 1.7.1.1. Structure and function of brain

There are the following parts in the human brain:

## Human-brain



Figure 17. Chart Flow of the structure of human brain.
There are several parts of the brain named cerebrum, cerebellum, pones, and medulla oblongata but the most important part of our brain is cerebrum whose main activity is to make man thinking. There are several lobes in forebrain named as frontal lobe, parietal lobe, occipital lobe, temporal lobe. Lobes of the brain are surrounded by a peripheral substance called the cerebral cortex composed of a large number of neurons (nerve cells). Cerebral cortex is responsible for cognitive development in human body. It is formed by two main components called white matter and grey matter. Human brain is covered by a hard covering called skull. Between cortex and skull are located found three-layered membranes, the meninges, whose names are pia-mater, arachnoïd and dura mater.

Activities of the different parts of brain:

1. Olfactory lob: It reacts to environment with the sense of smell .
2. Cerebrum: It is associated with all the processes of intelligence.
3. Optic lob: It is responsible for vision.
4. Pons: It coordinates mid-brain with hind-brain.
5. Cerebellum: It maintains the balance of the body.

Following picture shows the internal structures of human brain.


Figure 18. Internal structure of human brain (from online.sfsu.edu).
After knowing the fundamental structure and function of brain we should know also the structure of neuron, as neuron is considered to be the structural and functional unit of nervous system. Divisions of neurone are as following.

### 1.7.1.2. Structure of neuron



Figure 19. Chart Flow of the structure of the neuron
At birth, the brain has already about one hundred billions of neurons, but there is very little connection between them. Experiences and various learning will stimulate billions of connections between neurons (between 10 and 1000 for each neuron, as shown by Hannaford, and to 200,000 in the cerebellum as shown by McCrone). A mature person possesses the same number of neurons or less - like connective tissue, the neuron never splits - which existed in him previously from his childhood. A neuron has a hexagonal body prolonged by processes. In an ideal neuron every organelle (organelle are specialized subunits of the cell with a specific functions) remains present. Among the organelle of neurons are mitochondria and Golgi bodies or dictiozome. A neuron has two types of processes. The axon is the process without branch which sends nerve impulses from one neuron to other neuron, and dendron is the branched process which receives nerve impulse from other neuron. Generally axons are covered by a coat called medullar coat, but the discontinuous portion of medullar coat is
called Ranvier's nod. The most important structure of neuron is the synapse which is the junction between dendrites and axon.

At the age of 2 or 3 years, children possess 15,000 synapses for every neuron, which is many more than adults (McDevitt \& Ormord, 2002). In fact adequate neurons and synapses are needed to adapt and adjust in the environment. Neurons which are active will survive and unused neurons will be pruned (Diamond and Hobson, 1998). An experiment on rats by Greenough, Black \& Wallace (1987) showed that increasing stimulus $25 \%$ can develop more synapses in the experimental rats. Of course, early stimulation (for example with the target of learning of 9 with toys) is evidently effective for human brain also.

Although the rate of growth of the brain is rapid in childhood, learning may continue all the lifetime. Nevertheless some effects have been undoubtedly proved harmful for the development of brain, such as absorption of alcohol or smoke by mother before the birth of child or malnutrition in the early childhood. Neuroscientists are just beginning to understand how brain development is related to aspects of adolescence such as risk taking, decision making or emotional behaviour. Research proves that the work of prefrontal cortex is engaged. It takes at least two decades for the full development of prefrontal cortex (Weinberger, 2001), but teacher and school can play major roles in cognitive and emotional development.

Following figure shows the structure of neuron and synapse, through which nerve impulse passes.


Figure 20. Link between neurons and synapses (from Mybrainnotes.com).

The microscopical space between two neurons is called synapse. It can make the connection between an axon and a dendron (axo-dendranic), two axons (axo-axonic) or a cell body and an axon (axo-somatic).

The cortex develops more slowly than other parts of the brain, and parts of the cortex mature at different rates. Research showed that the development of cortex might be influenced by environment (Berk, 2002; Meece, 2002). Prefrontal cortex regulates human behaviours with reasoning, but research shows that the fully functional prefrontal cortex grows at least during two decades (Weinberger, 2001). Naturally in the period of adolescence, students become more affected by emotions than by reasons. School and teachers can play an important role in cognitive and emotional development if they can provide appropriate environments and set up an incoming target for the learners.

For speaking or reading, various areas of cortex must act together (Byrnes and Fox, 1998). For example, to answer a question, one has to hear it through the auditory cortex. Motor neurons of Broca's area (which control lip, jaw and tongue's movement) and Wernicke's area (near the auditory cortex), are both responsible for the answer produced. According to Anderson (1995), neurons of Broca's area make the speech grammatically correct and neurons of Wernicke's area make the sentence meaningful.

Nerve cells of certain parts of brain are submitted to overproduction at certain periods of its development. During the first month after birth, brain is waiting for visual and auditory stimulations. Neurons of the dedicated areas are growing rapidly at that time. This is called the experience-expectant overproduction of neurons.

If a child is born completely deaf and receives no auditory sessions, then the auditory process of his brain will be converted to the development of his visual processing. Similarly if a new born baby struggled with visual processing or is born blind, his visual processes become devoted to auditory processes (Siegler, 1998).

Another type of synaptic overproduction which happens for individual learning is called experience-dependant processes. Neurone or nerve cell performs mainly three types of activities, receiving signal from sensory organ (as visual or auditory signal), connecting different organs and environments and controlling voluntary movements.

There are two hemispheres of cerebrum, the left cerebral hemisphere generally controls the factors of language processing and the right hemisphere controls the emotional behaviours.

Females have less specialisation of hemispheric activity than the male (O'Boyle \& Gill, 1998).

### 1.7.1.3. Piaget's idea about cognitive development

Here are some ideas about cognitive development in context of psychology and child learning.

The Swiss psychologist Jean Piaget (1954, 1963, and 1970) identified four factors: biological maturation, activity, social experiences, and equilibration, which control our basic thinking. The biological maturation is a physiological and mental change natural for any human being. Teachers and parents have the least little to do in this stage for the students. Activity is close to biological maturation. At this time a child experiences a lot of ideas through his activities. Another factor is the transmitted social experience, by which our cognitive developments are stimulated. Equilibration is the process by the dint of which man always searches for a solution through assimilation and accommodation. There are many applications of Piaget's theory in teaching. Here is the chart showing the stimulus for cognitive development:

BIOLOGICAL


Figure 21. Chart Flow of the stimulus for cognitive development following the theory of Piaget.
The youngest learners do not succeed in correlating together and concentrating with two works at a time. As an example, they cannot follow audio and visual instructions at the same time. But after developing, they become able to organise two separate behavioural structures at a time (McDevitt \& Ormrod, 2002, Miller, 2002). Piaget gave a special name to this structure: the scheme. In his theory, schemes are the basic units of thinking. As an example, recognizing a flower on the plant is a scheme, and discriminating a particular flower among
many flowers by its smell is another scheme. But the second scheme is made possible by the experience of the first scheme, which hastens the cognitive development in child.

Here are the four processes of cognitive development described by Piaget:

- Adaptation: By going through the different stages of cognitive development, people acquire the various psychological structures. They become experienced and develop the tendency to adapt with their environment. In the learning processes, psychologists found the following two kinds of adaptation:
- Assimilation: In assimilation old scheme(s) is (are) used to understand a new scheme.
- Accommodation: It occurs when existing schemes are transformed in the demand of the situation of the environment. We adjust our thinking to fit the new information, instead of adjusting the information to fit our thinking. Students have constantly to adjust to their increasing complex environments by using existing schemes, whatever they are (assimilation), and by modifying and adding to their schemes when something new is needed (accommodation). In some cases, situation might turn to use neither assimilation nor accommodation. If people fall in with something that is too unfamiliar, they may ignore it. As if anybody is attending a conversation in foreign language which is not familiar to him, he would not try to make meaning with the conversation, if he has not had any prior learning experience of the language.
- Equilibration: According Piaget, organising, assimilating and accommodating can be viewed as a complex balancing act.

In the theory, the actual changes in thinking take place through the process of equilibration which is the act of searching for a balance. In brief, if we apply a particular scheme to an event or situation and if this scheme works, then equilibration works; if the scheme fails to create any satisfactory result, then disequilibrium occurs.

### 1.7.1.4. Stages of Piaget's cognitive development

Piaget (Inhelder \& Piaget, 1958) mentioned different stages of learning and specified expected educational level, age group and characteristics of learners. Here are the different levels of activities of a child as mentioned by Piaget

| Age <br> group | Stage | Educational level | Characteristics |
| :---: | :--- | :--- | :--- |
| $\mathbf{1 - 2}$ | sensori- motor |  | -Makes use of memory and <br> thought <br> -Begins to recognize objects <br> Moves from reflex action to <br> schedule-directed activity. |
| $\mathbf{2 - 7}$ | preoperational | Nursery (maternally) <br> and starting of primary <br> (elementary level) | -Develops skills in language <br> learning. <br> -Seeks his own problems in <br> another person's view. |
| $\mathbf{7 - 1 1}$ | Concrete operational | Primary (elementary) <br> and starting of lower <br> secondary (college in <br> France) | -Is able to solve concrete <br> (manually handled) <br> problems. <br> -Understands laws of <br> conservation. |

Table 31. different levels of activities of a child as mentioned by Piaget (according to Inhelder \& Piaget, 1958).

- Sensori- motor stage: This is called the stage of infancy. According Piaget, sensorimotor stage is the earliest stage when senses of children are developed by objectal performance i.e. by observing, hearing, moving, touching, tasting the object, but they cannot memorize for a long time a particular object. Recent research shows that an infant of 3 to 4 months age cannot search a 'hands-on' object which he experienced earlier. His memory and the skills of his motor neurones do not provide him to search the object in surroundings (Baillargeon \& Devos, 1991; Meece, 2002).
- Pre-operational stage: This stage extends from early childhood to the early elementary years. By the end of the sensori-motor stage, child can make use for many action schemes. In this stage, child needs some actions which are carried out and kept in mind for a long time. Piaget mentioned it as 'operations'. Thinking what is separated from action involves the use of symbolic scheme. The ability to form and use symbols like words, gestures, sings, images is a major accomplishment of pre-operational stage, and brings children closer to real life. The ability to work with symbols, such as using the word 'car' when presenting the picture of car instead of showing a real car, is called the 'semiotic function'. Children's earliest use of symbols is for pretending or meaning. Children who are
not able to talk often use gestures symbolizing the actions instead of words meaning them. Pretending to use a hand-watch might be a good example of action symbol. In pre-operational stage children enlarge their vocabulary form about 200 to 2000 words. So this transforming stage is very significant regarding child development. As the child moves through the preoperational stage, his ability to think about objects in symbolic form remains somewhat limited to think in one direction only or to use logic in one way. It is very difficult for the child to handle a manual problem, or imagine how to reserve the steps in a task.
- Concrete operational stage: as Piaget mentioned, it starts from the age group of 7. Reversible thinking is involved in many tasks that are difficult for the pre-operational child, such as conceiving the conservation of matter ${ }^{64}$, but this becomes possible for the age group of 7 to 11 . Children acquire the ability to solve a concrete problem.
- Formal operational stage: after the age group of 11, children can adjust to solve an abstract problem. For example, they can answer to the question "If Kelly is taller than Ali and Ali is taller than Jo, who is tallest ?", which means they are able to conduct an inferential reasoning, which is the ability to think about things which the child has not actually experienced and to draw conclusions from its thinking. The child who needs to draw a picture or use objects is still in the concrete operational stage, whereas children who can reason the answer in their heads are using formal operational thinking.


### 1.7.2. Vygotsky's socio-cultural theory

Nowadays psychologists recognize that cultural shapes determine what and how the child will learn about the world. In some communities culture encourages competitions, with as a result increasing competitive skills within the children (Barkeman et al., 1990; Ceci and Roazzi, 1994). These last 25 years, Vygotsky's theory has produced an alternative to Piaget's theory regarding the ideas about language, culture and cognitive development which provided a great contribution in the process of learning and education (John-Steiner \& Mahn, 1996;

[^44]Macalin \& Hickey, 2001; Wink \& Putney, 2002). According John-Steiner \& Mahn (1996) "Vygotsky conceptualized development, as the transformation of socially shared activities into internalised processes".

Vygotsky believed that human activities take place in cultural settings and cannot be understood apart from them. He emphasized the tools that culture provides to support thinking. He thought that all higher mental processes, such as reasoning and problem solving, are mediated by psychological tools, such as language, sign and symbols. Adults teach children to use these tools in day-to-day activities and they internalise them. Then the psychological tools can help students advance their own development (Karpov \& Hayhood, 1998). The process is something like this: children are engaged in activities with adults or more capable peers; they exchange ideas and ways of thinking or representing concepts. The map, for example, is a way to represent spaces and places. These ideas co-created are internalised by the children. Thus children's knowledge, ideas, attitude and values develop through appropriating or talking to themselves, using the ways of thinking provided by their culture and shown by the more capable members of their group (Kozulin \& Presseisen, 1995). According to Vygotsky (1978), the specifically human capacity for language provides children auxiliary tools which enable them to succeed in difficult tasks, to overcome impulsive action, to plan a solution to a problem prior to its execution, and to master their own behaviour.

Vygotsky placed more emphasis than Piaget on the role of learning and language in cognitive development. If anybody spends much time around young children, he knows that children often talk to themselves when they play. In fact, Vygotsky believed that language in the form of the private speech (talking to oneself) guides cognitive development.

At the opposite, Piaget considers children's self-directed talk as an 'egocentric speech'. He assumed that this egocentric speech is as another indication that young children cannot see the world through the eyes of others. They talk about what matters to them, without taking into account the needs or interests of their listeners. As they mature, and especially as they have disagreements with the peers, Piaget believes that children develop a socialized speech. They learn to listen and exchange ideas.

### 1.7.3. Differences between the ideas of Piaget and Vygotsky regarding the development of language and speech

| Subject | Vygotsky's ideas | Piaget's ideas |
| :---: | :---: | :---: |
| Child's development and |  |  |
| egocentric language | Child's development is <br> orientated from social sense <br> to individual sense. <br> Egocentric language <br> increases until it gradually <br> transforms itself into internal <br> verbal thought. | Child development is <br> orientated from individual <br> sense to social sense. <br> Egocentric language declines <br> with ages. |
| Developmental significance | Represents externalized <br> thought, its function is to <br> communicate with the self <br> for the purpose of self- <br> guidance and self-direction | Represents an inability to <br> take the perspective of <br> another and engage in <br> reciprocal communications. |
| Relation to social speech | Positive, private speech <br> develops out of social <br> interaction with others | Negative, least socially and <br> cognitively matured children <br> use more egocentric speech |
| Relationship to | Increases with task difficulty. <br> Private speech serves a <br> helpful self-guiding function <br> in situations where more <br> cognitive effect is needed to <br> reach a solution |  |

Table 32. The ideas of Piaget $v s$ those of Vygotsky regarding the development of language and speech.
Piaget defined development as the active construction of knowledge and learning, and the positive formation of associations (Siegler, 2000). He was interested in knowledge construction and believed that cognitive development has to come before conventional learning. He said that "learning is subordinate to development and not vice-versa" (Piaget, 1964). On the other hand, Vygotsky believed that learning was an active process that does not need to wait for development completion. In fact, learning, if properly organised, results in mental development processes that would be impossible apart from learning (Vygotsky, 1978). Vygotsky considered that "learning pulls development up to higher levels and [that] social interaction is a key of learning (Glassman, 2001; Wink \& Putney, 2002). Concerning the role of peers in cognitive development, he believed that cognitive development occurs through the child's conversations with more capable members of his group (peers).

Vygotsky's theory suggests that teachers need not to do more than just arrange the environment so that students can discover it as their own. According to Karpov \& Haywood (1998), learners should not be expected to reinvent or rediscover knowledge already available in their cultures; rather, they should be guided and assisted in their learning. That is why Vygotsky saw teachers and parents as central to the child's learning and development.

### 1.7.4. Erikson's ideas about child's cognitive development

Erik Erikson was an eminent psychologist whose theory provided a framework for studying personal and social development. In his first book Childhood and society (1950), Erikson framed a comprehensive description of the young people in relation to society. In the books which he composed in the later part of his life, Identity, youth and crisis (1968) and Identity and the life cycle (1980), he expanded his ideas further.

Here is the chart of Erikson's stages of development

| Stages | Approximate <br> age | Important <br> event | Description |
| :--- | :--- | :--- | :--- |
| 1. Trust and <br> mistrust | 12 to 18 months | Feeding | Develops a sense of trust with a <br> person regarding the feeding. |
| 2. Autonomy <br> versus shame <br> and doubt | 18 months to 3 <br> years | Toilet training | Development of different skills <br> (walking, grasping). <br> Child learns to control emotion but <br> may develop shame if not handled <br> well. |
| 3. Initiative <br> versus guilt | 3 to 6 years | Independence | The child continues to become more <br> assertive and to take more initiative <br> but may be too forceful, which can <br> lead him to guilty feelings. |
| 4. Industry <br> versus <br> inferiority | 6 to 12 years | School | The child must deal with demands <br> to learn new skills or risk a sense of <br> inferiority, failure and <br> incompetence. |
| 5. Identity <br> versus roles, <br> confusion | Adolescence | Peer <br> relationships | The teenager must achieve his <br> identity in occupation, gender roles, <br> politics and religion. |
| 6. Intimacy <br> versus <br> isolation | Young adulthood | Love <br> relationships | The young adult must develop <br> intimate relationships or suffers <br> from feelings of isolation. |


| 7. <br> Transmission <br> versus <br> stagnation | Middle <br> adulthood | Parenting/Men <br> toring | Each adult must find some way to <br> satisfy and support the next <br> generation. |
| :--- | :--- | :--- | :--- |
| 8. Ego <br> integrity <br> versus despair | Late adulthood | Reflection on <br> and acceptance <br> of one's life | The late adult reaches culmination <br> which is a sense of acceptance of <br> oneself and a sense of fulfilment. |

Table 33. Erikson's stages of development
Clarification of Erikson's model:

- Trust versus mistrust: Erikson identifies trust versus mistrust as the basic conflict of infancy. According to Erikson, the infant will develop a sense of trust if his needs for food and care are confronting regularity and responsiveness from caregivers. In the first year the infant remains in Piaget's sensori-motor stage and is just beginning to learn that he is separated from the world around him. This realisation is part of what makes trust so important: the infant must trust the aspects of his world that are beyond his control (Bretherton and Waters, 1985, Isabella and Belsky, 1991).
- Autonomy versus shame and doubt: This is the stage where self-control and selfconfidence settle down in the child. The young child begins to assume important responsibilities concerning his self-care such as feeding, toileting and dressing. In this stage if parents don't encourage their child in developing self-effort, then cognitive development might be damaged.
- Identity versus roles' confusion: This is the most important part of Erickson's theory which is associated with his study of the period of adolescence and school years. Erikson noticed that learners become very much influenced by their peer groups. In the early school years, peer group leads to a sense of competition. The difficulty to adjust to these factors might be converted into an inferiority complex. The major event in adolescence which was noticed by Erikson is the crisis of identity.

James Marcia suggested that there are four identity alternatives for adolescents, depending on the options they have explored and the commitments they have taken (Marcia, 1991, 1994, 1999). Achievement of identity is the first of the four. After exploring realistic options, the individual makes choices and is tended to pursue them. At the end of school when they enter college level, $80 \%$ students change their identity goals. Once achieved, identity may not be unchanging for everyone (Stephen, Fraser \& Marcia, 1992; Waterman, 1992). The
second stage is the foreclosure of identity, explored by adolescence with difficulty. Generally adolescents imitate other models (usually their parents). When individuals failed to explore or cannot reach in a conclusion about what they want to be in future, they reach the stage of identity diffusion. Adolescents who pass through identity diffusion may become apathetic and withdrawn, with little hope in the future, or they may be openly rebellious (Berger \& Thompson, 1995; Kroger, 1995). Adolescents suffering of identity diffusion often give up their trust or have a tendency to be drug addicted (Archer \& Waterman, 1990). Finally adolescents reach in a stage called moratorium, characterized by the delay of commitment of a person toward personal and occupational choices.

Erickson's work is a milestone in the field of human psychology study, especially in the area of childhood and adolescence. However some feminists criticized him as he indicated that woman's identity achievement is fused with achieving intimacy (Miller, 2002). Through Erickson's theory, we can now explain various psychological phenomena characterizing the adolescent school goers.

### 1.8. Application of psychological theories to education

In our modern ages, any strategy for learning, teaching, counselling, monitoring, evaluation is impossible without a proper knowledge of psychology. The development of education sciences is a consequence of the growth of democracy, industry and sciences. Their aim is to improve the status of educational systems in spite of the diversity of people involved, teachers and managers as well as students. For that, they need tools of measurement, quantitative as well of qualitative. As they have to compare people, levels, ages, curricula, educational projects, etc., they are great consumers of assessments and statistics, as well of models to observe and explain students' behaviours. Psychology, which was historically the first science to investigate on education, yet remains the principal provider of models for education sciences in the field of explanation and measurement of skills.

Psychology has already a long experience in measuring and observing mental processes. Now that education sciences are borrowing her methodology, one can ask if there is any difference between these two scientific disciplines and if, simply, education sciences are necessary, or even useful. Yet we need to remember that the difference between psychology
and education sciences lies in the contexts: laboratory for psychology, school-room for education sciences. Psychology is an experimental discipline, who deals with the child in general and categories of tasks, processes, behaviours, etc. Psychology constructs artificially simplified situations in order to isolate certain factors. On the contrary, education sciences are interested with the real school actors, simultaneously at the mondial level and at the local level of country, region, town and school. But if phenomena are complex and unstable, the object of education sciences remains unique and verifiable: what is taught, how, and with what results. To answer these questions, psychology remains obviously the best partner of education sciences.

### 1.8.1. Alfred Binet and psychometry

Though we have not yet mentioned his name, we have to expose the work of Alfred Binet because he deeply influenced the procedures of students and skills evaluation. Alfred Binet (1857-1911), can be considered one of the main representatives of "Renaissance" of the French psychology in the $20^{\text {th }}$ century. He is known for his contribution to the development of psychometry. Etymologically psychometry is the science which measures mind. She studies all measurement techniques practiced in psychology and technical validation of these measures. Psychometry realizes the measurement of individual differences in reaction times. Binet made a lot of experiences associating auditory and visual imagery, and explored children's memory capabilities. He is also known for having realized the first standardized intelligence test in collaboration with the physician Théodore Simon.

The Binet-Simon psychometric scale aims at early diagnosis of retardation by comparing the performance of the child to those of his age group. Binet wanted above all to prevent, limit and cure the consequences of mental diseases upon children education. He refused to exclude the borderline retarded, and provided a host structure to allow them to return to normal classes faster. Moreover, Binet was the first to highlight the social difference of cognitive variations in the results of intellectual and physical performances. Yet its psychometric scale led to naturalists and racial interpretations, deforming his theories, particularly in the United States where the instruments he had perfected were turned into tools for selection. But his own ideas and projects prove that he was an authentic pioneer of education sciences and a great psychologist.

### 1.8.2. Implementation of Piaget's theory in educational field

In modern education we experiment many applications of Piaget theory. The National Association for the Education of Young Children of U.S.A. has traced guidelines for the development of appropriate curriculum based on Piaget's findings (Bredekamp \& Copple, 1997). Piaget's method shows how we can learn about children's mind by listening them carefully, by paying close attention to their ways of solving problems. If we understand children's psychology, we will be better able to match our teaching methods to their abilities.

According to Piaget, knowledge is not a copy of reality. To know an object, to know an event, is not simply to look at them and make a mental copy or image of them; it is to act upon them. Evidences given by animal studies indicate that infant rhesus monkeys show dramatic increases of synaptic connections throughout the brain cortex at the same time as they master the kind of sensori-motor problems elaborated by Piaget. This may be true in human infants as well. The transition to the higher cognitive states in humans has also been related to changes in brain, such as the production of additional synaptic connections (Byrnes and Fox, 1998). Thus there is some neurological evidences for each stage.

### 1.8.3. Erickson's idea on child development

Like Piaget, Erikson saw development as a passage through a series of stages, each often with particular goals, concerns, accomplishments and dangers. The stages are interdependent; accomplishments at later stages depend on how conflicts are resolved in the earlier years. At each stage, Erikson suggested that the individual faces a developmental crisis. The way on which the individual resolves each crisis will have a lasting effect on the conception of his own life and his view of society.

The field of teaching proposes an extensive scope to apply Erikson's theory to ensure that students will attain mastery of each stage. There are specific classroom activities that teachers can incorporate into their teaching during the three stages that include school aged children. For example, at the preschool level, teachers should want to focus in the following activities of students as suggested by Erikson:

1.     - Creating projects according to the interest of child.
2.     - Involving learners in the learning process through classroom interactions.
3.     - Utilizing physical activity to teach fairness and sportsmanship.

### 1.8.4. How self-concept, self-esteem and self-determination help a child to learn

From Piaget's theory we can construct the concepts of self-concept and self-esteem. Selfconcept generally refers to "The composite of ideas, feelings, and attitudes people have about themselves" (Hilgard, Atkinson \& Atkinson, 1979). We can consider self-concept to be our attempt to explain ourselves to ourselves, to build a scheme (in Piaget's terms) that organizes our impressions. But this model of scheme is not permanent, as our self-perceptions always vary from one situation to another and from one face of our lives to another. Self-concept and self-esteem are often used interchangeably, even though they have distinct meanings. Selfconcept is a cognitive structure, a belief about who you are, for example, in the field of game and sports, the fact that you can define yourself as a basketball player. Self-esteem is an affective reaction and judgement about who you are, for example, praising yourself as a remarkable basketball player. Self-determination ${ }^{65}$ is slightly different from self-concept theory.

If people evaluate themselves positively, if they "like what they see" when they look at themselves, we can say that they have high self-esteem (Pintrich \& Schunk, 2002). Selfconcept is made up of other, more specific concepts, including the non-academic self-concept, the general academic self-concept, and the specific ones as self-concept in English, selfconcept in mathematics and so on. A recent research indicates that self-concept for artistic abilities forms another separate area (Vispoel, 1995). Herbert, Marsh \& Alexander Yeung (1997) examined how 246 boys in early high school in Sydney, Australia, chose their courses. They found that self-concept affects deeply learning in school through course selections. The academic self-concept for a particular subject (Mathematics, Science, etc.) was proved the most important predictor of course' selection, more important than assessments in subject in previous grades, or the global self-concept. In fact, having a positive self-concept in a particular subject is a bigger factor for courses' selection when self-concept in other subjects is low. The courses selected in high school put students on a path towards the future, so that self-concepts about particular academic subjects can influence them for the whole life.

[^45]We now turn to self-esteem. Student's evaluations and feelings about themselves might be called self-esteem. For teachers, there are at least two questions they have to solve about self-esteem of their students if they want to evaluate them properly:

1.     - How does self-esteem affect a student's behaviour in school?
2.     - How does life in school affect self-esteem?

In answer to the $1^{\text {st }}$ question, it appears that students with higher self-esteem are somewhat more likely to be successful in school (Marsh, 1990), although the strength of the relationship varies greatly, depending on the characteristics of the students and the method of research followed (Kishor, 1997; Marsh \& Holmes, 1990).

What's about the $2^{\text {nd }}$ question: how school affects self-esteem? A study which followed $3226^{\text {th }}$ grade students for 2 years by Hoge, Smit \& Hanson (1990) found that satisfaction with the school, impression that classes were interesting and the teachers attentive, the feedback of the teachers, influence students' self-esteem. Over 100 years ago, William James (1890) suggested that self-esteem is determined by how successful we are in accomplishing tasks or reaching goals. Susan Harter (1990) supported the views of James. Children who believe that an activity is important and who feel capable in that area have higher self-esteem than others. Students must have a legitimate success in tasks that matter to them. The way individuals explain their successes or failures is important. Students must attribute their successes to their own actions. This supposes that they are auto-dependent.

To make students familiar with self-management, it is necessary to involve them in the basic steps of a behaviour change program. Such a cognitive behaviour modification puts again emphasis on the relationship between thinking and self-talking. Many psychologists consider that cognitive behaviour's modification is more a cognitive matter than a behavioural one. But some pedagogists think differently. They conceived cognitive behaviour modification's programs, by which students are taught directly how to use self-instruction. B. Manning \& B. Payne (in their article "Self-talk for Teachers and Students", 1996) determined four skills which help learners to improve their way of listening, planning, working and checking. The following four posters are used to help $5^{\text {th }}$ grade students in the processes of their self-instruction. They have been imagined by D. Meichenbaum who exposed his methodology in his book: Cognitive Behaviour Modification, An integrative approach (1977).

In classroom interactions, when teacher engages the students into a task, consisting either in planning or handling a project or confronting feedback, they can self evaluate with the help of the following protocol.

## Poster-1



## Poster - 2



## Poster - 3



## Poster -4



Figure 22. Fac-simile of the four posters imagined by D. Meichenbaum (according to Cognitive Behaviour Modification, An integrative approach (1977)).
D. Meichenbaum's methods of learning include also dialogue and interaction between teacher and student, modelling, guided discovery, motivational strategies, feedback, careful matching of the task with the student's developmental level and other principles of good teaching, the student is even involved in designing the programme (Harris, 1990, Harris \& Pressley, 1991).

We will use some of the above mentioned questions to investigate the school environment and the teacher-student relationship in the later part of this study.

### 1.8.5. How language skills are developing in learners

Language is part of school learning, but it is also a tool for learning. Of language skills depends the success of studies and of professional carrier. But language is learnt long before entering school, by parental and social contacts, which is called learning by impregnation. In theory, school should improve and strengthen language competences acquired previously. In fact, language skills of students entering the school are very uneven, due to the difference of socio-economic conditions and to the presence of migrant students unaccustomed to the language spoken at school. That is why nowadays school aims to equalize the language skills within a generation rather than improve everyone's language skills.

All children in any culture are expected to master their native language, unless severe deprivation or physical problem interferes. At least sounds, meanings words and sequences of words, volume, voice tone, inflection, and speaking turns' rules must all be coordinated before a child can communicate effectively in conversation. Inevitably culture plays a major role by determining what linguistic tools are necessary in the life of the people. The important point is that children develop language as they develop other cognitive abilities by actively trying to make sense with what they hear. Reward and correction play a role in helping children learn correct language use, but the child's effort for putting together the parts of the complicated system is very important (R. Rosser, 1994).

Several researches have explained the cognitive development of language in students, a lot of which focuses upon dual language learning. Language development is a critical phenomenon which plays an important role in cognitive development. Research shows (J. Cummins, 1984, 1994) that the more proficient a speaker is in his first language, the more quickly he or she will adopt a second language. For children who are taught bilingually at the
age of 2 or 3 , improvement becomes slow because they often mix the grammars of the two languages but at the age of 4 if they got enough exposure to both languages, they put things straight, and speak as well as the native monolinguals (Baker, 1993; Reich, 1986).

Bilingual children often adopt the use of vocabularies of the two languages when they speak, but this is not a sign that they are confused, because their parents mix often the vocabularies intentionally.

It takes them from three to five years to become truly competent in a second language (Berk, 2002; Bhatia \& Richie, 1999). It appears that there is a critical period for learning accurate language pronunciation. The earlier people learn a second language, the more they will get confident in pronouncing their native language. After adolescence it is difficult to learn a new language without speaking with an accent (Anderson \& Graham, 1994).

In the view of Diaz-Rico \& Weed (2002), old students learn the second language faster than young as they have several strategies of learning. Age is a factor in learning language but not because of any critical period that limits the possibility of language learning by adults (Marinova-Todd, Marshall, \& Snow, 2000). The best time to learn second language is early or middle childhood, as demanded by Kathleen Berger (2003). The advantages of dual language learning have been supported by many researchers. In addition, bilingual adapted students have a more advanced meta-linguistic awareness of grammar and they easily can find their errors. These findings seem to hold as long as students don't abandon their first language (Berk, 2002; Bialystok, 1999; Galambos \& Goldin-Meadow, 1990; Garcia, 1992; Ricciardelli, 1992).

Let us consider the main stages of mother language learning. Between 5 or 6 years students are expected to speak fluently their mother language. The following skills are expected from a child in his childhood:

Pronunciation: The majority of $1^{\text {st }}$ graders can follow most of the sounds of their native language, but a few may remain unconquered. About $10 \%$ of 8 -years old boys or girls have some difficulty with the words comprising the consonants s, z, v, th and zh (Rathus, 1988).

Syntax: In elementary school children learn the basics of words' order. Naturally children learn syntax of their native language more easily than that of a second language. Although
they can recognize the meaning of passive sentences generally they do not use a passive sentence spontaneously.

Vocabulary and meaning: Berger (2003) demanded that a child of early grade learn 20 words every day. The 6 -year student has an average vocabulary of 8000 to 14,000 words which will grow to about 40,000 words by the age of 11 .

Pragmatics: The pragmatic skills involve the appropriate use of language to communicate. For instance, children must learn how to manage speaking turns' rules in a conversation. Young children may seem to take their speaking turns and share a conversation, but if you listen, you realize that they don't exchange any information.

In later elementary school, children's conversations start to contribute to information usually on the same topic. Also, by middle childhood, pupils understand that an observation can be a command, as in "I see too many children at the pencil- sharpeners." By adolescence, individuals become well adapted at varying their language style to fit the situation, so they can talk to their peers in slang which makes little sense to adults, but marks the adolescent as a member of the group. Yet these same students can speak politely to adults (especially when making requests) and write persuasively about a topic in history (Berk, 2002).

Meta-linguistic awareness: Around the age of 5, pupils begin to develop metalinguistic awareness. This means that their understanding about language and how it works becomes explicit. They have knowledge about language itself. They are ready to study and extend rules that they have implicitly understood but not consciously expressed. This process continues throughout life, as we all become better able to manipulate and comprehend language. One goal of schooling is the language development and literacy.

Partnership with families: Especially in the early years, home experiences are reflected within students' development of language and literacy (Roskos \& Neuman, 1993; Snow, 1993; Whitehurst et al., 1994). Language teaching is privileged in those homes where parents teach their children by their own, take them to book stores and libraries, limits the uses of television, and encourage literacy-related plays such as setting up a pretend school or writing letters (Pressly, 1996; Roskos \& Newman, 1998; Sulzby \& Teale, 1991). Of course, not all homes can provide this literacy-rich environment, but teachers can help the students in this regard to built a community partnership guideline.

### 1.8.6. Adolescent learning and peer- culture

Erikson mentioned that in adolescent learning, peer culture is the most significant factor influencing school performance. Peer cultures are elaborated by groups of students who decide certain rules for themselves, as how to dress, talk, or style of hair. The group determines in which game or music or other activities, his members will participate. It leaves a huge imprint on education.

It has been proved in research that, mostly, peers' influence on adolescent is stronger than the impression of parents, when the two come to clash. For example, peer cultures are more powerful in defining issues of style and socialisation, parents and teachers are still influential in matters of morality, choice and religions (Harris, 1998).

### 1.8.7. Ethnicity and cognitive development

Ethnicity is the reserved term to refer to groups that are characterised in terms of a common nationality, culture, or language (Betancourt \& Lopez, 1993). This shared sense of identity may be influenced by geography, religion, race or language. Vygotsky placed more emphasis than Piaget on the role of learning language in cognitive development.

On 14/5/2002, the U.S. department of education published research findings about ethnic and racial differences' consequences in school achievement, which was a comparison of the years 1971 and 2000.


Figure 23. Findings about ethnic and racial differences' consequences in school achievement(Following the cited research of the U.S. department of education).

Compared to 1971, in 2000, $94 \%$ of white students, $87 \%$ of African-American students and $63 \%$ of Hispanic students of high school level have done better in standardized achievement test and showed major improvement of results in all level .

Spencer and Markstrom-Adams (1990) narrated that "special efforts to encourage ethnic pride are particularly important so students examining their identities do not get the message that differences are deficits". Although there are consistent differences among ethnic groups on tests of cognitive abilities, most of the researchers agree that these differences are mainly the legacy of discrimination, the product of cultural mismatches, or the result of having grown up in a low-SES environment.

In next chapter, we shall discuss how low SocioEconomical accelerates dropout of unprivileged students, in India (for Indian students, there are many diversities in learning achievement depending to caste, or religion), and in France (students of ZEP collèges versus other collèges).

### 1.9. Conclusion of Chapter 1

The primary resolution of this chapter-1 in this study was to investigate whether the modern education systems of France and India have fulfilled the aims of autonomy, competence and relatedness for all, which are determinative for adolescent learning. The second purpose was to explore the impacts of various personal, professional, and environmental factors influencing education system of either country.

As there are lots of diversities among the regions and territories of both the countries due to geopolitical, socio-demographic, cultural, linguistic and economic profiles, it is not easy neither logical to make a comparative study in all respects, but we tried to make a comparison of most of the components which are closely associated with educational system, as far as possible.

In a first part which covers Sections 1.1, 1.2 and 1.3, we have quoted different theories of various educationists and the results of their implementation in educational sectors of different countries of the world (1.1 and 1.2), specially focusing on the field of the learning of child and adolescent, as our study is precisely related to 14-18 years old students, who are at the age of adolescence.

From the comparative historical background of the education systems (1.3), one can realize that vocational as well as various professional courses have been successfully implemented parallel to mainstream education system in France much earlier than India. In France, there is a long history of the creation of a common lower secondary school curriculum, accessible to all, with no early guidance or tracing. The objective has been taken to raise school achievement for children of all social backgrounds. For the fulfilment of this objective, 2 years of basic vocational courses (CAP, BEP) have been introduced. For this vocational stream, students are recruited through the process of academic selection which continue to operate in the common junior high school (collège), an institution that is regarded as a factory as much of failure as of success (Le Monde de l'éducation, $\mathrm{n}^{\circ} 311$, Février, 2003).

The use of vocational courses to increase participation in school is a long standing feature of educational policy in France, for example, in the early sixties, nearly half of all secondary school students were enrolled in vocational courses, and many also began pre-vocational and pre-apprentice courses when they were 14-15 years old. The school based vocational courses, were upgraded from the mid of 1960 and continued to enrol a high proportion of secondary school students (41\% in 1972-73, according to Delion (Delion, 1973, p. 89-99). Ultimately, vocational education is tending to expand in response to the increasing demand of labour market. Consequently a large endeavour has been made to incite different categories of students to pursue their studies a considerable time to stick with education processes. The modern need for expansion of secondary education saw the development of alternative forms of school and the diversification of programmes, though academic selection remained a dominating feature. The upper secondary level programs have been diversified. Nowadays they include shorter and longer cycles of study, often without common standards of learning and achievement, meaning that students of different streams can enrol for a higher or shorter term of studies.

In a second part (which includes Sections 1.4, 1.5 and 1.6), we have incorporated entirely the status of socio-economic factors, of literacy, of educational structure, of curriculum (1.4), of the accountable policies (1.5), and of assessment (1.6), across the educational field in France and India, which are supposed to be the ideal indicators for reflecting the reality of educational environments

Concerning curriculum composition, in India, NCERT took up the responsibility of developing the school curriculum in 1975. In the document entitled: "The Curriculum for the Ten Year School - A Framework", objectives of general education, contents and instructional objectives, methodology of teaching, instructional aides, assessment tools, and, of course, remedies against school dropout, are recommended. In 1977, Ishwar Bhai Committee reviewed the Ten Year School Curriculum. In 1988, National Curriculum for Elementary and Secondary Education was organized, a framework of revised activity on the National Policy on Education (NPE) of 1986. In 2000, National Curriculum Framework for School Education (NCFSE) was brought in action. The NCF-2005 was approved by Central Advisory Board of Education (CABE) in September, 2005. In France, curriculum is evidently revised in regular basis, which are available in the official website of B.O. ('Bulletin officiel'). Curriculum development is a cyclic process, it requires regular feedback through different sources including research studies for its revision, updating and upgradation.

Our study is also an attempt in this direction, focusing on the current status of the school curriculum of either country. In this regard, a broad discussion has been initiated concerning primary, upper primary and secondary levels educations of India and France. As a conclusion we may suggest that in India as well as in France, curriculum should be so composed as to provide sufficient scope for ethnic pride of respective regions and groups, and a number of working days compatible with the quantity and quality of school contents.

In a third part (including Sections 1.7 and 1.8), we have also discussed elaborately all the psychological aspects (1.7) which are closely concerned with child's cognitive development and teaching (1.8).

Neurons are found adequate in number at the age of 2 or 3 , afterwards those which are active survive and the inactive are pruned. In adult, adequate neurones and synapses are needed to adapt and adjust to the environment. This explains why pre-primary education at the age of 2 to 3 is so important for the socialisation of learners and for the overcoming of the different cognitive behavioural problems of childhood.

In France, $70 \%$ children are sent to pre-primary school at the age of 2 and $30 \%$ are admitted at the age of 3 , which gives a $100 \%$ students' enrolment at the level of pre-primary education. In India, there is no prominent infrastructure of pre-primary education in national or state level. I.C.D.H (Integrated Child Development Services), and Anganwadi (which means "courtyard
shelter" in Indian languages), are only two state institutions of pre-primary education where a very limited number of pupils is admitted. This is a big drawback of the Indian education system.

Another important issue of which we can be apprised by the biological explanation of cognitive development is about socialization, which plays such an important part in learning. Psychologists affirm that many behavioural problems encountered in childhood can bother or even obstruct the future process of socialization.

The discussion of all above topics urged us to develop ideas about how to create a benevolent educational environment for the learners and how to tackle different problems which face students in their educational domain. It gave us precious indications about how to detect and to treat at risk students, who are apt to drop out. It also provided us with ideas for the survey processes (chapter-3), which will be examined in the concluding part of this study.

If we put in relation the main features of the comparison of the education systems of the two countries with the main results of research on child's cognitive and behavioural development, we find three processes intimately related: mind, sociality and language. They are the main supports of a successful schooling carrier. We will see in the next chapter that most of the predictive indicators of school dropout and most of the remedying programs take into account the three basic skills of maths (how to count and reason), sociability (how to live together), and language (how to communicate in speaking and writing). What remains to be discussed is how to find the proper way of making these three skills collaborate instead of conflict, as, for example, when the lack of mathematics skills forces somebody to specialize in literature, or is an impediment to assure a very basic job, when the lack of language skills prevents from communicate, or when the lack of social skills deprives a student of the collaboration with his peers for a better learning.

## Chapter 2

## School dropout and allied factors

### 2.0. Introduction

The modern history of education system, in the developing and developed countries of the world, shows two opposite but interrelated trends: first, the comprehensive student enrolment in secondary education, and secondly, widening vulnerability to failure at school.

In the field of education, international comparison highlights the institutional differentiation i.e. students following discrete academic, professional or vocational streams and separate segregations i.e. students attend separate schools according to academic performance, religion, ethnicity or socio-economic status (Lamb, 2008).

In the early decades after the Second World War, the majority of children from working class background, did not attempt extended secondary schooling, many were considered as underachievers. They repeated grades and were not admitted to academic secondary schools, or if they were admitted, they were placed in terminal courses. Thus failure was coming early and definitely.

Massification (a French term) of education came in, on the middle part of past century (1960 to 1970 depending of national chronologies), resulting in high insecurity for a large number of students, eventually affected in high percentage of dropping out from conventional educational institutions.

France and India must be replaced in their respective environments. In late 1970, with the advancement of industrialization in France and Europe, and with the 'green revolution' of cultivation in India like the other Asian countries, huge skilled or unskilled labours were needed, which demanded the importance of the diversification of post-secondary education. That is why nowadays, in modern education system, not all streams of study or training in upper secondary education give accesses to tertiary education.

As dropping out is influenced by both individual and institutional factors, intervening strategies should be focused on either or both set of factors. Both state and private organizations should cooperate to reduce dropout rates and improve high school performance.

### 2.1. Dropout, a presentation

Dropout is an integrated process by which a person, his family and the substantial economic growth of a country might be stagnant. This is why prevention of student dropout is an instant vital global issue for ever. Let view, how in the field of research in education, importance of this topic is being gradually enhanced.

The historic past of research on school dropout spans from early 1927. At this time, dropout students were labelled as "school leavers" and associated with those who are at risk with possible mental inferiority (Fuller, 1927). When students drop out, their lives may be totally reset. They will generally earn less than their peers, and they end up in labour market or worse position more likely than higher studies.

### 2.1.1. How to observe dropout

The phenomenon of students dropping out of high school has recently gained renewed attention, with researchers and policy makers wanting to know how many students are dropping out, what causes dropout, and what may be done to prevent it (Bridgeland, Di Julio, and Morison 2006; Heckman and La Fontaine 2007; Orfield 2004). Leaving high school before receiving a diploma often represents a culminating event in a long-term process of disengagement from formal education (Alexander, Entwisle, and Kabbani 2001; Finn 1989). Understanding this process requires the consideration of students traits (some invariant, some malleable) and the social organization of the school, home, and neighbourhood. These factors are visible to outside observers, but they are not always identified at school. Many stay at home and do not have something useful to do with their time, others continue to look after younger brothers and sisters (this is more prevalent amongst girls), some try to find work but without success, others continue to or engage in criminal activities often initiated before the end of school, and some young girls get pregnant around 16 or 17 years of age.

### 2.1.1.1. Definition

First of all, one must distinguish dropout from a closer phenomenon which can precede or nurture it: school unattendance. New UIS data show that 58 million children roughly between the ages of 6 and 11 years are out of school, with barely any change since 2007. According to the statistics of UNESCO ${ }^{66}$, around $43 \%$ of those out of school - or 15 million girls and 10 million boys - will probably never set foot in a classroom if current trends continue.

This lack of progress is largely due to the high population growth in sub-Saharan Africa, now home to more than 30 million out-of-school children. Most of these children will never start school and those who do are at risk of dropping out. Across the region, more than one in three children who started school in 2012 will leave before reaching the last grade of primary, according to UIS data.


Figure 24. Out of school children in the world in $2012^{66}$.

[^46]According to Lyche (2010) ${ }^{67}$ dropping out is usually the result of a long process of student's disengagement caused by six factors named educational performance, students' behavior, educational system policies, conditions of labour market, school factors like school's size and resources, background like students' family, some of which are observable and some not. This is shown by the subsequent schema:


Figure 25. The six factors involved in the dropping out (according to Lyche).

### 2.1.1.2. Measurements

The calculation of dropout rates varies according to how the concept is defined. Studies show that a variety of parameters are used to define dropout (Hammack, 1986; Mac Millan, Balow, Widaman, Borthwick-Duffy \& Hendrick, 1990, Thurlow, Johnson \& Sinclair, 2002):
(1) Variation in grade levels or age of students, as some surveys consider data for only tenth to twelfth grades of students, whereas some include data from ninth to twelfth grades.
(2) Variation in the length of time which students are required to miss school before they are considered dropout (ranges vary from 15 to 45 days for declaring unexcused absence).
(3) Variation in the length of the accounting period during which dropout is calculated.
(4) Exclusion of some groups of students from the calculation of dropout rates (e.g., those who receive special education services).

[^47](5) Programme count regarding enrolment. Some calculations include students enrolled in GED programme, night school, and some only include those enrolled in traditional day schools.

### 2.1.1.3. Variations depending on countries

The definition of dropout changes also as required by the socio-economic demands of the countries and the effects on their educational concern. In most of the O.E.C.D. countries, enrolment of students beyond the secondary level is considered as a minimum level of educational attainment for successful participation in further study and work, failure of which is considered as dropout. The accepted dropout indicator of European government in Lisbon summit (2000) recognizes pedagogic failure of students before the second cycle of secondary education; which in the French field means that they have quit their studies without qualification of CAP (vocational training qualification), B.E.P (certificate of technical education) or after 'BREVET' without getting 'Baccalauréat' (12 standard) certificate. In U.S.A., according to the law N.C.L.B (No Child Left Behind), 2002, states have been required to test student's ability in reading and math between grades $3-8$ and once in high school. In U.S.A the dropout calculation is measured in the basis of graduation. In the field of Indian education dropout is measured by the students who failed to reach beyond the grade level of elementary education or to the standard of class -viii.

### 2.1.2. Dropout in French education system

How serious is the status of current students' dropout in France? 'Le monde', a daily newspaper in France reported in an article of 12/5/2011, that there have been 306,000 school dropout happened between June-2010 and March-2011. In this report it was also proclaimed that within the dropout students, 60,000 were associated with vocational training, 80,000 were seeking an employment, and the rest 166,000 dropped out due to some undetected causes.

### 2.1.2.1. Statistics of dropout in France from 1960 to 2010

A report of B.O. (Bulletin officiel) of French education department (april-2005) proclaims that $6 \%$ of young people had finished their initial education without proper qualification (in the sense of the French classification of education levels), $70 \%$ of them reached to the level of the baccalauréat, $62 \%$ obtained the baccalauréat, approximately $50 \%$ accessed to the higher education and a little over $40 \%$ obtained a higher education qualification. In late 60, French students who leave their studies before compulsory education were more than $35 \%$ of total
number of existing students of the country ${ }^{68}$. From 1960 to 2005 the dropout percentage reduced in regular intervals. But from 2005 to 2009, it has rather been increasing:

$$
10.5 \% \text { in } 2005<10.8 \% \text { in } 2006<11 \% \text { in } 2007<12.3 \% \text { in } 2009 .
$$

Following are the statistics of students dropout from 1960's to 2009.


Figure 26. Statistics of the student dropout in France from 1960 to 2009 (from ${ }^{68}$ ).
Here we shall discuss about the schooling history and labor-market entry of dropout students in France using the report of INSEE survey (2003) on educational and occupational skills: FQP (Formation et Qualification Professionnelle).

According to the report, learner's early learning problems are manifested by the need to repeat grades in primary school. Grade repetition emerges as a particularly strong dropout determinant. Another powerful factor is the streaming in secondary school, which separates students who continue in the "mainstream" middle school and high school from those rapidly channelled into vocational-training programs. Later, students either leave school very early or go on to prepare higher vocational diplomas called CAP or BEP. However, schooling histories differ not only because of students' educational characteristics but also because of their socio-economic profiles.

We have examined too the reports of April 2005 B.O. and of J.A.P.D test (J.A.P.D. is the military day of France, a literacy test is organized on this occasion).

According to these reports, $6 \%$ of young people had finished their initial education without proper qualification (in the sense of the French classification of education levels); $70 \%$ reached the level of the Baccalaureate (level-IV); $62 \%$ obtained the baccalaureate;

[^48]approximately $50 \%$ accessed to the higher education and a little over $40 \%$ obtained a higher education qualification. In 2008, although $86.67 \%$ students have appeared in 'baccalauréat' examination, the dropout rate has been increased to $11 \%$. From a report of education department we know that, in the three successive years after 2006, the dropout rate in college students has been found $10.8 \%, 11 \%$ and $11 \%$.

### 2.1.2.2. School dropout at the different levels of education's sector in France

Dropout intervenes at every level and in every sector of education. According to the statistics of March 2001, we found the results of generation 98 (Source: www.cereq.fr-1998, 'quand l'école est finie', page-9), presented both with a diagram and a board:


Figure 27. School dropout at different levels of education in France (following www.cereq.fr-1998).

| Grade level | Total <br> number of <br> students | Percentage of <br> students |  |
| :--- | :--- | :---: | :---: |
| (A) | Lycées and collèges under the control of ministry <br> of education department | 362,000 | $49 \%$ |
| (B) | University or établissement rattaché' | 168,000 | $23 \%$ |
| (C) | 'Centre de formation des apprentis' | 121,000 | $16 \%$ |
| (D) | Other 'établissement d'enseignement supérieur' | 70,000 | $9 \%$ |
| (E) | I.U.F.M | 21,000 | $3 \%$ |

Table 34. Statistics corresponding to Figure 27.
Clarification: In 1998, 742,000 students were found who moved away from the different levels of education sectors but most importantly, about $50 \%$ of them were students of collèges or lycées.

Let us now compare with the results of generation 2007 (quand l'école est finie, cereq, 2012):

| Grade level | Total number of students | Percentage |
| :--- | :---: | :---: |
| Collège or lycée | 317,770 | $43 \%$ |
| University or 'établissement attaché' | 184,750 | $25 \%$ |
| 'Centre de formation des apprentis' | 140,410 | $19 \%$ |
| Other 'établissement d'enseignement <br> supérieur' | 96,070 | $13 \%$ |

Table 35. School dropout at different levels of education in France in 2007 (from quand l'école est finie, cereq, 2012).

In 2007, 739,000 students from different levels of education system in France dropout, which is 3000 less than in 1998. In collège or lycée level, we found in 2007, $43 \%$ students dropping out, with a decrease of $6 \%$ compared to the students of generation 98 .

### 2.1.2.3. Level of qualification of students migrant or born of migrants on coming out of school in France

The tendency to drop out has been shown related to socio-economical, linguistic and cultural factors. One of them consists in migration's consequences.
We found the next statistics about the employment and working conditions of migrant workers in www.eurofound.europa.eu

| Level of education reached by young who got out of the education system in 1998 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Origin of the father |  |  |  |  |  |
|  | South Europe |  | North Africa |  | Frenchnative |  |
|  | M | W | M | W | M | W |
| No qualification | 8,1 | 6,3 | 23,7 | 14,9 | 7,5 | 5,5 |
| Technical school and vocational training (no diploma) | 9,7 | 4,4 | 16,6 | 10,9 | 5,7 | 3,6 |
| Technical school and vocational training (qualified) | 27,4 | 21,4 | 19,5 | 19,9 | 20 | 15,1 |
| End of secondary studies (no diploma) | 8,5 | 4,2 | 8,4 | 5,9 | 6 | 3,8 |
| End of secondary studies (qualified) | 22,1 | 29,6 | 18,9 | 27,9 | 24,5 | 27,7 |
| Under-graduate (qualified) | 14,9 | 14,8 | 6,8 | 12 | 17,5 | 22,3 |
| Graduate (qualified) | 4,7 | 13,6 | 3,8 | 6 | 7,8 | 13,7 |
| Post-graduate (qualified) | 4,5 | 5,7 | 2,1 | 2,5 | 10 | 8,3 |

Table 36. Statistics about the employment and working conditions of migrant workers in Europa(from www.eurofound.europa.eu).

The question of the working conditions of 'migrants' relates to quite complex issues in France. Referring to the formal definition of 'migrants' (non-nationals) leads to keep in the shade the major problems of discrimination at work towards the 'visible minorities', as those are in large part French citizens. Migrants tend to concentrate more than natives in unqualified jobs, with precarious employment status. The fact that even the 'second generation' is concerned by this situation highlights the difficulties of the French educational system to offer social integration and promotion for those who do not benefit of a favorable family background (high educated parents, with a network of professional relations).

Evidence from most recent statistics indicates that people migration is becoming one of the major factors influencing education and economic sectors in Europa. International migration database, stats.oecd.org, data of $6^{\text {th }}$ October, 2014, shows that the percentage of immigrants is growing more rapidly in France than in other European countries except Italy.

| Inflows growing of foreign <br> population in percentage | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| France | 128.88 | 135.95 | 126.16 | 136.05 | 141.9 |
| Austria | 91.74 | 94.76 | 91.81 | 98.26 | 11.93 |
| Belgium | 93.38 | 106.01 | 102.71 | 113.58 | 117.94 |
| Czech Republic | 102.51 | 77.81 | 39.97 | 30.51 | 22.59 |
| Italy | 490.43 | 462.27 | 392.52 | 419.55 | 354.32 |

Table 37. Percentage of inflows of immigrants in some European countries (according to stats.oecd.org, data of $6^{\text {th }}$ October, 2014).

The purpose of this database is to describe the 'immigrant' population (generally the foreign born population). The information gathered concerns the flows and stocks of the total immigrant population and of immigrants' labor force, together with data on acquisition of nationality. Statistics show a growing up proportion of immigrants in France in 2011 compared to 2007.

This study allows to compare among the migrant workers both EU citizens and non-EU citizens. In other words, it enables us to consider both migrations across EU member states, Bulgaria, Romania and Norway, and migration from outside this area. In France, migrant students in the field of post-graduate level suffer more to get a job, compared to native postgraduate students.

Today's immigrants are much more qualified than those of before. The proportion of the group who holds a higher education diploma has risen from $6 \%$ to $24 \%$. However, immigrants are still much more highly-represented in the population without qualifications ( $48 \%$ against $23 \%$ for non-immigrants).

### 2.1.2.4. Population aged 18 -24, without lower secondary qualification in Europa

| Country | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| France | $12.8 \%$ | $12.2 \%$ | $12.5 \%$ | $12.7 \%$ | $11.9 \%$ | $12.4 \%$ | $12.8 \%$ |
| Germany | $12.1 \%$ | $13.6 \%$ | $13.6 \%$ | $12.5 \%$ | $11.8 \%$ | $11.1 \%$ | $11.9 \%$ |
| Belgium | $13.1 \%$ | $12.9 \%$ | $12.6 \%$ | $12.1 \%$ | $12 \%$ | $11.1 \%$ | $11.9 \%$ |
| U.K | $12.1 \%$ | $11.3 \%$ | $11.3 \%$ | $16.6 \%$ | $17 \%$ | $15.7 \%$ | $14.9 \%$ |

Table 38. Statistics of the population aged 18-24, without lower secondary qualification in Europa (from: survey 'Génération 98', CEREQ).

Above chart discloses that:
(a) In 2010, the dropout rate in 16-24 age group of students of France was $12.8 \%$ and in the span of last seven years once ( $11.9 \%$ in 2008) the percentage reached less than 12 . In both Germany and Belgium the percentage of secondary unqualified students decreased from $12.1 \%$ and $13.1 \%$ in 2004 to $11.9 \%$ in 2010. In U.K, the percentage of unqualified students has increased from $12.1 \%$ in 2004 to $14.9 \%$ in 2010.
(b) In the span of seven years (from 2004 to 2010) the lowest percentage of secondary unqualified students in 16-24 age groups was $11.9 \%$ in France which is greater than Germany and Belgium (11.1\% in 2009) and U.K (11.3\% in 2005 and 2006).
(c) In the period of seven years, the highest rate of unqualified students found was $12.8 \%$ in France which is less than $17 \%$ of U.K (in 2008), $13.6 \%$ of Germany (in 2006) and $13.1 \%$ of Belgium (in 2004).

### 2.1.3. Dropout in Indian education system

India did not take part in any major educational assessment like P.I.S.A, PEARL or TIMSS. We cannot really take into account the failed attempt to enter PISA Assessment in 2012. So it is not easy to access the learning status and learning environment around the country.

To know the educational status of a country, literacy rate is a prime and reliable indicator. In this regard we must have to consider the latest literacy rate of India as a whole and also the difference in literacy rate of genders. The literacy rate is calculated in India at the time of census which is held on in a gap of 10 years. In India, a person whose age is seven and above, who can both read and write and understand any simple form of his mother language is considered a literate person. In 2011 the literacy rate India was $74.04 \%$, in which male were found $82.14 \%$ and female $65.46 \%$. In India like in many other Asian countries the literacy rate persists in a miserable condition. And we know that parents' illiteracy has a direct effect on children's dropping out of school.

In France, as we discussed earlier, the rate of students' dropout is high compared to other European countries, although the literacy rate is high. So, even if the literacy rate is the most powerful indicator of a country's educational status, it is not sufficient in itself to prevent from school dropout. Another condition must be its improving at the beginning of life and all the lifelong. Literacy enhances productivity and earning potential of a population, besides improving its quality of life. Illiteracy is an endemic problem for more than half the population in sub-Saharan Africa and south Asia. The starting point for literacy for most of a country's population is primary education. Universal primary education as it induces significant reduction in dropout rates could enhance literacy levels. The strengthening formal primary education system is one of the chief means of increasing literacy.

### 2.1.3.1. Massive illiteracy and dropout in India

The literacy rate has been increased rapidly after India got independence. Anyway, in 2007, India's literacy rate ( $60 \%$ ) was yet much behind China ( $93.3 \%$ ), Sri-Lanka ( $90.8 \%$ ) and Burma ( $89.9 \%$ ). But Nepal ( $56.5 \%$ ) and Pakistan ( $54.2 \%$ ) were far behind India. The number of girls dropping out of school, far more important than that of boys, indicates the inequality in male and female educational status in Indian society. In the eleventh economic plan (20072012) the following two main objectives of education have been fixed: increase literacy rate and tackle the excessive dropout status. It was planned firstly, to increase the rate of literacy above $85 \%$ in average, and secondly, to reduce of $20 \%$ dropout from elementary school, which was more than $52.2 \%$ in the academic session of 2003-04. Some statistics of the latest literacy rate of India (2011) after the $15^{\text {th }}$ official census are given below (http://www.census2011.co.in/literacy-php):

| Rank | State | Literacy rate (2011 Census) | Literacy <br> Male <br> Census) | $\begin{aligned} & \text { rate- } \\ & (2011 \end{aligned}$ | Literacy rate- <br> Female $(2011$ <br> Census)  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Andaman \& Nicobar Islands | 86.3\% | 90.1\% |  | 81.8\% |
| 2 | Andhra Pradesh | 67.7\% | 75.6\% |  | 59.7\% |
| 3 | Arunachal Pradesh | 67.0\% | 73.7\% |  | 59.6\% |
| 4 | Assam | 73.2\% | 78.8\% |  | 67.3\% |
| 5 | Bihar | 63.8\% | 73.5\% |  | 53.3\% |
| 6 | Chandigarh | 86.4\% | 90.5\% |  | 81.4\% |
| 7 | Chhattisgarh | 71.0\% | 81.5\% |  | 60.6\% |
| 8 | Dadra \& Nagar Haveli | 77.7\% | 86.5\% |  | 65.9\% |
| 9 | Daman \& Diu | 87.1\% | 91.5\% |  | 79.6\% |
| 10 | Delhi | 86.3\% | 91.0\% |  | 80.9\% |
| 11 | Goa | 87.4\% | 92.8\% |  | 81.8\% |
| 12 | Gujarat | 79.3\% | 87.2\% |  | 70.7\% |
| 13 | Haryana | 76.6\% | 85.4\% |  | 66.8\% |
| 14 | Himachal Pradesh | 83.8\% | 90.8\% |  | 76.6\% |
| 15 | Jammu and Kashmir | 68.7\% | 78.3\% |  | 58.0\% |
| 16 | Jharkhand | 67.6\% | 78.5\% |  | 56.2\% |
| 17 | Karnataka | 75.6\% | 82.8\% |  | 68.1\% |
| 18 | Kerala | 93.9\% | 96.0\% |  | 92.0\% |
| 19 | Lakshadweep | 92.3\% | 96.1\% |  | 88.2\% |
| 20 | Madhya Pradesh | 70.6\% | 80.5\% |  | 60.0\% |
| 21 | Maharashtra | 82.9\% | 89.8\% |  | 75.5\% |
| 22 | Manipur | 79.8\% | 86.5\% |  | 73.2\% |
| 23 | Meghalaya | 75.5\% | 77.2\% |  | 73.8\% |
| 24 | Mizoram | 91.6\% | 93.7\% |  | 89.4\% |
| 25 | Nagaland | 80.1\% | 83.3\% |  | 76.7\% |
| 26 | Orissa | 73.5\% | 82.4\% |  | 64.4\% |
| 27 | Pondicherry | 86.5\% | 92.1\% |  | 81.2\% |
| 28 | Punjab | 76.7\% | 81.5\% |  | 71.3\% |
| 29 | Rajasthan | 67.1\% | 80.5\% |  | 52.7\% |


| $\mathbf{3 0}$ | Sikkim | $82.2 \%$ | $87.3 \%$ | $76.4 \%$ |
| :---: | :--- | :---: | :---: | :---: |
| $\mathbf{3 1}$ | Tamil Nadu | $80.3 \%$ | $86.8 \%$ | $73.9 \%$ |
| $\mathbf{3 2}$ | Tripura | $87.8 \%$ | $92.2 \%$ | $83.1 \%$ |
| $\mathbf{3 3}$ | Uttar Pradesh | $69.7 \%$ | $79.2 \%$ | $59.3 \%$ |
| $\mathbf{3 4}$ | Uttarakhand | $79.6 \%$ | $88.3 \%$ | $70.7 \%$ |
| $\mathbf{3 5}$ | West Bengal | $77.1 \%$ | $82.7 \%$ | $71.2 \%$ |
|  | Whole India | $74.04 \%$ | $82.14 \%$ | $65.46 \%$ |

Table 39. Statistics of the latest literacy rate of India (2011) after the $15^{\text {th }}$ official census (see http://www.census2011.co.in/literacy-php

### 2.1.3.2. Survey of Sarva Shiksha Abhiyan (SSA) in 2009

S.S.A is a Government of India's flagship programme launched in for achievement of Universalization of Elementary Education (UEE) in a time bound manner, as mandated by $86^{\text {th }}$ amendment to the Constitution of India making free and compulsory Education to the Children of 6-13 years age group (i.e., those above 6 years but below 14 years) a Fundamental Right. SSA is being implemented in partnership with States' Governments to cover the entire country and address the needs of 200 million children in nearly 2 million habitations.

### 2.1.3.2.1. Characteristics of SSA survey

Regarding the methodology, the samples of households were collected from all the states and union territories of India during February - May 2009. The survey was organized on the students who were enlisted under the age group of 6-13. Elaborated results came in front in 2010.

The following findings are based on the data collected from a sample of 99,226 households. It was estimated that there were 190,582,581 children in the age group of 6-13 years, $155,143,385$ in rural areas and $35,439,196$ in urban areas. Out of these, the estimated number of out-of-school children in the country was $8,150,618$, who shared $4.28 \%$ of the total children in this age group.

### 2.1.3.2.2. Results of SSA survey

i/ The survey discriminated the tendency of student out of school status depending on zones, $7,024,118$ of which were from rural areas ( $4.53 \%$ ) and $1,126,500$ from urban areas (3.18\%).
ii/ The percentage of out-of-school children was relatively higher among those in the age group 11-13 years (5.23\%) compared to the age group 6-10 years (3.69\%).
iii/ Percentages of out-of-school boys and girls in the age group 6-10 years were 3.40\% and $4.04 \%$ respectively, in 11-13 age group the percentage of out-of-school children were relatively higher among girls ( $5.79 \%$ ) than boys ( $4.77 \%$ ).
iv/ Among the different social groups, the estimated percentage of out-of-school children were $7.67 \%$ for Muslims, $5.60 \%$ for ST, $5.96 \%$ for SC and $2.67 \%$ for OBC and others.
$\mathbf{v}$ / The survey reveals that estimated $2,897,096$ children in the age group 6-13 (i.e. $1.52 \%$ of the total number of children in the age group 6-13) were physically or mentally challenged.
vi/ At the national level, among the children in the age group 6-13 years who were out-ofschool, $74.89 \%$ were those who never attended a school, and $25.11 \%$ were those who had dropped out from school after their school enrolment, as resumed by the diagram below.

## \%Out of school children - By Locality


\%of Dropouts and Never Attendedchildren


Figure 28. (left) Statistics of percentage of out-of-school children depending on zones. (right) Statistics of percentage of drop out and never attended children (following Survey SSA in 2009).

### 2.1.3.3. Results of Social and Rural Research Institute (SRI) survey about out of school students in India in 2010

In the following report of the survey of S.R.I-2010 ${ }^{74}$, clearly two differentiations have been shown, the states (traced by maroon color) where the rate of students out of school is more than average ( $4.28 \%$ ) and the states (in green color), where the percentage of students out of school is less than national average. These findings confirm the last statement of SSA survey.


Figure 29. Percentage of Out-Of-School Children in every state of India (from survey of S.R.I-2010 ${ }^{74}$ ).
Clarification:
(i) Percentage of girls out of school ( $4.71 \%$ ) is more than the boys ( $3.92 \%$ ).
(ii) Students of 11-13 years age group are more out of school (5.96\%) than the age group of 6-10 age groups (3.69).
(iii) Muslim students of 6 to 13 age group are more victimized (7.67\%) than S.C (5.96\%), S.T (5.60) \& O.B.C (2.67\%)
(iv) Statewide statistics about the percentage of students out of school in India:

|  | State | Boys | Girls | Average | Rural | Urban |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Arunachal Pradesh | 10.61 | 10.88 | 10.24 | 10.80 | 7.11 |
| $\mathbf{2}$ | Rajasthan | 8.36 | 5.54 | 12.55 | 8.99 | 2.67 |


| $\mathbf{3}$ | Uttar Pradesh | 7.60 | 7.29 | 7.98 | 7.33 | 9.53 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4}$ | Bihar | 7.15 | 6.21 | 8.19 | 7.34 | 4.89 |
| $\mathbf{5}$ | Orissa | 7.02 | 6.56 | 7.50 | 7.28 | 3.10 |
| $\mathbf{6}$ | West Bengal | 5.25 | 5.51 | 4.98 | 5.27 | 5.17 |
| $\mathbf{7}$ | Delhi | 5.00 | 5.21 | 4.76 | 0.72 | 5.09 |
| $\mathbf{8}$ | Mizoram | 4.71 | 4.55 | 4.91 | 5.70 | 1.80 |
| $\mathbf{9}$ | Assam | 4.55 | 3.92 | 5.19 | 4.84 | 2.76 |
| $\mathbf{1 0}$ | Uttarakhand | 3.54 | 3.21 | 3.92 | 3.83 | 1.16 |
| $\mathbf{1 1}$ | Manipur | 3.15 | 2.23 | 4.25 | 3.57 | 1.78 |
| $\mathbf{1 2}$ | Meghalaya | 3.05 | 2.98 | 3.13 | 3.07 | 2.13 |
| $\mathbf{1 3}$ | Haryana | 2.69 | 2.32 | 3.19 | 3.07 | 2.02 |
| $\mathbf{1 4}$ | Madhya Pradesh | 2.62 | 2.44 | 2.85 | 2.71 | 2.31 |
| $\mathbf{1 5}$ | Nagaland | 2.44 | 1.97 | 2.96 | 2.01 | 3.65 |
| $\mathbf{1 6}$ | Jharkhand | 2.34 | 2.92 | 1.60 | 2.50 | 1.03 |
| $\mathbf{1 7}$ | Chattisgarh | 2.08 | 1.66 | 2.67 | 2.16 | 1.10 |
| $\mathbf{1 8}$ | Gujarat | 1.86 | 1.87 | 1.84 | 1.48 | 2.92 |
| $\mathbf{1 9}$ | Tripura | 1.47 | 1.59 | 1.32 | 1.59 | 1.01 |
| $\mathbf{2 0}$ | Andhra Pradesh | 1.41 | 1.52 | 1.29 | 1.49 | 1.19 |
| $\mathbf{2 1}$ | Karnataka | 1.27 | 1.43 | 1.10 | 1.30 | 1.19 |
| $\mathbf{2 2}$ | Maharashtra | 1.27 | 1.32 | 1.21 | 1.24 | 1.33 |
| $\mathbf{2 3}$ | Chandigarh | 1.18 | 1.35 | 0.99 | 0.58 | 1.30 |
| $\mathbf{2 4}$ | Dadra \& Nagar | 1.09 | 0.04 | 2.45 | 1.16 | 0.28 |
| $\mathbf{2 5}$ | Sikkim | 0.67 | 1.01 | 0.31 | 0.69 | 0.29 |
| $\mathbf{2 6}$ | Tamil Nadu | 0.63 | 0.68 | 0.56 | 0.69 | 0.45 |
| $\mathbf{2 7}$ | Pondicherry | 0.55 | 0.15 | 0.94 | 0.66 | 0.45 |
| $\mathbf{2 8}$ | Jammu \& Kashmir | 0.54 | 0.68 | 0.33 | 0.58 | 0.06 |
| $\mathbf{2 9}$ | Kerala | 0.37 | 0.55 | 0.18 | 0.38 | 0.21 |
| $\mathbf{3 0}$ | Himachal Pradesh | 0.26 | 0.35 | 0.15 | 0.24 | 1.24 |
| $\mathbf{3 1}$ | Daman \& Diu | 0.08 | 0.16 | 0.00 | 0.00 | 0.35 |
| $\mathbf{3 2}$ | Punjab | 0.03 | 0.03 | 0.03 | 0.01 | 0.09 |
| $\mathbf{3 3}$ | Andaman \& Nicobar | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mathbf{3 4}$ | Goa | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| $\mathbf{3 5}$ | Lakshadweep | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| All | India | $\mathbf{4 . 2 8}$ | $\mathbf{3 . 9 2}$ | $\mathbf{4 . 7 1}$ | $\mathbf{4 . 5 3}$ | $\mathbf{3 . 1 8}$ |
|  |  |  |  |  |  |  |

Table 40. Statistics of percentage of Out-Of-School Children in every state of India (from survey of S.R.I$\left.2010^{74}\right)$.

### 2.1.4. Comparison of dropout situations in France and in India

The comparison must take into account the differences of parameters issued from the differences of situations.

The situation in France could be characterized by a reduced academic failure but more serious consequences for the future of young people. From website Personnel de l'Éducation Nationale, media.education.gouv.fr / State of Education, 16 [2006 issue] we are informed that:

> En France, $13 \%$ de l'ensemble des jeunes de 18 à 24 ans ne poursuivent pas d'études n'ont ni CAP, ni BEP, ni baccalauréat et sont «sortants précoces », en 2005 .
> Poursuivant ou non des études, $17 \%$ des jeunes âgés de 20 à 24 ans, n'ont, de même, ni CAP, ni BEP, ni baccalauréat (contre $83 \%$ de diplômés du second cycle du secondaire). Dans les générations de leurs parents (nées de 1947à 1956), 4 personnes sur 10 sont dans ce cas ${ }^{69}$.

For a better understanding we must remember that:

- According to the accepted definition in France, to leave the education system "without a qualification" means a break in study before the final year of preparation for the Vocational Training Qualification (CAP) or Certificate of Technical Education (BEP), or just after college (page-8/9).
- The minimum level of qualification selected by the European Union and international bodies is the completion, by young generations, of a secondary education "second cycle", validated by a certificate or a diploma (page 30/31)
- In 2003, five objectives were established on priority education and vocational training issues: widespread development of the second cycle in secondary education, reduction in the number of early dropouts from the education system, development of adult 'training', improvement in basic reading skills and increase in the number of science and technology graduates (page- 40/41).

From the website: Dropout study 21 states- Sarba Siksha Avijan, ssa.nic.in, we can collect some indications about Indian dropout situation and definition.

- A student is termed as school leaver if she/he has left the school and her/his name is struck off from the school roster on or before 30th September of the following year (2009/2010). A school leaver either discontinues study or takes admission in another school. In the case of schools in which the highest grade is grade VII or below, a student who leaves school after completing the highest grade is also treated as school leaver since such a child

[^49]has to be tracked to find out whether she/he is a dropout or is studying in another school (page 21).

Here we shall prepare a comparative analysis of school dropout and gross enrolment ratio of France and India, which are most convincing and explorative evidences for sizing up the educational status of both countries.

A $100 \%$ school enrolment in elementary education like in French education system is still a dream in Indian education sector. Such a percentage of students never became at this day a part and parcel of formal education system. In India, $6.94 \%$ students in average were out of school in 2006 which was converted in $4.28 \%$ in 2009. Within out of school students, $7.8 \%$ were found from rural areas in 2006, reduced to $4.53 \%$ in 2009. In urban area this statistics showed a slight improvement, $4.34 \%$ were found in 2006 against $3.18 \%$ in 2009. In 2006, the percentage of students out of school was $4.7 \%$, reduced to $3.2 \%$ in 2009. In standard-1, students' dropout percentage was $2.2 \%$ in 2006 compared to $1.1 \%$ in 2006. It has been prominently disclosed that in three years students' dropout reduced to $1.1 \%$ in grade- 1 , and the percentage of students out of school to 1.5 in average. The S.R.I survey has further disclosed that in India, within the students who dropped out of school (25.11\%) in the year 2009, near about $50 \%$ quitted primary or elementary education.

### 2.1.4.1. Global statistics

In late 60, percentage of student's dropout in France was $38 \%^{70}$. From 1960 to 2005, as shown higher, this percentage of students' dropout has been reduced in regular intervals but since 2005 rate of dropout is mounting again. According 'le projet académique de Nice' 2010-2014 ${ }^{59}$, in 2005 to 2009, student's dropout has been increasing in following ways $10.5 \%$ in $2005<11 \%$ in 2007 and $<12.3 \%$ in 2009.

In India, according to Ministry of Human Resource Development (department of education is included under this establishment) statistics of 2009-10 ${ }^{71}$, following are the percentages of students' dropout rate in primary, elementary and secondary schools. Evidently, the rate of dropout is massive in India compared to France.

[^50]| Primary (1-v standard) |  |  | Elementary (1-viii standard) |  |  | Secondary (1-ix standard) |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total |
| 30.25 | 27.25 | 28.86 | 40.59 | 44.39 | 42.39 | 53.38 | 51.97 | 52.72 |

Table 41. Percentages of students' dropout rate in primary, elementary and secondary Indian schools (from ${ }^{71}$ ).

### 2.1.4.1.1. At a national level

UNESCO Institute for Statistics, in collaboration with World Bank ${ }^{72}$ has been provided these statistics of Gross Enrolment Ratio in secondary education. Regardless of age, this statistics expressed as a percentage of the population of official secondary education age. In these statistics GER can exceed $100 \%$ due to the inclusion of over-aged and under-aged students because of early or late school entrance and grade repetition.

| Country | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ |
| :--- | :---: | :---: | :---: |
| France | 110 | 110 | 110 |
| India | 61 | 65 | 69 |

Table 42. Percentage of the population of official secondary education age (from ${ }^{72}$ ).
From the above statistics, transparently two different trends can be observed, in the developed countries like France, GER has been static since 2009 to 2011, but in the developing countries like India this rate is increasing very slowly.

At the commencement of current century, Indian GER rate was very low compared to average of world, developed countries and developing countries ${ }^{73}$.

| GER average | $\mathbf{1 9 9 8} \mathbf{- 1 9 9 9}$ | $\mathbf{2 0 0 2 - 2 0 0 3}$ |
| :--- | :---: | :---: |
| World total average | 60 | 65 |
| Developed countries average | 100 | 107 |
| Developing countries average | 58 | 52 |
| India | 32 | 37 |

Table 43. Comparison between GER of several countries (from ${ }^{73}$ ).

[^51]Above comparative statistics of dropout and student enrolment rates show comprehensive differences between two countries. So that in pursuance of our further study, we shall discuss separately the factors which are related with the dropout scenarios in France and in India. Because of major diversities in education statuses, all education related factors cannot be compared in same parameters.

### 2.1.4.1.2. At a local level between Académie de Nice and West-Bengal

As our study is related to the dropout criteria within the students of Nice in France and the students of West Bengal in India, we give here a comparison of dropout statistics of India and West Bengal, and EU and France in the same year 2010.


Figure 30. Ratios of Dropout percentage in India/West Bengal/EU/ France (according to http://appsso.eurostat.ec.europa.eu ).

Clarification: Above mentioned statistics have been taken from 'Dropout study 21 states' (page-2), s.s.a.nic.in and 'Early leavers from education and training by sex and labour status' [edat_lfse_14], http://appsso.eurostat.ec.europa.eu. From them one can realize how comprehensive is students' dropout in India (37.5\%), and in West Bengal (14.7\%). In addition, students' dropout rate of France ( $12.5 \%$ ) is much lesser than the average of 27-E.U (13.9\%).

Due to unavailability of comparable statistics for the same year, we have drawn up another comparative statistic: the percentage of student dropout in academy of Nice reported to French context.


Figure 31. Percentage of student dropout in academy of Nice reported to French context (from projet_academie_nice_20102014_livret2, page-16).

Clarification: During the year from 2005 to 2008, dropout rate of the academy of Nice always superseded from the average dropout of France. Comparing the above all statistics it might be concluded that although dropout rate of India is much higher than the national average of France, in West Bengal, the trend of student dropout ( $14.7 \%$ in 2010) is very similar to academy of Nice academy $(14.1 \%, 14.2 \%, 13.1 \%$ and $15.4 \%$ in the successive year from 2005 to 2008) in France.

### 2.1.4.2. Gender and dropout

Gender is a significant socio-economical indicator in the field of education in general and for school dropout in particular. But it is also one of the most variable, as it is linked to cultural et socio-economical environment of each country.

### 2.1.4.2.1 Boys' and girls' dropout in France

We found in EUROPA-2020, the results of a survey made on 762,000 boys and girls. According to these statistics, in France in the year 2008, at the lowest level of vocational education (CAP/BEP), corresponding to the 18- age groupe of the chart below, girls struggle more than boys (11,200 girls found unemployed compared to 4,470 boys) to get a job. But boys become less effective when the qualification level increases (as for instance until BTS/DTS) which corresponds to the 21-age group. We see that in the same year at this level 2,800 girls were found unemployed against 10,200 boys.


Figure 32. Unemployement of boys and girls at (CAP/BEP) and (BTS/DTS) level in France (according to EUROPA-2020).

### 2.1.4.2.2. Boys' and girls' dropout in India

Clarification: According to survey reports of S.R.I- 2010, there a percentage of girls out of school $(4.71 \%)$ higher than boys $(3.92 \%)$. Next chart gives the five top-ranking states for female out of school:

| Name of state | Percentage of female out of school |
| :--- | :---: |
| Arunachal | 10.88 |
| Uttar Pradesh | 7.29 |
| Orissa | 6.56 |
| Bihar | 6.21 |
| Rajasthan | 5.54 |

Table 44. Statistics of the five top-ranking states for female out of school (according to survey reports of S.R.I2010).

### 2.1.4.3. Socio-economical environment of dropout

Socio-economical environment has often been shown as a major factor of inequality, which greatly affects schooling and labor access. One finds it responsible of inequalities between students inside each country, and of inequalities between countries, such as it may explain tendencies to migrate and immigrants' difficulties to integrate in their receiving countries.

### 2.1.4.3.1. Socio-economical environment of dropout in India

These are the main causes of students' dropout in India as indicated by the S.R.I survey in 2010.


Figure 33. Statistics of the four main causes of students' dropout in India (according to survey reports of S.R.I2010).

We find the explanation of the graphic in the chart below:

| Reasons for students dropout | Percentage |
| :--- | :---: |
| A. Poverty /economic reasons | $\mathbf{2 7 . 0 9 \%}$ |
| B. Students are too young to attain the school | $\mathbf{2 5 . 9 4 \%}$ |
| C. Students have to earn for the maintenance of his family | $\mathbf{7 . 4 1 \%}$ |
| D. Students need to help in domestic purpose | $\mathbf{7 . 3 6 \%}$ |
| Other reasons | $\mathbf{6 \%}$ |

Table 45. the four main causes of students' dropout in India (legend of Figure 33).
Statistics explains that poverty is obviously the main reason of students' dropout in India. The second reason is the inadequate number of schools which is responsible of the young students' dropout or school unattendance because they cannot go to a distant school especially in rural areas of India. The third cause of students' dropout is that they support their families with their own income; which is too a clear indication of increasing child labour. This survey also mentions that there is still little percentage of pupils who are unconscious about the contribution of education.

These statistics explain that poverty is obviously the main reason of students' dropout in India. The second reason is the inadequate number of schools responsible of young students' dropout of school or school unattendance, because they cannot go to a distant school especially in rural areas of India. The third cause of students' dropout is that they support their families with their own income; which is too clear an indication of increasing child labor. This survey also mentions that there is still a little percentage of pupils who are unconscious about the contribution of education.

### 2.1.4.3.2. Socio-economical environment of dropout in France

According to Maryse Esterle (March, 2010), a French renowned sociologist and researcher, truancy and school dropout are more prevalent among modest or poor backgrounds of students in France (source: Preventing absenteeism and dropping out: tension in the school system-www.cesdip.fr).

Nowadays in the French education system, parents are generally kept away from school and have few resources to understand and help their child (they cannot offer them private lessons or discuss with school staff in equal shares). Serious problems arise between 14 to 16 ages, when the selection of education stream (general, technological or business) has to be
determined by the student after passing the 'Brevet'. Another reported problem is that adolescents, enjoying certain autonomy of action, are susceptible to the attraction of peer groups.

In addition to problems related to learning and the way schools are organized, some young people have much personal problem or difficulties that force them to be mobilized on other fields than education. For instance they have to contribute to the family budget or must supply their own financial need, they support their family (protection of a parent in case of spousal violence, care to younger siblings). They suffer from family disintegration that leads them to self-manage their daily lives without establishing a clear priority for school. All these factors can lead to truancy or to students' dropping out.

Many stay at home and do not have something useful to do with their time, others continue to look after younger brothers and sisters (this is more prevalent amongst girls), some try to find work but without success, others continue to, or engage in criminal activities often initiated before the end of school and some young girls get pregnant around 16 or 17 years of age.

If they are supported by the services of the Judicial Protection of Youth (PJJ), they can enter vocational training. Some students attend programs provided by the school (Mission Générale d'Insertion for example), which work better when contact with school officials has not been completely broken off before they have stopped going to school.

Overall it can be said that young people starting on the job market with no qualifications have a greater risk of not being accepted socially and/or professionally. Many of these problems could be solved by the psychological supervision or therapy as we pointed on when discussing student's psychology.

Several social and economic factors directly or indirectly influence school dropout, such as rate of literacy, adult education, social consciousness, procedure of student assessment, child abuse as labour etc. So at the end of this section we can conclude that school' dropout is becoming an alarming social and global problem.

In next section, we shall try to investigate the causes of student dropout by studying the surveys upon the students, teachers and administrators of France and India, using the most
renowned surveys (P.I.S.A, PEARL and TIMSS) of our interconnected world, and comparing them with the surveys of this study where necessary.

### 2.2. Causes of school dropout

We are now to consider school dropout not in a general view, but as a process which must be closely apprehended in order to explain it and to cure it.

It has been observed that students' dropout happens due to two main causes, which profile two different outcomes:

1) When students drop out due to severe learning deficiency in respect of their grade levels, without any professional training, most of them are fated to become unskilled labour ;
2) When students drop out willingly in quest of jobs, as they quit in search of a job, most of them end by undergo a professional training course and tend to become skilled labor.

In India dropping out students of the first category become associated with cultivation and child labor, and in France most of the early leavers of this type are destined to become unskilled workers in the sector of industry.

Nevertheless the causes shaping these two categories need to be refined, in order to explain the individual choices. Who drops out and why? Several researches and their findings, indicated the following causes which are supposed to be the universal criteria of dropout, and can be spread between two types: due to individual or family disturbances.


Low confidence level
Lack of knowledge for a class
Illness /Disability
Pregnancy
Tendency of absence from class
Behavioural problem
Drug/Alcohol use

Disturbance in family life
Lack of parental involvement
Struggle with poverty
Son/daughter of single parents
Truancy

Poor peer- relation

Figure 34. The causes leading to students' dropout classified in individual or family categories. ).
This prompts us to separate the efficient causes of dropout between external and internal causes. If one can clarify the origin of causes, one will be in better position to detect, treat and prevent them.

### 2.2.1. External causes

By external causes we mean all factors which don't directly depend of the will of students. For instance, students cannot choose the economic and cultural status of their family, nor the degree of development of their country, neither their birth place. Besides, we will try to put back France and in India in a more global context, when possible, in order to appreciate their respective positions in their respective geopolitical environments.

### 2.2.1.1. Dwelling place

In India, we have some indications from S.R.I survey in 2010 of the effect of dwelling places on school unattendance.

The five top-ranking states of 'students out of school' are:

| Name of state | Percentage of students out of school |
| :--- | :---: |
| Rajasthan | 12.55 |
| Arunachal Pradesh | 10.24 |
| Bihar | 8.19 |
| Uttar Pradesh | 7.98 |
| Orisha | 7.50 |

Table 46. Statistics of the five top-ranking states for students out of school (according to survey reports of S.R.I2010).

The five top-ranking state where urban area is much affected are:

| Name | Percentage |
| :--- | :---: |
| Uttar Pradesh $^{74}$ | 9.53 |
| Arunachal Pradesh | 7.11 |
| West -Bengal | 5.17 |
| Delhi | 5.09 |
| Bihar | 4.89 |

Table 47. Statistics of the five top-ranking states where urban area is much affected for students out of school (according to survey reports of S.R.I- 2010).

In France, it has been shown that the suburbs called "zones" with a high percentage of migrants' populations are more affected by school dropout. These are also places where are found high percentages of out -of work people and monoparental families (alone mothers most of time). These proportions are found in other occidental developed countries like U.S.A, U.K., etc.

More precisely, in France, the highest rates of school failure are found in areas that have several problems: high unemployment, a large proportion of many single parent families, a concentration of social housing and parents mostly without a diploma. "These risk areas located mainly in the north, the Mediterranean west side and in Seine-Saint-Denis," says Catherine Moisan, Director of Evaluation, Prospective and Performance of the ministry of Education, presenting the Atlas of dropout in France in June $2014^{75}$.

[^52]
## Les zones à risques d'échec scolaire

Cumul de fragilités économique, familiale, culturelle en milieu urbain
Précarité économique dans les petites et moyennes communes
Difficultés de vie familiale et habitat social en milleu urbain
Fragilité culturelle dans les petites communes
Milieu rural vieillissant
Sécurité économique et soutien culturel


Sources : Insee RP 2006, Revenus fiscaux localisés; calcul et cartographie: Céreq - ESO Coen

Figure 35. Scholar risk areas in France (from ${ }^{75}$ ).

The localizations of dropout in France are, if we translate the legend of the chart reproduced here, and by regressive order of importance: urban zones with a plurality of cultural, economical and familial problems, little and medium towns with economical problems, urban zones with familial and dwelling problems, little towns with cultural failures, rural zones with aged population, urban zones with economic safety and cultural support.

### 2.2.1.2. Gender

In U.S, according to a report of CNN.COM/U.S, nearly one of five men between the ages of $16-24,(18.9 \%)$ dropped out in 2007 . The dropout within the black is $21 \%$ and among the white are $12.2 \%$. More than one in five students within 16 to 24 dropout in Florida.

In California, the dropout rate is $14.4 \%$. In Georgia the dropout rate is highest ( $22 \%$ ). In a report of July-2009, the unemployment rate within high school dropout was $15.4 \%$ compared to high school graduate $(9.4 \%)$ and $(4.7 \%)$ for individuals with a bachelor's degree or higher. According to the statistics of the education department (2007), the dropout tendency within male is higher than female. From 2004 the dropout rate in successive three years was $11.8 \%$, $10.8 \%$ and $10.3 \%$ in male and $8 \%, 8 \%$ and $8.3 \%$ in female.

From www.cereq.fr-quandlecoleestfinie, survey 2010, p. 13, we see the tendency of student dropout within the third cycle of French education:

| Educational grade | Numbers of students | Average age | Female percentage |
| :--- | :---: | :---: | :---: |
| i. Unqualified | 58,000 | 18 | $41 \%$ |
| ${\text { ii. } \mathbf{2}^{\text {nd }} \text { or 1 }}^{\text {re }}$ | 61.000 | 19 | $36 \%$ |
| iii. CAP or BEP $^{\text {iv. Baccalauréat level }}$ (without diploma) | 125,000 | 19 | $43 \%$ |
| v. With Baccalauréat <br> (prof. or techno.) | 29,000 | 21 | $39 \%$ |
| vi. Baccalauréat +1 or <br> +2(non-diploma) | 97,000 | 21 | $51 \%$ |
| vii. Baccalauréat +2 | 138,000 | 22 | $54 \%$ |
| viii. From 2 | cycle | 77,000 | 22 |
| ix. From 3 ${ }^{\text {rd }}$ cycle | 62,000 | $25-26$ | $55 \%$ |
| Total | 742,000 |  | $63 \%$ |

Table 48. Statistics of the tendency of student dropout within the third cycle of French education(from
www.cereq.fr-quandlecoleestfinie ).

## Clarification:

i/ About $13 \%$ students drop out without any qualification among which boys (49\%) are more affected than girls (41\%).
ii/ Students of general stream drop out more than those of the popular streams like BEP or CAP.
iii/ Statistics show that girls drop out (63\%) much more in 2 nd cycle compared to the boys (37\%).

### 2.2.1.3. Unfavourable socio-economical and cultural environment

The importance of socio-economical and cultural environment is peculiarly attested in India. A majority of people living in villages of India is still submerged in darkness of superstition. Even in this $21^{\text {st }}$ century of which we pride ourselves because of the progress of science, the people of the villages are immersed in the darkness of superstition, old customs and prejudices. The condition of the women is outstandingly pathetic. They are still behind the curtain, with a feeble hope to take part in elementary education. Education is a luxury for the villagers, the culture of education is absent from their family. They cling to the professional tradition of the family. The son of barber must be a barber, a washer would bring up his child as a washer, a carpenter would engage his son in the work of carpentry.

Their social prejudices prevent them from accepting that their children could be admitted into schools. The villagers still fear that education could push their next generation to go astray. They think education would make them arrogant, disobedient, and uncultured. The cause is the absence of consciousness, of awareness and of open mindedness. Therefore children do not like to go to school and if they go, in any condition they drop out mid-way. Unless and until awareness about the value of education will not inculcated among the poor villagers, dropout will not be stopped.

The interest of the poor in literacy and education can be roused by making it clear for them that literacy will enable them to lead a better life. It must be remembered that children who are now going to primary schools are mostly first generation learners. So, their parents do not care for their education. Consequently the children dropout in the middle of their studies and engage themselves in their parents' profession. After a lot of research it has been
proved beyond doubt that only literacy can alleviate such a tendency. Literacy increases children participation in school and contributes to create an environment for education.

This confirms that cultural causes of dropout are closely interconnected with the economic ones. Villages' people remain half-fed or unfed and in such condition education to them is a luxury. Uneducated poor parents who cannot make both ends meet in any way, allow their children to earn something for maintaining their families and child's labor is preferred in many working places as they work for a little wages. It is really an inhuman cruel practice though it saves many families from starvation. As a result, in spite of laws against it, it persists. These children not only stay deprived of the compulsory primary education, they become victim of malnutrition. The only banning of child labor is not sufficient. It will not constitute the true solution, except if a stable and more improved socio-economic structure is constructed.

In spite of this survival, the problem of dropout is getting into the way of progress. But infrastructural deficiency in schools must be taken into consideration behind the practice of students of leaving schools mid-way. Most of the primary schools in rural areas, even in towns, have not sufficient spaces to accommodate students. They have no shade over their head, no drinking water, no sanitary facilities. It also must be admitted that teachers sometimes are lacking in sense of responsibility and in compassion, and this grandly contribute to keep children away from school.

Moreover children have to walk for miles to reach school with empty stomach, which dissuades them from attending school. The educationalists are thinking hard over this matter and try to find out means for solving these problems. Furthermore, fear of be tortured at schools by the teachers contributes to discourage the students. Some schools are still Dickens' 'Salem houses’. Physical and mental torture creates psychological problems. Not only that, fear of retention in a class is another reason for leaving school midway. This failure seems to be a matter of shame to some. So they stop going to school. Educational level of parents, their positive approach of school and the home atmosphere play a great role over the studies of their son or daughter.

### 2.2.1.4. Parents' illiteracy

In India, parents' illiteracy is at the spring of the repetitive process of school failure. Illiterate people, who did not go to school or ceased to do it soon after they entered, are not in condition of accepting to let their children go to school. Below we transmit the results of S.R.I Survey -2010 about status of educational level of parents in India.


Figure 36. Statistics of the educational level of parents in India (according to survey report of S.R.I- 2010).
Clarification: Within the different castes, social and religious groups into which Indian citizens are regrouped, the highest percentage of illiterates (39\%) is found in scheduled castes communities in comparison to other castes. Here is the representation of above statistics in table forms:

Status of educational level of parents who participated in S.R.I Survey -2010

| Social group | Scheduled <br> caste <br> (S.C) | Muslim | Scheduled <br> tribe <br> (S.T) | Other <br> backward <br> class <br> (O.B.C) | Average |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Not literate | $39 \%$ | $35.5 \%$ | $26.3 \%$ | $20 \%$ | $26 \%$ |
| Literate but no formal <br> education | $22.6 \%$ | $22.8 \%$ | $30.2 \%$ | $18.7 \%$ | $21.6 \%$ |
| Literate with middle <br> range education | $15.3 \%$ | $15.5 \%$ | $16.8 \%$ | $16.3 \%$ | $16.2 \%$ |
| Secondary/ higher <br> secondary | $15.2 \%$ | $20.8 \%$ | $20.9 \%$ | $33.5 \%$ | $27.6 \%$ |
| Graduate/ post- <br> graduate | 3.7 | $4.1 \%$ | $5.5 \%$ | $11.3 \%$ | $8.3 \%$ |

Table 49. Statistics of the educational level of parents in Scheduled castes and other minorities (according to survey report of S.R.I- 2010).

Status of educational level of parents who participated in S.R.I Survey -2010

From the above statistics it is understandable that there are big differences in the status of school dropout among the different social groups of students in so far as the accessibility of parents to educational levels differs.

In France $9 \%$ of population aged between 18 to 65 years are suffering with illiteracy. $21 \%$ youth around 17 age group were incompetent in their literacy skills and $5 \%$ of them are illiterate. French education department is fully aware of this fact and they try to trace and prevent the problem from kindergarten stage of education (source: Plan against illiteracy, presented by Luc Chatel, education minister, in 29/03/10 ${ }^{76}$ ). In fact a close relation exists between illiteracy and dropout.

### 2.2.2. Internal causes

School dropout is not only a social problem but also and may be first a psycho-cognitive problem, for it is related to the representations of learning as well as to the difficulties of learning among pupils. If we admit that school dropout is first a failure of learning process, one must not neglect the responsibility of school system, including subjects taught, methodologies of teaching and assessment, in the process.

### 2.2.2.1. Deficiency in basic skills

On one side, Knap and associates (1995) conclude that, for the at risk students, a meaning oriented instruction produces an authentic and practical learning, and is more effective than traditional knowledge-oriented practices. So for the students who are 'at risks', a meaningoriented curriculum, focusing on the acquisition of 'basic skills' (basic of reading and mathematics) should be provided. On the other side, Means, Knapp, Palincsar and Klenk (1991) stated that when students learn, they use not only 'basic skills' but also higher level thinking skills. Subsequently, a special strategic program for at 'risk-students' should be planned to ensure them a better mastering of metacognition (ability to think about themselves) than does the traditional knowledge based program.

[^53]Snow, Burns and Griffin (1998) demanded in a research work that most reading problem arise in the adolescence period of students but can be removed by counselling and providing good instructions in student's early child-hood years.

Desnoyers and Pauker (1988) proposed some methods and programs, implementing by which schools and board of education can enhance school attendance and reduce student dropout.

According Sizemore (1995), school should build his own instruction strategies for students.

Even Traditionalists such as Hirsch (1987) believed that a specific body of functional knowledge should to be transmitted for the betterment of students. All researchers agree with the fact that a good level in literacy and mathemacy is essential for continuing schooling in good conditions.

### 2.2.2.2. Grade repetition

Grade repetition ('redoublement' in French) occurs when students are maintained in the same grade for an extra year, rather than being promoted to a higher grade along with their age peers. It is rarely decided by students themselves. But it is with no doubt provoked by the insufficient quality of school results, in comparison of required level. As it is a frequent cause of dropout, it must be counted among internal causes.

Jere Brophy, professor of Teacher Education at The Michigan State University, in its booklet on Grade repetition examines the effects of grade repetition which, according him, are three ${ }^{77}$ :

- effects on academic achievement - which he qualifies as short-term gains but long-term problems, because grade-repeaters often drop out further ;
- effects on student self-esteem, peer relationships, and attitudes towards school, with negative psychological and social outcomes;

[^54]- general effects on school system - as high levels of grade repetition can lead to "increased class sizes and classroom management problems (due to large age differences among pupils in the same classroom)".

He concludes, at this end of his study, that the application of grade repetition "brings extra costs and long-term negative academic and social consequences".

According to PISA 2009 ${ }^{78}$, an average of $13 \%$ of 15 -year old students across OECD countries reported that they had repeated a grade at least once: $7 \%$ of students had repeated a grade in primary school, $6 \%$ had repeated a grade in lower secondary school, and $2 \%$ had repeated a grade in upper secondary school.

Over $97 \%$ of students in Finland, Iceland, Slovenia, the United Kingdom, the partner countries Azerbaijan, Croatia, Kazakhstan, Montenegro, Serbia, and the Chinese economic partner Taipei, reported they had never repeated a grade; and grade repetition is non-existent in Japan, Korea and Norway.

In contrast, over $25 \%$ of students in Belgium, France, Luxembourg, Netherlands, Portugal, Spain, the partner countries Argentina, Brazil, Colombia, Panama, Peru, Trinidad and Tobago, Tunisia, Uruguay, and the Chinese economic partner Macao- reported that they had repeated a grade.

Here we shall examine the status of grade repetition of France and India through states provisional statistics.

Does repeating a grade, students improve their achievement? A meta- analysis of research study of C. T. Holmes (1989) shows overall negative result of grade retention.

For a long time in the history of France education, redoublement was an apprehensive factor for the students of all grade levels. Here is a statistics from Le système éducatif (2008), to show how preliminary grade level learners had to face redoublement at the end of $20^{\text {th }}$ century:

| $\mathbf{1 9 6 0}$ | $\mathbf{1 9 7 0}$ | $\mathbf{1 9 8 0}$ | $\mathbf{1 9 9 0}$ | $\mathbf{2 0 0 0}$ |
| :---: | :---: | :---: | :---: | :---: |
| $52 \%$ | $45.40 \%$ | $37.30 \%$ | $27.70 \%$ | $19.50 \%$ |

Table 50. Statistics of preliminary grade level learners facing grade retention at the end of $20^{\text {th }}$ century (according to système éducatif (2008)).

[^55]Evidently, grade retention issue has been reduced its importance in France and worldwide.

From the following source: Status of Grade retention in France- Nice 'Project report' (2010-2014), page-3, we found the status of grade retention within the students of Nice academy and France in the comparison of different grade levels.


Figure 37. Statistics of grade retention in France (from Nice 'Project report' (2010-2014), page-3).
Clarification: The above statement describes the status of unsuccessful candidates in different grade levels in the colleges of public schools. The coloured line shows the statistics of percentage of national status of redoublement and the white line states about the percentage of local status (Nice) of unsuccessful students.

In latest report of 2008, it has been shown that in elementary section, grade repetition is the highest in the CE1 class ( $4.1 \%$ ) followed by CP (3.7\%), and the lowest rate has been reported in the CM1. There is no trace of results for CM2 students, which would have been very significant for understanding the flow of successful candidates passing from elementary stage to lower secondary education.

In lower secondary stage following results have been observed:

- The rate of grade repetition in Nice is higher than the national average rate in the level of Troisième (3e) but lower in the level of Sixième (6e) in 2007 and 2008;
- Percentage of unsuccessful candidates are more in numbers in Sixième (6e) and Troisième (3e) compared to Cinquième (5e) and Quatrième (4e).

It has been proposed that the rate of grade repetition would be decreasing in number in course of time in every level of secondary education. The local target suggested for Nice was to reduce the rate of retention from $3.4 \%$ to $2.5 \%$ in 6 e grade level for the academic year of 2010 and from $4.7 \%$ to $4 \%$ in 3 e grade level in the academic year of 2011. Moreover a huge percentage of unsuccessful candidates ( $12.4 \%$ in 2008) was found in 2 nd grade, which corresponds to the first year of upper secondary school (lycée).

Here we placed some statistics about grade repetition of whole India and few states of India where grade retention is comparatively higher. We have taken them from D.I.S.E. (District Information System of Education) 2007-08 and 2008-09 ${ }^{79}$ :

| Name of state | Primary Upper primary |  | Primary | Upper primary <br> 2008-2008 |
| :--- | :---: | :---: | :---: | :---: |
| Andhra-Pradesh | 2.16 | 0.78 | 1.40 | 0.28 |
| Delhi | .53 | 4.25 | 3.11 | 2.74 |
| Gujarat | 7.83 | 4.23 | 5.38 | 2.75 |
| Madhya-Pradesh | 10.44 | 6.97 | 7.89 | 5.28 |
| Uttarakhand | 4.52 | 3.90 | 3.74 | 3.32 |
| West Bengal | 12.04 | 15.50 | 8.96 | 7.87 |
| Total India | 5.24 | 4.69 | 3.88 | 2.75 |

Table 51. Statistics about grade repetition of whole India and few states of India (following ${ }^{79}$ ).
Clarification: Above statistics shows, the percentage of grade repetition is always greater in primary level ( 1 to 5 standards) than upper primary level ( 6 to 8 standards), which brings a major difference in comparison to French education system where grade retention in elementary education has been reduced to $1 \%$ or in fraction.

In India, according to the R.T.E act of 2009, no retention is possible in school education from the academic year before the level of standard-viii.

[^56]
### 2.2.2.3. Unsuitable teaching devices

We now tackle the problem of relationship between students and teachers. It has been shown a frequent cause of dropout, often put forward by students themselves, even if of additional nature. Internal of external, the classification can be discussed. In fact, teachers training and education is definitely involved in the prevention of dropout, and this depends on educational policies, and not of students. But the way a student reacts to the comportments of teachers is closely related to his psychology, his culture, his family and his personal story.

Teachers have a difficult task to accomplish. As Allington (1995) noticed, in a heterogeneous group of students (students of different merits), which is the most frequent situation, teachers cannot deliver instructions to the perceived ability level of the class; they aim an ideal median level. A rather accelerated learning adapted to the needs of students’ various abilities and interests, which means personalized, would better fit to students situated at both extremities: most gifted students, and at risk students. But it is expensive and complex to organize in a large scale.

On the same way, it seems evident that school must take into account the culture and the environment of the students in order to make them feeling precisely at school like at home, which means not only accepted but desired and legitimate. Alton-Lee (2003) shows that student outcomes are enhanced when there are effective links between schools and the various other contexts in which students are socialized. But this is too a difficult program to realize, as it impacts a lot of actors: social, educational, political, etc.

### 2.2.2.4. Teacher's expectation

The process of teaching and learning is fundamentally relational. The patterns of norms, goals, values and interactions that shape relationships in schools provide an essential area of school climate. The aim of many researchers' studies is to determine the effect of teacher expectations on students' success or failure.

Numerous researchers (Clark, 1963; Rosenthal and Fode, 1963) have highlighted the importance of teachers' expectations for students' achievements. However, researchers in this area received an impetus following the study of Rosenthal and Jacobson (1968) which became famous as "Pygmalion in the classroom". In this study, Rosenthal and Jacobson selected a group of students and told to the teacher that these children (experimental group) had extra potential for academic growth, compared to another group of children (control
group). At the end of the academic year, 'the experimental group' showed considerable improvement in IQ compared to the 'control group'. Thus children, who had been described as having extra potential, were described by teachers as having significantly better chances of becoming successful in future.

These findings arouse a lot of interests among the researchers. Though some researchers (Elashoff and Snow, 1971; Jensen, 1969; Thorndike, 1968) questioned the original findings on methodological grounds, a significant amount of evidence has been accumulated which shows that teachers' behaviors based on their expectations influence students academic performances (Cooper, 1979; Crano and Mellon, 1978; Smith and Luginbuhl, 1976). However, a large number of studies in the area of attribution for success and failure of students by teachers have been conducted either in laboratory teaching situations or in the context of role-playing pedagogy (Zuckerman, 1979) by students acting as teachers. The need to conduct such studies in the classroom setting based on students actual performance has been repeatedly underscored (Bar-Tal-1979; Cooper-1979).

The attribution theory has suggested that the believes of an individual about the causes of his performances affect his expectations on similar tasks (Bar-Tal, 1978; Mac Mahan, 1973; Weiner, 1972, 1979). It has been also observed that judgement of teachers about students' performances is very effective in changing students' behaviours (Dweck, 1975; Millar, Brickman and Bollen, 1975). For example in a study by Anderson and Jennings (1980) we found that when an assessment proportional to their effort is attributed to a selected group of students, their performances were improved in subsequent tests. However, when students were told that the assessment was due to factors other than effort, performances were not improved in the same way.

Researchers also explored the process through which teacher's expectations affect students' performance. According to Rosenthal (1974), in the case of 'high expectationsstudents', teachers created a warmer socio-emotional climate, gave them more opportunities to learn new subjects, and tended to praise them more in comparison to 'low expectationstudents'. Cooper and Lowe (1977) studied the personal responsibility attributed by teachers for success and failure to smart, average and dull students. They found that more personal responsibility was attributed to the failure of dull students compared to average students, and to the success of smart students in comparison to dull students.

Darlega, McAnulty, Sally and Reavis (1980) suggested that the cognitive interpretation of expectancy information by teachers in the form of their attribution for students' performance may provide an explanation for the effect of teacher's expectation on students.

Many studies have analyzed the relationship between social factors and teachers' expectations (Dusek and Joseph, 1983; Friedman, 1976), but the issue of how the social background of students influences teachers attribution has not received much attention. A brief review of these studies undertaken in a non-academic setting may provide some insight into the nature of teacher's attribution as influencing the performance of students coming from different social backgrounds.

Stephan (1977) studied the attribution of responsibility to behaviour by children from three ethnic backgrounds: black, Chicanos and Anglos. It was found that members of Chicano- and Anglo- groups made more dispositional attributions for positive behaviours and fewer dispositional attributions for negative behaviours for the members of their own group. In another study on ethnocentricism and attributions involving white subjects, Greenberg and Rosenfield (1979) reported that the greater the ethnocentricity of the subject is, the higher will be his tendency to attribute less blame to white people when failing. In the Indian setting there are evidences to suggest that the scheduled castes were generally evaluated negatively by the high castes and vice-versa (Majeed and Ghosh, 1981; Sinha and Upadhyaya, 1969).

Schunk (1999) shows how students, environments, and behavior in learning setting are in interaction and correlate each with other.


Figure 38. Relationship between students, environments and behavior in learning (from Schunk (1999)).

Brenda Manning and Beverly (1996) determined four skills that can improve student learning: listening, planning, working and checking. P.I.S.A's questionnaires regarding the teachers-students relationship should be an important tool to appreciate the teacher-students relationship and the disciplinary climate. From this particular survey, one can also detect the status of learning of other countries like India.

### 2.2.3. Conclusion of Section 2.2.

One important aspect of the school environment is the formal curriculum, that is, the set of courses taken by a student. The high school curriculum can be viewed as a socially structured set of opportunities and constraints. One course may represent an opportunity for inspired learning, establishing social connections, but also an occasion for feeling oneself bored and discouraged.

Dropout problem should be given a prime importance for the progress of a nation. Without cordial and sympathetic approach it is not possible to bring all children to school. Sympathy, love, compassion on the part of the teaching community can put an end to most of the problems. Children should need to know their rights and the danger of working as children' labor forces them to leave their schools and education. They need to learn to protect themselves and to discover the human rights and laws which exist for their protection, and to whom they can turn for help when they are at risk of being exploited.

### 2.3. Consequences of school dropout

The consequences of dropout should deserve a special place in our study. First, they are at the spring of our interest and of the interest of everyone for this phenomenon. Dropout is studied almost equally or even more for the diseases it accompanies or involves than for itself. Most of researches about it aim to prevent it and, if possible, to suppress it. Among the facts that led to consider it a global problem was also the development of world-wide economy and the need to possess basic skills' achievement for attaining employment worldwide. Besides, dropout represents also a danger for school itself and even the idea of education, as it is at the origin of what is called the school breaking which separate citizens between those who succeeded and those who failed. As soon as knowledge begins to seem odd and exterior to everyday life, this is the beginning of the programmed school's vanishing. One begins to find it annoying, then useless and finally pernicious. From this, it must be expected that, among
consequences of dropout, psychological and factual factors interfere with each other and enhance each other.

### 2.3.1. Dropout and unemployment

There has always been a direct relation between the level of academic qualifications and employment.

Research's findings ${ }^{80}$ have established that dropouts are mostly to become unemployed (Rumberger \& Lamb, 2003; O.E.C.D, 2001; Barro, 1997; Shavit \& Mueller, 1998).

At the Lisbon summit-2000, most of the European countries decided to set a common prospective of a dynamic, knowledge based economy. As a result in 2003 five objectives were established for the students on priority education and vocational training issues as follows:
(a) Wide spread development of the second cycle in secondary education.
(b) Reduction in the number of early dropouts from the education system.
(c) Development of adult training.
(d) Improvement in basic reading skill.
(e) Increase the number of students in the field of science and technology.

After an elaborate discussion it was decided that fighting against school failure or early dropouts is an important issue which will improve social cohesion.

One of the main targets of Europa-2020 is to reduce the rates of early school leaving below $10 \%$ within 2020.

We have collected some indicators from state level statistics regarding the status of increasing dropout and its relation with unemployment in reference to France in the context of Europe and to India.

### 2.3.1.1. In France

In France, in 2005, risk of unemployment for young people without qualification reached $21 \%$. The Céreq's generation-2001 survey highlighted the unemployment situation experienced by young people from different levels of education in last few years.

[^57]It has been also found that young people holding BTS (Higher Technician Certificate) and DUT (University diploma in Technology) diplomas, as well as technological and vocational baccalauréat are less affected than general graduates regarding employment.

Here is the distribution of young people aged 17 to 24 years according to their education level in France:

| Diploma of superior/ post- <br> baccalauréat education | Grande école | $3 \%$ |
| :--- | :--- | :---: |
|  | $3^{\text {rd }}$ cycle of university | $6 \%$ |
|  | $2^{\text {nd }}$ cycle of I.U.F.M |  |
|  | Baccalaureate +2 in health or social | $10 \%$ |
|  | training | $3 \%$ |
|  | BTS/DTS | $3 \%$ |
|  | DEUG |  |
| Baccalaureate +1 or 2 without diploma | $12 \%$ |  |
|  | $3 \%$  <br>  CAP/BEP <br>  Baccalaureate (professional or <br> technology)  | $12 \%$ |
| Diploma of secondary <br> education | Left in 1 ${ }^{\text {st }}$ or 2 ${ }^{\text {nd }}$ year of CAP/BEP | $11 \%$ |
| Without qualification |  | $8 \%$ |
| No basic qualification |  |  |

Table 52. Statistics of distribution of young people aged 17 to 24 years according to their education level in France (from Céreq's generation-2001 survey).

Clarification : Vocational Students (CAP or BEP) are maximum (18\%) in percentage in suffering to get a job and students of Grandes Écoles or social training categories struggle less (3\%) in the list.

### 2.3.1.2. In US and Europa

According to a report of CNN.COM/U.S., nearly one of five men between the ages of 16$24,(18.9 \%)$ dropout in 2007.The dropout rate within the black was $21 \%$ and among the white $12.2 \%$. More than one in five students within 16 to 24 dropped out in Florida. In California the dropout rate was $14.4 \%$. In Georgia the dropout rate was the highest (22\%).In a report of July-2009, the unemployment rate within high school dropout was $15.4 \%$ compared to high school graduate $(9.4 \%)$ and $(4.7 \%)$ for individuals with a bachelor's degree or higher. According to the statistics of the education department (2007) the dropout tendency within boys was higher than girls.

In the year 2008 U.S. government faced the wastage of more than 319 billion dollars due to the dropout problem. So the increased rate of dropout is not only harmful for the individuals but also harm for the economic growth of a country.

Let us now depict a panorama of unemployment status for the youth of priority zones in Europe.

Youth residing in sensitive urban areas (ZUS) at the end of their studies in 2007, had a different demographic profile than other youth generations. Youth of ZUS possesses different economical and social backgrounds. Only $38 \%$ have a working father and $41 \%$ are children of parents born abroad. $29 \%$ of them do not reach to the level of graduation, and only $27 \%$ access to higher education (against respectively $18 \%$ and $42 \%$ of other youth). In 2010, three years after the completion of their education, their unemployment average was found $29 \%$, which is much higher than average youth generation (18\%). The risk of unemployment affects more young men (33\%) then women ( $25 \%$ ).

The latest statistics from European Union website about the unemployment status of European countries (http://ec.europa.eu) show that.

- Youth unemployment rate is more than twice as high as the adult one - 23.3 \% against $9.3 \%$ in the fourth quarter of 2012.
- The chances for a young unemployed person of finding a job are low - only $29.7 \%$ of those aged 15-24 and unemployed in 2010 found a job in 2011.
- When young people do work, their jobs tend to be less stable - in 2012, $42.0 \%$ of young employees were working on a temporary contract (four times more than adults) and 32.0 \% part-time (nearly twice the adults' rate).
- Early leavers from education and training are a high-risk group - 55.5\% of them are not employed and within this group about $70 \%$ want to work.
- Resignation is an increasing concern $-12.6 \%$ of inactive youth wanted to work but were not searching for employment in the third quarter of 2012.
- In 2011, $12.9 \%$ of young people were neither in employment nor in education nor in training (NEETs).
- There are significant skills mismatches on Europa's labor market, whereas despite the crisis, there are over 2 million unfilled vacancies in the EU.

The 2011 ${ }^{\text {th }}$ year marked a sudden increase of unemployment, as attest the unemployment rates of France and other European countries (2010-2011), as shown in the diagram of rate of unemployment in Europa disclosed below:

| Country | $\mathbf{1 2} \mathbf{2 0 1 0}$ | $\mathbf{3 / 2 0 1 1}$ | $\mathbf{6 / 2 0 1 1}$ | $\mathbf{1 0 / 2 0 1 1}$ |
| :--- | :---: | :---: | :---: | :---: |
| Germany | $6.6 \%$ | $6.2 \%$ | $5.9 \%$ | $5.5 \%$ |
| Italy | $8.3 \%$ | $8.2 \%$ | $8.0 \%$ | $8.5 \%$ |
| France | $9.7 \%$ | $9.7 \%$ | $9.8 \%$ | $9.8 \%$ |
| U.K | $7.8 \%$ | $7.7 \%$ | $8.0 \%$ | $8.3 \%$ |

Table 53. Statistics of rate of unemployment in Germany, Italy, France and U.K. (from http://ec.europa.eu ).
Evidently the rate of unemployment has been increasing in France in a year (from 9.7\% to $9.8 \%$ ) and in other European countries like Italy and U.K. But Germany showed out a steady progress in reducing the rate of unemployment from $6.6 \%$ to $5.5 \%$ in the scheduled period. In last decade, due to heavy economic deficit throughout the world, unemployment problem has been heightened. Here is some recent statistics about status of unemployment throughout European countries. In last decade, due to heavy economic deficit throughout the world, unemployment problem is mounting.

Here are some recent statistics about status of unemployment throughout European countries.

| Name of country | Youth unemployment rate <br> in 2011 | Youth unemployment <br> rate in 2012 |
| :--- | :---: | :---: |
| i) E.U-27 | 21.4 | 22.8 |
| ii) Belgium | 18.7 | 19.8 |
| iii) Czech Republic | 18.1 | 19.5 |
| iv) Germany | 8.6 | 8.1 |
| v) France | 22.8 | 24.3 |
| vi) Italy | 29.9 | 35 |
| vii) U.K | 21.1 | 21 |
| viii) Greece | 44.4 | 55.3 |
| ix) Spain | 46.4 | 53.2 |
| x) Austria | 8.3 | 8.7 |
| xi) Poland | 25.8 | 26.5 |
| xii) Hungary | 26.1 | 28.1 |
| xiii) Romania | 23.7 | 22.7 |
| xiv) Portugal | 30.1 | 37.7 |
| xv) Sweden | 22.8 | 23.7 |

Table 54. Statistics of rate of youth unemployment in European countries (from http://ec.europa.eu ).

In 2011-12, average rate of unemployment in E.U-27 was 22.8\%. Germany and Austria show better results, keeping a rate of more or less $8 \%$. Unemployment rate of France is slightly above the average of E.U, but in Greece and Spain the problem is massive.

### 2.3.1.3. In India

The following results of unemployment rate of India have been reported by the Ministry of labour and welfare on Saturday, September 13, 2014 (Source: www.tradingeconomics.com ).


Figure 39. statistics of unemployment rate of India (according to: www.tradingeconomics.com ).

Clarification: The unemployment rate in India decreased from 9.4 \% in 2010 to $5.20 \% \mathrm{t}$ in 2012. Unemployment rate in India averaged $8.35 \%$ in 2006. It was lowered down to 8 in 2008. The highest record has been $9.40 \%$ in 2010 and the lowest $6.3 \%$ in 2012.

### 2.3.2. Dropout and illiteracy

Illiteracy and school dropout are interconnected in such a manner that they shape together a vicious cycle. Illiterate parents are reticent to send to school their children, who finish by quit school, and, forgetting the few they learnt, rapidly become illiterate. At the beginnings of this research field, researchers were into the habit of separating the two phenomena: dropout and illiteracy, as they were in the duration. Illiteracy was considered rather like a disease striking adults and school dropout like a disease striking adolescents. But with the incoming
of first generation's students in school, illiteracy has come down to students under 16-age, who begin to unlearn reading when they are yet attending school.

### 2.3.2.1. In France

In metropolitan France in 2011, 2,500,000 individuals, that is $7 \%$ of 18 to 65 age schooled in France, were suffering from illiteracy, by the terms defined by ANLCI ${ }^{81}$. Yet this illiteracy rate hides differences due to age, gender, dwelling and status of employment. Among the total population observed:

- $53 \%$ were more than 45 years;
- $60 \%$ were men;
- a half of them were living in feebly populated zones, the other half were living in urban zones;
- $10 \%$ were living in urban disadvantaged zones (ZUS);
- a half of them was employed;
- $10 \%$ were unemployed;
- $18 \%$ were retired;
- $14 \%$ were in training or out of activity;
$-8 \%$ were at home ${ }^{82}$.
In 2012, near 750,000 French young men and women aged 17 years or more, attended the Journée Défense et Citoyenneté (JDC, translation: defence and citizenship day). The programme of JDC includes assessments of basic learning of French language, peculiarly of reading performance and text understanding. $4.4 \%$ of young people attending the JCD were found in great school difficulty, girls suffering a bit less (3.9\%) than boys (5\%). At the end, crypted files are sent for one part to local missions for young people out of school, for another to the national education ${ }^{83}$.

These files are part of information operated by dropout prevention platforms inside which local missions and national education system collaborate. Young people suffering from illiteracy are given a strengthened tutoring in the schools where they are studying.

[^58]For those who are no more schooled and left school without qualification, or without a sufficient level in basic skills, a second chance is given, offering different possible solutions. A CPF (Compte Personnel de Formation, translation: training personal account), created in 2013, gives the possibility either to go back to school, in special school structures devoted to school recovery (raccrochage scolaire) or to benefit of a right to professional training (ibid.).

On the occasion of "Assises Régionales de Lutte et de Prévention de l'Illettrisme" (Regional Assizes of prevention of illiteracy), which took place on July $20132^{\text {nd }}$, in Toulouse, an assessment was disclosed which showed that, every year, 5 to 6000 young people who are received by local missions were out of basic skills' mastering(ibid.).

### 2.3.2.2. In India

In India the 2011 statistics about literacy rate and students out of school (2011) show the same strong same correlation between illiteracy and school leaving.

This statistics clearly shows that the number of students away from school is inversely proportional to the rate of literacy in most states of India:

| States | Literacy rate | Students out of school |
| :--- | :---: | :---: |
| Arunachal Pradesh | $67 \%$ | $10.61 \%$ |
| Bihar | $63.8 \%$ | $7.15 \%$ |
| Rajasthan | $67.1 \%$ | $8.36 \%$ |
| West -Bengal | $77.1 \%$ | $5.25 \%$ |
| Delhi | $86.3 \%$ | $5 \%$ |
| Assam | $73.2 \%$ | $4.55 \%$ |
| Kerala | $93.9 \%$ | $0.37 \%$ |
| Tamil Nadu | $80.3 \%$ | $0.63 \%$ |
| Pondicherry | $86.5 \%$ | $0.55 \%$ |

Table 55. Statistics about literacy rate and students out of school in India vs Students out of school Brevet (according to Flash statistics DISE-2011-12, "Elementary education in India Progress towards UEE").
(1) Pondicherry, Kerala and Tamil Nadu: The entire Indian south holds a decent literacy rate, i.e. over $80 \%$, consequently the rate of students away from school is less than one;
(2) West-Bengal and Assam: These states have a literacy rate comprised from $70 \%$ to $80 \%$, and the rate of students away from school is of medium range ( $4 \%$ to $5 \%$ );
(3) Arunachal, Bihar and Rajasthan: These states have a low literacy rate i.e. less than $70 \%$ and the rate of students out of school varies in between $7 \%$ to $10 \%$;
(4) In Delhi, exceptionally, we observe that a high literacy rate coexists with a quite high rate of children out of school, owing to the afflux of poor migrant workers with their families ${ }^{84}$.

Statistics shows that without increasing literacy rate (which is also an indicator of consciousness that people have of education) dropout rates might be not reduced.

### 2.3.3. School dropout and GDP (Gross Domestic Product)

Dropout is a phenomenon who causes the stagnation of the person, of his family and of the substantial economic growth of the country. This is why prevention of students' dropout became a most vital and burning issue nowadays in the context of global modernization. Many researchers working upon the correlation between school's dropout and GDP have been realized worldwide, some of which have been discussed accordingly.

In the year of 2008, U.S government had to face the wastage of more than 319 billion dollars due to the dropout problem. So the increased rate of dropout is not only harmful for the individuals but also harmful for the economical growth of a country.

Although French education system has been highly regarded for long time throughout the world for its highly centralized education system, it is now facing a severe increase both of illiteracy and dropout of which we have just shown the correlation.

In our comparative study, we have previously discussed the status of students' dropout in European countries and U.S.A.

### 2.3.4. School dropout and social climate's disturbance

According to a study of U.S. department ${ }^{85}$ of education in 2010 within $10^{\text {th }}$ standard students, the decision of dropout predominates in learners with a series of following disengagements which often begins in elementary school.

[^59]

Figure 40. Schema showing the various social disturbances leading to the decision of dropout (from ${ }^{85}$ ).

The above schema shows the various social disturbances among which we found school dropout and explain why one cannot focus over one element without taking the others into account.

Clarification: Decision of dropping out predominates within the students of elementary levels along with various other disabilities. This explains that prevention of dropout is normally taken into charge by the social policies and needs a collaborative approach between institutional partners to be correctly applied.

### 2.3.5. Conclusion of Section 2.3.

In India after independence adult education was reframed under the name of social education and introduced by first education minister Maulana Abul Kalam Azad. He expressed the significance of social or adult education in these terms: "This is where the need for adult education- in our country we have given it the name of social education - becomes imperative. By social education, we mean education for the complete man; it will give him literacy so that the knowledge of the world may become accessible to him".

[^60]The proposals of the adult education committee set up first by Hindustani Talimi Sangh and the main proposals of their first meeting were: "Adult education does not necessarily begin or end with literacy, and yet literacy is an essential part of it. No program of literacy will succeed or be effective unless it is placed in the context of general adult education touching the life of the people at all vital points. The test of the success of literacy will lie in the literates themselves preserving literacy and making use of it to acquire the knowledge necessary to help in solving their problems including poverty".

### 2.4. Remediations for school dropout

Ongoing interest is noticed across all the nations of the world regarding school dropout because, besides the threat of unemployment, dropout often causes people to have poorer physical and mental health, to show higher rates of crime, and to engage less often in active citizenship (Owens, 2004; Rumberger, 1987).

### 2.4.1. Why school dropout must be regularly surveyed

As it is considered an indicator of social and economical health, dropout is a target for regular surveys at global, national, regional and local levels. The reason is that politic deciders need fresh precise and information to guide their choices and assess the results.

### 2.4.1.1. Contribution of Sarva Shiksha Abhiyan Survey to the prevention of dropout in India

The program seeks to open new schools in dwelling places which do not have schooling facilities and strengthen existing schools' infrastructure through provision of additional classrooms, toilets, drinking water, grants for maintenance and school's improvement. SSA has a special focus on girl's education and on children with special needs. By its survey and findings S.S.A. has been led to be a major land mark in the education sector after India's independence. Hence we have to follow all of its activities in details.

The primary objectives of the survey were:
i To estimate the proportion and number of out-of-school children in the age groups of, $6-10,11-13$ and $6-13$ years for all children and children classified according to gender, social category (SC, ST, OBC, Muslim, Others) in each state and the whole country;
ii To estimate the proportion and number of school going children (by age, gender, social category) who attend (a) different types of school and (b) who are enrolled in different classes in I to VIII.
iii To estimate the number and percentage of (a) out-of-school and (b) school going children having different types of disability in the age group $6-13$;
iv To estimate the number and percentage of dropout children in the age group 6-13 who left school after completing class I, II, III, VIII.

Secondarily, the survey focused on following areas for intervention:
a. All children should attend school or an Alternative school such as an EGS centre or 'Back-to-School’ camp, by 2003;
b. All children should complete five years of primary schooling by 2007;
c. All children should complete eight years of elementary schooling by 2010;
d. Focus should to be put on quality elementary education with special emphasis on education for life;
e. All gender and social category gaps should be bridged at primary stage by 2007 and at elementary education level by 2010.

Though SSA has been designed to improve the quality of elementary education of children in the age group of 6-13 years, there still existed a comprehensive number of out-ofschool children in India at the end of 2007. And although household surveys have been conducted in many states, still reliable up-to-date statistics on out-of-school children remained not available at the national level. So, under the leadership of Ed. CIL, ministry of Human Resource Development of India decided to get a nation-wide sample, for searching the perfect numbers of out-of-school children in India. SRI - IMRB- International was the entrusted agency carrying out the survey in every state and Union Territory of India from February to May, 2009.

### 2.4.1.2. Importance of surveys for guiding educational policies aiming at risk students

After the providing of reliable representations of dropout, the second primary use of surveys is to help to conceive strategies for at risk students.

Saint and Denis and Haut (1989-90) worked upon 'dropout' of the students 'at risk' in French language schools. They prepared their study making up some questionnaires where they asked students questions about family status, feeling of isolation, school work, school interest, and need for help from teachers. They took an elaborate program to be followed by individuals, groups and peers counseling.

Kerp (1988) and Sullivan (1989) prepared some questionnaires to detect dropout' students base upon relevance of school courses, school attendance and students behaviors. So from the synthesis of research work worldwide we can conclude that:
i- A proper survey should be built upon a questioning method applied to the students, teachers and administrators, in quest of the areas of inconveniences which cause student dropout;
ii- Parental involvement is much needed for the promotion of a good academic environment;
iii- Special methods should be followed for the students emphasizing basic skill of education (reading, writing and mathematics);
iv- Individual and group studies should be pursued at regular intervals following different psychological methods.

From the above discussion it might be realized that there are several deciding factors acting on student's dropout. As far as we are concerned, we made good use of those informations in our personal survey work.

### 2.4.2. Adult education and students' dropout

In an education system, when a student in18+ age group is enrolled in no type of conventional educative structure, he is considered as belonging to adult education. Through adult education some percentage of students might be included in the mainstream of education. Hence, adult education can provide a positive and ultimate step for the reduction of dropout. In the policy of preventing student dropout, Canadian government (CMEC) ${ }^{86}$

[^61]suggested some remedial process of dropout for the students using the scheme of adult education. By the way, Adult learning was one of the five targets of EUROPA- 2020, which amended ${ }^{87}$ for ensuring at least $40 \%$ of $30-34$-year-olds completing third level education in 2020.

Apparently it might be assumed that there is no connection between adult education and student's dropout but these two terms are correlated because parents create the first baseline guidance for the child in which it begins his cultural and educational development. Later, only he receives his second guidance from the educational institutions. Primarily the concept of education is transmitted from parents to kids. In modern education, research in pedagogy found that the educational level of parents is one of the main reasons for student's dropout. Moreover when a student is being detached from conventional education sectors, adult education is the only way to continue his studies. So student's dropout and adult education are interrelated in two alternative ways.

### 2.4.2.1. Adult education defined by UNESCO

The expression 'Adult education' indicates the entire organized educational procedure, irrespective of content, level and method, formal or informal, whether they prolong or replace initial education in schools, colleges and universities or the training (apprenticeship), whereby persons regarded as adult by the society to which they belong develop their abilities, enrich their knowledge, improve their technical or professional qualifications or turn them in a new direction and bring about changes in their attitudes or behavior in the twofold perspective of full personal development and participation in a balanced and independent social, economic and cultural development.

Adult education, however, must not be considered as an entity in itself, it is a subdivision, and an integral part of a global scheme for life-long education and learning. The term 'lifelong education and learning', for its part, denotes an overall scheme aimed both at restructuring the existing education system and at developing the entire educational potential outside the education system, creating an understanding of and a respect for the diversity of customs and cultures, on both the national and the international planes.

[^62]In such a scheme men and women are the agents of their own education, through continual interaction between their thoughts and their actions. Education and learning, far from being limited to the period of attendance at school, should extend throughout life, include all skills and branches of knowledge, use all possible means, and give the opportunity to all people for full development of the personality. The educational and learning processes in which children, young people and adults of all ages are involved in the course of their lives, in whatever form, should be considered as a whole.

In the General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting in Nairobi from 26 October to 30 November 1976, in its nineteenth session, UNESCO amended Articles 26 and 27 of the Universal Declaration of Human Rights, promoting the right of everyone to education and to participate freely in cultural, artistic and scientific life. The principles set forth in Articles 13 and 15 of the International Covenant on Economic, Social and Cultural Rights enlightened the diversity of modes of training and education throughout the world and the special problems peculiar to the countries whose education systems are as yet underdeveloped or insufficiently adapted to national needs.

### 2.4.2.2. Adult education and students' dropout in Abhu-Dabi

It has been reported by 'The national'- a leading newspaper of Abu-Dhabi (13/12/2011)

- that changes have been proposed for adult education system, owing to the fact that, according recent statistics, more than one in three of emirate's inhabitants has not completing high school, or has dropped out from conventional study system. A special committee has been set up by Abu-Dhabi's educational council to support dropping out students. His members are supposed to study the problem of slow learners, look upon the environment of the school and finally provide the ways by which students' dropout might be reduced.

According to 2009 statistical report of statistics' centre in Abu-Dhabi, 50,000 students did not completed their high school education and dropped out before going to college. Moreover it has been calculated that among the about 16,000 students who are learning in 47 learning centres, $52 \%$ are between the age of 20 to 29 and $76 \%$ belongs to the grade of 10 to 12 . Adult education centres are not fully equipped to deal with those dropout students and have to face a shortage of resources and teachers. They often manage the situations by appointing part time teachers, many of whom are not sufficiently trained to teach them properly. To tackle the
situation a night school has been arranged in the government school building and a curriculum has been composed in such ways that students' deficiencies in school education might be filled in.

According to an official of the education department, current conventional school system only focused on imparting literacy skills is not sufficient for the students. Besides, mixed ages groups of students make a huge problem for the teachers who have difficulty in delivering the same teaching or in following the same curriculum for all. So it is recommended to send any student who fails the same grade twice or more to the adult learning centres. In this way it can occur that a ten years kid who dropped out is placed in adult learning centres to learn with a 25 years old the same curriculum. It has been observed also that many students leave school attracted by the good salaries provided by army or police. Families must be continuously counselled to become aware about the importance of education and to fear dropout. It is also advocated that the span of compulsory education should be extended.

### 2.4.2.3. Adult education in India

Adult education was first introduced by Indian government in 1938. The Central Advisory Board of Education (CABE), in its forth meeting of December 1938, appointed an adult education committee under the leadership of Dr. Syed Mahmud, the minister of education of Bihar. The committee investigated on several issues of adult education such as the need for training teachers who dealt with the adult education, and for judging the motivation of adults, the use of audio-visual and media, and the establishment of programs for retention of literacy and continuing education.

In 1939, Bombay adult education committee was formed under the leadership of B .G. Kher who was the education minister of Mysore. The slogan of his literacy campaign was 'each one teaches one'. Contemporarily many institutions were involved in the campaign such as the Education Expansion Department of Jamia Milia Islamia University, in Delhi. The third Indian president, Dr. Zakir Husain also tried to teach illiterate people. An incidence of great significance in the country was the establishment of Indian Adult Education Association in 1939. The association aimed at enlarging and improving the content and quality of life through education, visualized as a continuous and lifelong process.

The adult education committee set up first by the Hindusthani Talimi Sangh on its first meeting (1939) stated that if adult education does not necessarily begin or end with literacy, yet literacy is an essential part of it. No program of literacy will succeed or be effective unless it is placed in the context of general adult education touching the life of the people at all vital points. The test of the success of literacy will lie in the literates themselves preserving literacy and making use of it to acquire the knowledge necessary to help in solving their problems including poverty.

In the after independence period, India adult education reached in a new dimension. The Central Advisory Board of Education (CABE) was formed with the objective to broaden the concept of adult education. At its $14^{\text {th }}$ meeting on January 1948, the CABE announced the inauguration of a separate adult education department in the country as an imperative and independent body. A sub -committee was appointed in this regard under the chairmanship of Shri Mohonlal Saksena, which imposed a greater emphasis on general education to enable every Indian to participate effectively to the new social order of the newly independent India. This concept of general education was further developed by Maulana Abulkalam Azad, the first education minister of independent India who termed it as 'social education'. He expressed the significance of these words as follows:


#### Abstract

This is where the need for adult education- in our country we have given it the name of social education - becomes imperative. By social education, we mean education for the complete man. It will give him literacy so that the knowledge of the world may become accessible to him. It will teach him to harmonize himself with his environment and make the best of the physical condition in which he subsists. It is intended to teach him improve crafts and modes of production so that he can achieve economic betterment. It also aims at teaching him rudiments of hygiene, both for the individual and the community so that our democratic life may be healthy and prosperous. The last, but not the least, the education should give him training in citizenship so that he obtains some insights into the affairs of the world and can help government to take decisions which will make for peace and progress.


In 1949 the $15^{\text {th }}$ meeting of Allahabad admitted 'social education' as a main and significant program of education and registered it among the subjects of discussion.

Former prime minister of India, Jawaharlal Nehru commented "Education is the most important part of our plans. Industry and agriculture, which are important for us, will grow adequately only if there is the background of mass education I am quite convinced in my
mind that the first plan among our plans and development schemes is universal education whatever you go, at the back of it, at the base of it, mostly education."

In the year 1975-76, adult or social education launched a new sector named "non- formal education" in which strategies were made for the non-school going students and out of school young and adults. In the year 1977-78, a comprehensive strategy was organized by government of India for the National Education Program (NEP) where a highest priority was given to adult education along with universalization of elementary education. During the National Adult Education Program, the two schemes of farmer functional literacy (Kisan Sakaharata Yojona) and non-formal education for the age group of 15 to 25 were merged and renamed as Rural Functional Literacy Project for the age group of 15 to 35. In the year 197980, 241 districts were covered in the country under the Rural Functional Literacy Project.

The following aspects were considered significant in achieving the objectives of NEP:
i- Build a state level national board of adult education with a view to ensure the much needed coordination between education and other development departments and agencies;
ii- Gather resources for the different levels of studies so that adult education centers might act as useful resources for any activities (research or learning process) at the state's level or the central level;
iii- Set up the collaboration with education and development departments;
iv- Make use of some special institutions like Nehru Yuvak Kendra, NSS units and voluntary organizations to the maximum;
$\mathbf{v}$ - Create the NEP review committee and make it responsible for assuring a periodical assessment.

NEP and its review committee proposed three phases of target as follows:
(A) Exploratory phase. The works of this phase has been scheduled:
i- Selecting the area and the target group (learners);
ii- Deciding about the approach - selective or mass approach;
iii- Understanding the local environments and learners problem through an explanatory survey;
(B) Preparatory phase. The proposed works of this phase are:
i- Syllabus preparation (listing out the main problems in each subject areas);
ii- Curriculum development;
iii- Preparation or selection of learning materials;
iv- Enlisting communities' participations;
$\mathbf{v}$ - Selection of places for centers;
vi- Selection and training of instructors;
vii- Procurement of physical facilities and learning / teaching materials;
viii- Motivation of learners for adult education centers by:
(a) Making individual and group contacts with adults and explaining them the usefulness of literacy in their life.
(b) Holding village meetings to create programmes suitable to literacy and adult education programmes.
(c) Using mass media or cultural means of communication such as puppet shows, film shows etc. to explain the uses of literacy and education.
(d) Displaying suitable posters at important places.
(e) Talking and making an instance with learners who have been benefited from the adult education programme.
(C) Operational phase. The carried out activities are:
(a) Conduct of centers, which includes (i) Deciding daily routines, (ii) Selecting prayers or inspirational readings taking place at the beginning of daily activities, (iii) Review of previous day's work, (iii) Teaching of literacy lesson, (iv) Discussion around individual and environmental problems, (v) Giving homework assignments;
(b) Counseling and guidance of instructors, through - (i) Visit to centers, (ii) Demonstrations in use of materials and learning processes, (iii) Monthly meeting, and (v) Circular letters;
(c) Evaluation with, (i) Maintenance of records, (ii) Evaluation of the learners' progress, (iii) Feedback, and (iv) Report's preparation;
(d) Follow-up, by enhancement of literacy skills through library service and other methods. From the above discussion one might reach the conclusion that people in the 15 to 35 age group (irrespective of their level of education), who are suffering by basic learning deficiencies might be benefited by the activities of adult education.

Nowadays Indian education experts have proposed a raft of changes in schools along with major reforms in adult education which have been related with job markets (Source: "reform in schools to cut rate of dropouts"- The National newspaper of ABU DHABI- 13/12/2011).

From above aims and objectives, one can realize that Indian educationists have treated this scheme as a life-long process of learning, insisting on the following principles, expressed by R. M. Chetsing:


#### Abstract

Adult education, while emphasizing acquisition of literacy skills should also be relevant to the environment and learner's needs, flexible regarding duration, time allocation, industrial arrangements, diversified in regard to curriculum, teaching and learning materials and methods, and systematic in all aspects of organization ${ }^{88}$.


### 2.4.2.4. New trends of adult education in France

In France, adult education is part of 'popular education' along with all age groups. Informal and non-formal education methods are employed outside of the national curriculum, and are administered by local and national associations alike. As inheritor of the humanist spirit prevalent during the Age of the Enlightenment, national education still carries the same agenda of emancipation and social promotion widespread as when it was established, yet its content and methods have evolved considerably. Popular education was born in the $18^{\text {th }}$ century in France and was conceived to give access to reason, to escape the dogma of the Church and to initiate the nation in encyclopedic knowledge. This knowledge - intellectual as

[^63]well as technological - was intended to ensure the social promotion of individuals and to allow them access to a profession without being a professional training activity per se.

French popular education has had two main golden ages. The first took place in the 18th century when Marie-Jean de Condorcet, deputy of the National Constituent Assembly, has instigated to create the CNAM, the National Conservatory of Arts and Crafts, where were to be taught professional competences enriched by the most recent techniques for the social promotion of individuals. The second belonged to the successive periods of Popular Front (1936), and post-1945 government, with its French Communist Party ministers for youth and sport, whose objective was to encourage cultural, social and political autonomy for the whole working class.

Nowadays, two types of adult education centers are found in France:
I GRETA (GRoupements d'ETAblissements): The most important national network of public and adult education centers. There is at least one GRETA branch in each local area. If anybody is interested in adult education classes he should consult the local branch of GRETA located in his local area. Providing with training a little more than 500.000 persons a year, they commemorated their 40 years of existence in 2014 and were at this occasion the target of a refoundation, aiming to improve and extend their forming offer, the financial supply for adult formation, and to accompany the professional project of each learner (Source: Les Greta- Ministère de l'éducation nationale, de l'enseignement supérieur et de la recherche, window internet explorer).

Useful education training is also offered by
(II) AFPA (Association Nationale pour la formation professionnelle des adultes), which offer a multitude of education and training opportunities, although specific opportunities will depend on the resources of the local areas.

Function of GRETA and AFP is to assist people into employment or to develop the skills and competences of those already employed and to compensate earlier school leavers.

### 2.4.3. Educational strategies against dropout

Educational strategies have to be adaptable if they want to be successful with at riskstudents. Therefore they are endowed with specific features among which one counts multifactorial policies, mixing social, cultural, and economical issues with educational and
didactical ones, a clear preference given to multicultural devices, projects and tools, a frequent resort to progressive pedagogies, etc. Wrapping the whole, assessments of various natures and on various scales allow executive teams to give account of money spent, comparing aims and results.

### 2.4.3.1. India's Daughter project as example of dropout's external factor bending

India has the second highest reports of child marriage in the world as mentioned by U.N. report. In the year 2013 West Bengal government has launched Kanyashree prokolpo (Daughter project- Ref: 536(20)/CD \& WBDSW/13 dated 24.07.2013). In this project annual scholarship of Rs 500 would be provided to girls from class VIII to XII, as girls usually dropout at this level, also one-time payment of Rs 25,000 will be offered to the girl who is part of the education scheme and is not married or dropout below the age of 18 years. Kanyashree is aimed at providing some relief to the poor girl students and their empowerment.

In a press conference it was expected that there were 10,000 beneficiaries in the year 2013, but the ultimate target is to cover up 24 lack girls $(2,400,000)$ in a year, this process is supposed to be a protection against child marriage and girl's dropout. (http://news.oneindia.in/india/wb-govt-launches-kanyashree-to-prevent-child-marriage ).

### 2.4.3.2. Multicultural education

Since the beginning of the $20^{\text {th }}$ century, flows of immigrants have been admitted in developed countries like European countries, Canada, Australia, and United States, as well as in developing countries like India, Pakistan, Iran, and Abu Dhabi. This historical phenomenon lets one think that to build a successful programme for drop out reducing, one must access sufficient knowledge of the needs for multicultural diversity in education sector.

Multicultural education needs to introduce flexible and sufficient diversities in the curriculum so that it might be accessible to all qualities' students. Many different cultures coexist in every modern country. In the United States, students growing up in a small rural town in the Deep South are part of a cultural group that varies in his way of life from the students of a large urban centre or the students in a west coast condo. Individuals with African, Asian, Hispanic, Native American or European origins have distinctive histories and traditions. Moreover the experiences of males and females are different in most ethnic and economical groups. Everyone living in a given country is led to share many common
experiences and values, especially because of the influence of the mass media; also his life is controlled by differing cultural backgrounds.

School performance of a student is always the result of interaction of the society, parents and individuals. James. A. Banks (2001) ${ }^{89}$ has suggested some tools which enhance the equity of educational outcomes among the students of different multicultural groups. The graphical representation below shows how the factors of multicultural components interact within students to meet the necessities of multicultural education demands.


Figure 41. Chart flow of factors of multicultural components interacting within students (from http://www.pearsoned.co.in/Web/Home.aspx ).

Clarification: Multicultural education has five dimensions:

- 1. Content integration has to give a place inside the curriculum to students' culture, in particular to the former curricula learnt in their original country;
- 2. Prejudice reduction deals with the problem of racial and cultural stereotypes which have to be pointed out and deconstructed in school life as well as in teaching and learning practices;
- 3. Knowledge construction process is the core of teaching work, but needs students accustomed to the school culture of the receiving country;

[^64]- 4. Equity pedagogy claims the same attention and respect to be given for all, even if everybody needs a specific treatment;
- 5. Empowering social culture and social structures aims to establish a common shared cultural capital.

To match with these five dimensions, five sets of adequate educative attitudes, have been proposed. They are presented in the next figure:


Figure 42. Chart flow of how of multicultural components interact (from http://www.pearsoned.co.in/Web/Home.aspx ).

Source: cultural diversity and education, foundations, curriculum, and teaching, in Woolfolk, Anita E. Educational Psychology, Active Learning Edition, $9^{\text {th }}$ Published by Pearson Allyn \& Bacon, Boston, MA, 2005, p.155; http://www.pearsoned.co.in/Web/Home.aspx

These factors exist in almost every effective alternative education program. Without most of these factors, alternative programs would not be able to meet most of the needs of risk students.

### 2.4.3.3. Increasing of parents' involvement

Parental involvement is much needed for the promotion of good academic environments in educational concern.

The importance of parents as well as family involvement in schools also has been recognized as a way to improve learning for at risk students.

According to Menacker, Hurwitz and Weldon (1988), the power and authority of the school are insufficient to ensure the good discipline and motivation necessary for acceptable educational outcomes. Parental support and involvement are also important. Comer and Haynes (1992) indicated that parental involvement contributes to improve academic performance, behavior and self-control of at risk students.

### 2.4.3.4. Increasing of literacy and mathemacy rates

P.I.S.A. explained the importance of enhancing reading and mathematical skills as follows:

- Reading skill: The learning capacity of an individual reflects on reading skills and written texts. It also measures one's individual ability to participate in society.
- Mathematical skill: The capacity of an individual to identify and understand the roles that mathematics plays in the world, to make well founded judgements and to use and engage with mathematics in ways that meet the needs of that individual's life as a constructive, concerned and reflective citizen.

Besides, P.I.S.A. recommends that special methods should to be used with the students for the enhancement of basic skill subjects of education (reading, writing and mathematics).

### 2.4.3.5. Developing of vocational training

At the Lisbon summit-2000, most of the European countries decided to set a common prospective of a dynamic, knowledge based economy. As a result in 2003, five objectives
were established for the students on priority education and vocational training issues which are as follows:

- (A) Widespread development of the second cycle in secondary education.
- (B) Reduction in the number of early dropouts from the education system.
- (C) Development of adult training.
- (D) Improvement in basic reading skill.
- (E) Increasing of the number of students in the field of science and technology.

After an elaborate discussion it was decided that fighting against school failure and early dropouts is an important issue which will improve social cohesion.

### 2.4.4. Trends for accompanying reducing strategies

Government of India has taken some steps to stop the menace to progress represented by school dropout. 'SARBA-SIKSHA-ABHIJAN' (S.S.A) or 'education for all' has been launched by the department of elementary education of the central government in September, 2001. An amount of 1300 million Rupees was allotted for the purpose. The program was launched with a view to provide eight years of a quality education to all children in the age group between 6 to 14 years.

The program seeks to narrow gaps between genders and social classes with participation of the community. All children are to be brought to schools, alternative schools, education guarantee centers or be back to school campus. Initially it was decided that S.S.A would establish 6078 primary and 4620 upper primary schools around the country. The S.S.A disbursed funds very quickly through the S.S.A mission, headed by the chief minister of the concerned state. Training has been given to a huge number of teachers (Para-teachers). District level committees have been set up to overview the progress. It has been termed a serious effort to resist illiteracy. India has the pride to have the best skilled manpower of the world, but suffers also of a massive number of illiterates, and such contradictory diversities are rarely found together. Ignorance embraces in itself exploitation, poverty, ill health, and hundreds of social problems. That is why it must be rooted out. As a remedy to nonparticipation in schools, in compliance with the order of the supreme court of India, mid-day meals have been provided to all children to the standard of class-viii.

It has been ensured that these meals were prepared in hygienic condition and contained the 300 calorie requirement stipulated by the Supreme Court. Mid-day meal has increased attendance of students and reduced school dropouts. At the same time it has limited malnutrition among children. When S.S.A. began, two-third of pre-school children suffered from malnutrition. Different surveys have shown that mid-day meals reduce the number of girls excluded from schooling. This will reduce at time gender gaps in schools and will have positive impact on the prevailing child labor system. It can put India on the path to realizing its ambitious goal of "education for all". Mid-day meal scheme has been a spectacular success in some states. It has been found that the school dropout rate has decreased by $30 \%$. One can say that this scheme has effectively broken castes' barriers.

In his prevention action, the cabinet committee on cities and urban social development (CIV of $20^{\text {th }}$ June 2008) has made dropout prevention and accompaniment of students leaving school without qualifications, one of its top priorities. In response to this recommendation, the inter-ministerial circular of $18^{\text {th }}$ December, 2008, jointly signed by the minister of education and the secretary of state for urban policy, proposed for the cities most in difficulty concrete actions based on an obligation of results by the end of this school year of 2008.

Following the inter-ministerial committee for youth (ICJ) on $30^{\text {th }}$ January 2009, the government first wanted to give this first approach a new impulse, by strengthening the procedure for locating, and by extending local collaborations throughout the country. He also founded the possibility of supporting experiments under the direction of the high commission for youth. Then, in order to improve the tracking of dropout from the training, he decided that prevention must involve the mobilization of all institutions devoted to training, before introducing internal measures of prevention, individual support and tracking of pupils. The ministry of education decided to make this issue a key feature of its management. Thus, an action to betterment the knowledge about student's dropout has been conducted in the heart of local public education under the responsibility of school leaders, including those of vocational schools which represented the main target of this policy.

To support this mobilization of the institutions and of the teams of school life, and to interconnect the different bases of internal management in order to improve the tracking of dropping out students or students leaving schools without qualification, a program has been conducted from September 2009, widespread to all education authorities. Ministries of
agriculture and justice have joined this strategy by implementing in turn, an automated tracking and tracing of dropped out students in order to improve knowledge of the phenomenon in the training structures under their authority. The general strengthening of the conditions for tracking dropping out students has entailed the involvement of all training local authorities, including training centers hosting apprentices under their control.

### 2.4.4.1. A global model for reducing school dropout

Directly coupled with an increase of dropout in education sectors is the growing importance of adult education throughout world. Here we tried to incorporate a chart flow to show in what ways adult education can reduce dropout.


Figure 43. Increasing the tendency of getting extra help from parents from home (The Pratichi education reportii, pratichi.org, table-6.3, p. 80).

Above cart can be explained as follows:

- (A) School education: In Indian concept it is composed of lower secondary (from $6^{\text {th }}$ grade to $10^{\text {th }}$ ) and higher secondary ( $11^{\text {th }}$ and $12^{\text {th }}$ ) but major dropout happens in lower secondary level. In the concept of French education it covers duration of college (from $6^{\text {e }}$ to $3^{\mathrm{e}}$ ) and lycées ( $2^{\text {nd }}$ to Terminale) but the major dropout happens in post lower secondary studies or in lycées.
- (B) Student's dropout: Students dropout happens due to two main causes:
- (C) First of all, few students forced to drop out due to severe learning deficiency for their grade levels.
- (D) Some of them drop out in quest of employment. In India most of students who drop out are in search of early jobs associated with cultivation and child labor. In France most of the early school leavers are fated to become unskilled workers in the fields of industrial or tertiary labor.

Adult education can manage to compensate these two types of dropout in following ways:

- (E) Training for the unskilled workers: unskilled workers might be trained in the package of adult education so that they might be transformed in trained worker.
- (F) Trained worker: A large group of students moves toward professional courses in their early life of education, which can be transformed in more skilled worker by industrial training.
- (G) Bridge courses: Through the bridge courses more skilled worker got the chance to join in higher studies.

So in the above chart we found a lot of solutions for the dropout students to return in academic field through adult education.

On his side, Batsche (1985) suggested twelve helping factors for the prevention of the dropping out students:
i/ There should be some form of financial aid available to assist the economically disadvantaged students.
ii/ Peer support in classroom and extracurricular activities are important in helping the high-risk students to form bonds that will keep him or her in school.
iii/ The school should provide realistic training that is related to post-high school jobs. This is closely related to education in vocational and technology fields.
iv/ Counseling services should be provided to assist students with personal problems that affect their school work.
$\mathbf{v} /$ The school should have an alternative program that meets the expectations of the parents and students.
vi/ Students should be able to talk with teachers as equals and not feel intimidated or powerless in their educational efforts.
vii/ The students should be able to approach the teachers with questions or problems.
viii/ The outcomes of the learning situations should be clearly defined.
ix/ The methods should be appropriate to accomplish the assigned task.
$\mathbf{x}$ / The sequence for learning should be well-defined and communicated to the students.
$\mathbf{x i /}$ The rules for learning should be established and communicated well.
xii/ The performance standards required by the teachers and administrators should be clearly indicated.

### 2.4.4.2. Assessment and reducing of dropout

Assessment puts in evidence central questions involved in any evaluative process. Do we judge facts, or persons? Using what criteria? Based upon what opinions and cultural frames? Assessment can be divided in two kinds: general and individual. The general one is interested in facts, results or opinions collected in a large scale. It owes to measure the importance or the probability of a given phenomenon (as school dropout). So it is used to prevent, detect or treat any prevalent disease (as is dropout). Besides, another kind of assessment exists, which regards individuals in their life course. It is practised by teachers on students, as well as students on their peers, or students on themselves. It consists in pronouncing judgements in
comparing persons in regard to their learning data, to their former results, and to those of others of the same grade, relatively to the issues prescribed by the curriculum.

### 2.4.4.2.1. Significance of evaluation for education

Evaluation should be the ultimate goal of an education system. In the core area of evaluation there are judgments. In evaluation one compares informations with criteria so to make judgments. Teachers must make all kind of judgments which are appropriate and concerned with the learning process of child. Often teachers make some educative judgments as follows: "Will John do better if he repeats his grade in this year?" or "Can Nicole get B or B+ for her project?. Measurement is utilized by evaluation to put in quantitative terms the numeric description of an event or characteristic. The measurement tells how much, how often or how well, by providing scores, ranks or ratings. As an example: "Manas answered 5 questions within 15 ". This is some kind of measurement we often see employed in education systems. Through measurements also, teachers get accustomed to privilege the performance of one rather than others.

Assessment is the process by which all kind of student's skill, knowledge and abilities are put in evidence. According to Linn and Gronlund (2000), assessment is any variety of examination used to obtain information about student performances. Not all the evaluative decisions made by teachers involve measurements. Some decisions are based on information that is difficult to express numerically: students' preferences, information from or on parents, previous experiences, but measurements play a major role in many classroom decisions.

Assessment can be formal such as unit tests, or informal, as observing who emerges as a leader of work group. Assessment can be designed by classroom teachers or by local, state or national agencies such as school districts or the educational testing service. Nowadays assessment can go well beyond paper and pencil exercises up to the observation of performances, the development of portfolios or the creation of artifacts (Linn and Gronloud, 2000; Popham, 2002).

### 2.4.4.2.2. Application of institutional screening tests in quest of at risk students

In this discussion we are trying to focus on formal assessments designed by groups and agencies outside the classroom. These assessments usually involve a phase of testing and a
phase of reporting of the scores. The answers given on any type of test have no meaning of themselves; we must make some kind of comparison to interpret test results. There are two basic types of comparison: in the first, a test score is compared to the scored obtained by other people who have taken the same test (this is called a norm-referenced comparison). The second type is criterion-referenced. Here, comparison is used to fix standard or minimum passing scores. That is why standardized tests are so useful in guiding educational policies. Of course, one may object that they are far from individuals' perceptions and experience. In this case, we can answer that, all things considered, general assessments end by meeting the individuals' evaluation, in so far as they assess the performances of the whole school system in order to diagnose its health.

### 2.4.5. Conclusion of Section 2.4.

From the above discussion we found that dropout is a serious factor of social recession resulting in poor economic growth of any country. Hence every country has to build separate strategy firstly in support of research findings for prevention of this issue and secondly to make a comparison with other developed countries in this regard.

According to the statistics of S.R.I-2010, in India, apart from school dropout, 4.28\% students never enrolled in the education system. Hopefully, integrated early childhood development programs (as I.C.D.S.), have been promoted to provide more attention regarding this matter.

Nevertheless, poverty is a factor which resists all kind of progress including the expansion of education in India. As it appears from the report on human development of India-1997, although rural poverty declined from $40 \%$ to $33 \%$ from 1981 to 1997 and the rate of literacy has doubled in between 1961 to 1992, still this was not sufficient and satisfactory compared to the scores of France and developed countries.

As a remedial measure, government of India has taken some steps for the extension of general education with the collaboration of 'SARBA-SIKSHA-ABHIJAN' (S.S.A). In September, 2001, sum of 1300 million Rupees was allotted with a view to provide eight years of a quality education to all children in the age group of 6 to 14 years. This target was proposed to achievement by 2010.

Consequently, the assessment of S.R.I-2010 found a school dropout rate remarkably decreased by $30 \%$. Mid-day meal scheme has brought a remarkable success in some states. Also this scheme can effectively be said to have broken down the caste-barriers.

On the French side, according to Maryse Esterle, renowned French sociologist, truancy and school dropout have been shown more prevalent among students of modest or poor backgrounds.

### 2.5. Conclusion of Chapter 2

We have discussed elaborately how extensive program of adult education can help to prevent dropout in either countries. The reduction of early exits, or dropouts, from the education system has become a priority in France as well as in Europe (Strategy Europe, 2020). This priority has been mirrored by the 2009 youth action plan (Agir pour la Jeunesse) and in the proliferation of initiatives launched by the Ministry of Education in partnership with the Ministry of Employment, such as local platforms, national workshops for the exchange of practices and experiences organized by the 'Fonds d'Expérimentation pour la Jeunesse' (translation Fund for Experimental Youth Projects), inter-ministerial monitoring and information exchange system, etc.

In the Indian context, to prevent dropout, country ought to establish a comprehensive vocational training course from secondary and post-secondary level of studies similar to France. In France, rather than free enrolment in technical or higher studies students should undergo through proper counseling in order to be deviated from the course which is the most common practice but ultimately ends for at risk students in averred dropout.

For many research findings grade repetition (redoublement) shows negative effects concerning student dropout, but if all the students are allowed indiscriminately to the next grade without judging their basic skills of knowledge, then some of them may find difficult to cope up with their studies in higher grade level.

Some researchers ${ }^{90}$ found that students retained in the first or second grade can significantly improve their grade-level skills during their repeated year.

[^65]The statistics of the academy of Nice 'Project report' (page-37) for the 3e level (equal to $9^{\text {th }}$ grade of O.E.C.D. countries) show a higher percentage of repetition in this grade than in any previous grade. In actual fact, several research works have underlined that transition of students from $8^{\text {th }}$ to $9^{\text {th }}$ grade is always challenging. Therefore academically weaker students should be traced out before they reach $8^{\text {th }}$ grade.

Ultimately teacher-student relationship is also an important factor which influences student dropout. Educational institutes should properly investigate about this issue, because poor conduct, rude behavior and negative vibes of the teacher might act as a cause of psychological depression among the student, resulting in dropout.

In the following chapter (ch-3) we have dealt with these issues and conducted our own survey to investigate more reasons and causes of dropout.

## Chapter 3

## Educational surveys and their impacts on the remedies of dropout

### 3.0. Introduction

Educational Surveys have a big impact on educational research. For instance, surveys' findings of contemporary researches on language acquisition have induced to place the learners at the centre of language learning. Emile Durkheim, the great French sociologist and founder of functionalist theory, was one of the leading personalities who recommended the use of scientific and statistical techniques of survey in sociological research.

Nevertheless, before discussing the various methods of surveys, we have thought necessary to tally the distinctive features of a Western mind and an Indian mind, in so far as in the process of composition, analyse and synthesis of survey of this study, we have dealt with several Indian and French students, pedagogues and administrators.

Self and group boundaries within Indian and Western minds ${ }^{91}$.


Indian-mind


Western-mind

Figure 44. Chart flow of self and group boundaries within Indian and Western minds.

[^66]Left figure represents the interactions established between individual and group relations by the Indian mind. They are governed by boundaries which are continuously varying under the influence of group activities. In Western mind, the contrast between self and others, man and nature, subjectivity and objectivity, is total. In Western culture, the self relates himself to the group to which he belongs by establishing links with the group, and boundaries seem to be invariable. For the Indians, the self and his group are seen to be related by variable boundaries. The self has no need to establish relations with its own group, since he is included in it. However, the fact that the self is included within the group does not imply that the Indian mind differs from the Western mind in terms of individualistic versus collectivistic orientations.

We have kept in mind these cultural differences when analyzing responses of parents, teachers and administrators (who are the members of extended educational program) to our questionnaires. As a matter of fact, considering the impact of adults belonging to student's environment on school dropout, we have decided to devote some questions to investigate educators' practices, advices and representations, so that we can identify the interrelations and interactions between students and their environment.

We have also taken into account another problem which might undermine the academic achievement of a student: the stereotype threat.

Stereotype threat is an "apprehensiveness about confirming a stereotype" (Aronson, 2002). The stereotyped individual bears an extra emotional and cognitive burden. As an example, universally girls are thought to be inferior in mathematics than the boys, which is unjustified.

When a person is aware of the stereotype, she cares about performing well enough to disprove its unflattering implications (Aronson, Lustina, Good, Keough, Steele and Brown, 1999). The results of a survey organized by J. Aronson, C.P. Steele, M. F. Salinas and J. Lustina, source: Reading about the social animal ( $4^{\text {th }}$ edition) - editor: Elliot Aronson, put in evidence the impact of stereotype threat on college students in the performance of standardized tests as shows the schema below:


Figure 45. Impact of stereotype threat on college students in the performance of standardized tests (according to Reading about the social animal (4th edition) - editor: Elliot Aronson).

When African-American college students are asked to participate in a standardized test to detect their verbal ability, their performance lowers down considerably (under 6) if they have been informed that the test would concern their ability, in comparison to another other group of Afro-American students (rated about 8) who have not been informed of that. In the same conditions, the performance of white students is not affected by stereotype's threat.

So we should minutely examine how far to be faced with grade retention and stereotype's threat at the time of examination can influence students' results, and later on induce school dropout. But we should also remember that the same effect could bias the results of any survey about basis abilities, if surveyed people are made conscious that it could be exploited to judge their own abilities.

Before entering discussion on the impact of surveys upon remediation of dropout, we have to determine the various types of surveys, in order to measure their respective advantages and limitations, and justify the type chosen for our experimentation.

There are three kinds of standardized tests which are frequently done for the assessment of the students. These are achievement test, diagnostic test and aptitude test.
$\mathbf{1}^{\circ}$ - Achievement test: For the assessment of language skills, reading and science skills’ apprehension, achievement tests are commonly used. They might vary in individual or group. Achievement test is used as indicator for deciding about individual or group's learning.
$\mathbf{2}^{\circ}$ - Diagnostic test: It investigates mainly the learning deficiency of an individual or group. In diagnostic test, learners are asked to hear and differentiate various kinds of sounds, remember spoken words or sentences, recall sequences of symbols, separate figures from their background. Diagnostic tests are more usual in the elementary school than in the secondary school.
$\mathbf{3}^{\circ}$ - Aptitude test: Aptitude tests are recognized for the measurements of developing abilities and for identifying how well a student will do in future. Achievement and aptitude tests measure both of them developed abilities. Aptitude tests predict how well people will do in particular programs in the college or in professional school (Anastasia, 1988).

As all are standardized tests, one must recall what separate standardized test from general test. Standardized test is the representation of an evaluation where the same directions are used for administering students in the classroom and where standard procedures are used for scoring and interpreting them (Carey, 443). It is multidimensional in purpose; it not aimed only to furnish any individual or group scores. By calculating mean, median, mode and standard deviation, student's emphasis on the subjects can be calculated.

It differs from general test in two points:
a) Its reliability: Standardized test is much more reliable than any other normal test because it always compares students' scores each other, and often with previous tests. As an example, teacher can make an evaluation of reading skills of students two months in successive weeks and can compare the students' progress.
b) Its validity: General test often sustains no particular direction. According Linn and Gronlund (2000), Popham (2002), validity is judged in relation to a particular use or purpose. A test might be valid for one purpose not for another. Standardized test can remove this inconvenience.

In pursuance of the execution of surveys for our study, we have manipulated P.I.S.A. survey's framework. In this connection, we should first have to consider the credibility and the extensive framework of P.I.S.A. in the field of student assessment.

### 3.1. What is P.I.S.A?

P.I.S.A. (Programme for International Student Assessment) is an international educational survey which started in 2000. P.I.S.A. enhances an extended programme to evaluate different aspects of education outcomes worldwide, by testing the skills and knowledge of 15-year-old students belonging to participating countries and economies. In the year 2009, over 65 countries and economies have participated in P.I.S.A. The methodology of P.I.S.A. follows the influence of TIMSS (Trends in International Mathematics and Science Study), and NAEP
(National Assessment of Educational Progress, which organised by the help of U.S.A). The reading assessment of PISA is inspired by PIRLS92 (Progress in International Reading Literacy Study), which is an initiative of New-Zealand government to compare basic skills of the children of this country to other countries' results).

### 3.1.1. Similarity of P.I.S.A.'s survey with this study

There are many eminent international educational surveys like PIRLS, NEAP, TIMSS but we have been followed some frameworks of P.I.S.A. (Programme for International Student Assessment) for several reasons, as:
i- P.I.S.A. deals with the assessment of 15 -age group of students, which is closely related to the specific age group of students of this study.
ii- P.I.S.A. shows a gradation of students according their learning outcomes, which clearly shows the proportion of students who are suffering from severe learning lacunas in basic skills of education and it detects the students who are at risk. Reading skills and aptitude level of mathematics are supposed to be the basic learning skills as defined by UNESCO; and evidently, deficiency of basic learning skills is responsible for the existence of a considerable school dropout in France and India.
iii- Apart its main comparative study of Reading, Mathematics and Science aptitude tests, P.I.S.A. has also evaluated the teacher-student relation in the context of education environment, which is a deciding factor of student dropout and which has been considered as a subject matter of investigation in our study.
iv- Internationally P.I.S.A is the largest device to evaluate student skills;
$\mathbf{v}$ - Many countries of the world set up new educational strategies according to the recommendations of P.I.S.A.

[^67]vi- In 2010, two states of India, Tamil-Nadu and Himachal-Pradesh, realized an assessment with their students with the questionnaires of P.I.S.A-2009, which enables us to draw a comparison between the survey results of India, France and O.E.C.D.

But we are also aware of the numerous critiques which arose against P.I.S.A since the beginning, particularly about the choice of the countries and economies assessed, and the fact that its survey does not take enough into account the cultural features and the ethnic pride which are reflected separately by the curriculum of each country.

Anyway, P.I.S.A. provides a huge help to researchers for engineering a comparative study but they ought to follow an impartial outlook to avoid both bias and political interferences.

### 3.1.2. Methodology of P.I.S.A.

P.I.S.A. primarily evaluates the potentiality of students who are aged between 15 years and 3 months and 16 years and 2 months, which corresponds more or less to the end of compulsory education worldwide. Only students pursuing their academic carrier in school are considered as a sample of P.I.S.A. evaluation. From each country, P.I.S.A. collects a sample of at least 5,000 students. Small countries like Iceland and Luxembourg are considered to participate with less than 5,000 students per year. Some countries use much larger samples than required, to allow comparisons between regions. Each student takes a two-hour handwritten test, which includes multiple-choice and essay type questions. In total the test provides six and a half hours of assessment material, but each student is not tested on all the parts. Following the cognitive test, participating students spend nearly one more hour answering a questionnaire on their background including learning habits, motivation. School directors also fill in a questionnaire describing school demographics, funding, etc.

In the reading test, P.I.S.A. measures neither the fluency on mother language of participating students nor how competent they are at word recognition tasks or spelling. Instead, they are scrutinized on how should they able to construct, extend and reflect on the meaning of what they have read across a wide range of pre-recognized or non-continuous texts.
P.I.S.A.'s mathematical assessment test asks students to apply their mathematical knowledge to solve problems set in various real-world contexts. To solve these problems, students must possess a number of mathematical competencies as well as the knowledge of a
broad range of mathematical contents. Compared to this, T.I.M.S.S.'s surveys measure more traditional school contents such as understanding of fractions and decimals and the relationship between them (dealing with curriculum's attainment). P.I.S.A. claims to measure education's response to real-life problems and life-long learning (dealing with effective knowledge).

### 3.1.3. Result of P.I.S.A.

P.I.S.A. has been conducting its assessment each 3 years since 2000. Main targets of evaluations are focused on candidates' aptitude level in reading, mathematics and science.

### 3.1.3.1. France and P.I.S.A. in 2003.



Figure 46. Different grade levels of students in PISA-2003 assessment (from O.E.C.D. PISA 2003 database, table -2.5a).

In 2003 assessment of P.I.S.A., according to the merit of results, France reached $15^{\text {th }}$ position within 40 participating countries. In reading and mathematical performances, respectively $17.5 \%$ and $16.6 \%$ students stood level-1 or below, and were considered as poor learners in the field of secondary education.

### 3.1.3.2. France and international compared results for reading, mathematics and science from P.I.S.A. 2000 to P.I.S.A. 2006

P.I.S.A. made its first three evaluations in 2000, 2003 and 2006. The main target of evaluations in the three successive terms was reading, mathematics and science. We represent comparative scores of some European countries along with top score:

| Name | Reading (2000) | Mathematics (2003) | Science (2006) |
| :--- | :---: | :---: | :---: |
| Finland (topper) | 546 | 544 | 563 |
| Belgium | 507 | 529 | 510 |
| France | 505 | 511 | 495 |
| Germany | 484 | 503 | 516 |
| Sweden | 516 | 503 | 503 |

Table 56. Comparative scores of some European countries along with top score in first three evaluations in 2000, 2003 and 2006 (according to PISA 2000 to 2006).

Scores below 500 were achieved by Germany (484) in 2000 in reading test, and by France (495) in 2006 in science category.
3.1.3.3. France and international compared results for reading, mathematics and science in P.IS.A. 2009 ${ }^{93}$.

| Country | Reading | Mathematics | Science |
| :--- | :---: | :---: | :---: |
| Sanghai (China) (topper) | 600 | 575 | 556 |
| Belgium | 515 | 507 | 506 |
| France | 497 | 498 | 496 |
| Germany | 513 | 520 | 497 |
| Sweden | 494 | 495 | 497 |
| U.K | 492 | 514 | 494 |
| U.S.A | 487 | 502 | 500 |

Table 57. Comparison between France and international of results for reading, mathematics and science in PISA 2009.

Above results show a big gap between the top score and the rest of the countries including France. From the result of P.I.S.A. 2009, several experts have been raising questions, the more significant being why there is a gradual decrease in the perceived level of mathematics skill.

[^68]Let us now consider the levels of students surveyed, restricting the comparison to France, Germany, U.S.A. and U.K.:

| Country | Grade level-(i) | Grade level- (ii) | Grade of highest level |
| :--- | :---: | :---: | :---: |
| France | $19.7 \%$ | $21.1 \%$ | $8.5 \%$ |
| Germany | $18.5 \%$ | $22.2 \%$ | $7 \%$ |
| U.S.A | $17.7 \%$ | $24.4 \%$ | $8.4 \%$ |
| U.K | $17.6 \%$ | $24.9 \%$ | $7 \%$ |

Table 58. Comparison of levels of students surveyed in PISA 2009 for France, Germany, U.S.A and U.K.
The above comparative study explains that in France, percentages of students of the highest ( $8.5 \%$ ) and the lowest ( $19.7 \%$ ) level, are higher compared to Germany, U.S.A and U.K. As there is a close relationship between lowest reading proficiency and student dropout, one can see that situation is tending to become complex and that immediate action should have to be undertaken to prevent the tendency to lowering of the reading proficiency.

The schema below indicates the different levels of achievements of French students in mathematical performance in (P.I.S.A- 2009).


Figure 47. Levels of achievements of French students in mathematical performance in P.I.S.A. 2009.
P.I.S.A. defined the capacities of level -1 's students in 2006, saying that they can represent explanations that are obvious and follow explicitly from given evidence. They suffer much to sustain in pursuance of their educational activities, and, due to their severe learning deficiency, they have a tendency to discard school earlier. On this chart, we see that $22.6 \%$ students are situated below or on the grade level-1, which represents more than the $1 / 5$
of students. Level -3 and level -4 are more or less similar in importance, and the upper levels are very tiny. One can conclude that the mathematics level in France is not satisfactory.

This is confirmed by the the next document which reproduces an interview of a European expert in mathematics and science, who was reacting to results of French students to the mathematics'part of P.I.S.A. 2009.

The expert first states that the result of 2009 is not as catastrophic as the 2006's one, which suffered of a great deficit compared to 2003. But on one part, this is not the result of policies' effort to enhance learning, and on the other, even if France remains in the middle part of the troop, countries like South-Korea, Finland or Canada are far before. Secondly she points out that a main cause of this bad result is the fact that French school system did not succeed in helping students at-risk in mathematics. Further more, the gap between higher levels' and lower levels' students has increased more than in the other countries. Later she evokes more specific reasons. In France mathematics are taught in a very abstract way, whereas they are used as a selective device. So failing in mathematics is often interpreted as loosing all chance of succeeding in any field of qualified employment.

In the reading skill area, comparing the results of 2009 results to those of 2000, French education department found an increasing bipolarization.

## En bref

3,
Depuis le milieu du XXe siècle, le tauxd'im. migrés dans le monde n'a pas beaucoup augmenté.Il est passé de 2,3\% de la population mondiale en 1965 à $2,9 \%$ en 1990 pour atteindre 3,1 \% en 2010. Si bien que 214 millions de personnes résident aujourd'hui dans un pays différent de celui dans lequel elles sont nées. En revanche, depuis le début du $X X^{\prime}$ siècle, on a assisté à un renversement des flux migratoires: alors que la majorité des migrants venait des pays du Nord pour s'installer dans ceux du Sud il y a cent ans, ce courant est devenu le moins important ( $7 \%$ des migrants). Et le chemin inverse, Sud-Nord, est le plus emprunté (environ $33 \%$ des migrants). Les flux Nord-Nord et Sud-Sud représentent également une part importante, respectivement $28 \%$ et $32 \%$ de la totalité des immigrés mondiaux.
G. Pison, Population \& Sociétés, 472, 2010.
sur le web
http://www.share-project.org/ Ce site (en anglais) donne accès à l'enquête Share de l'Union européenne qui porte sur la santé, le vieillissement et la retraite en Europe.

## éducation Trop d'élèves en éches en mathématiques


et évaluation des initiatives éducatives auprès de la Commission européenne.

Les résultats de PISA, enquête triennale portant sur les acquis des élèves de 15 ans de 65 pays, viennent d'être publiés. L'édition précédente pointait une régression de la France en mathématiques. Où en est-on?
V.H. Dans cette discipline, la tendance à la baisse de niveau constatée entre les éditions 2003 et 2006 de PISA ne s'est pas poursuivie en 2009, sans que nous n'ayons redressé la barre. En 2003, la France avait obtenu en mathématiques un score de 511 points, quila

situait bien au-dessus de la moyenne des pays de l'OCDE (500). En 2006, elle avait rejoint le groupe des pays moyens avec un score de 496 points ( 498 pour l'OCDE). En 2009, la France se situe toujours dans la moyenne avec 497 points (496 pour l'OCDE). Mais bien loin derrière des pays comme la Corée du Sud (546), la Finlande (541) ou encore le Canada (527).
Comment expliquer cette stagnation?
V.H. Il semble que nous n'arrivions pas à aider les élèves en difficulté en mathématiques à réussir. Cette catégorie a augmenté en six ans : elle représentait $16,6 \%$ de l'échantillon PISA en 2003, et elle est passée à $22,5 \%$ en 2009. Pour autant, notre système ne forme pas plus de très bons élèves qu'auparavant: leur proportion plafonne à $14 \%$, soit moins qu'en Allemagne par exemple ( $18 \%$ ). Enfin, en France, l'écart (331 points) entre le score moyen des $5 \%$ d'élèves les plus performants et des $5 \%$ les plus faibles est supérieur à l'écart moyen dans l'OCDE ( 300 points). En mathématiques comme dans d'autres domaines, notre système éducatif est donc plus inégalitaire que la moyenne.
Pourquoi ne parvenonsnous pas à diminuer le nombre d'élèves en difficulté en mathématiques?
V.H. Le milieu socio-économique et le taux de redoublement, plus élevé dans notre pays que dans les autres,
semblent avoir un impact plus déterminant en France qu'ailleurs. Mais on l'observe aussi pour les autres disciplines. Ce qui est spécifique aux mathématiques, c'est la manière très théorique de les enseigner en France. Cette méthode ne serait pas adaptée à tous les élèves. Elle serait pour certains une source d'anxiété. Un phénomène que l'enquête PISA 2003 avait mis en évidence: les élèves français qui n'obtiennent pas de bons résultats en mathématiques ont plus souvent l'impression que ceux des autres pays de n'avoir aucune chance de réussir dans leurs études. Quelles sont les clés du succès à l'étranger ?
V.H. En Finlande, premier pays européen du classement PISA en mathématiques, la proportion d'élèves en difficulté n'augmente pas, sans doute parce que le système éducatif limite les écarts de niveau, en insistant sur l'acquisition d'un socle commun de compétences. La formation continue des enseignants joue aussi un ôle fondamental. Ainsi, en Allemagne, la mise en place du réseau Sinus Transfer - qui fournit en permanence des outils pédagogiques aux enseignants - a porté ses fruits : classé derrière la France en mathématiques en 2000, ce pays obtient cette année un score de 513 points, qui le situe au-dessus de la moyenne de l'OCDE. recueillis par Fabien Goubet 1] PISA 2009, www.pisa.oecd.org

Figure 48. Article of "La Recherche" which gives an interview of a European expert in mathematics and science, who was reacting to results of French students to the mathematics'part of P.I.S.A. 2009 (from La Recherche February 2011).


Elèves en difficulté

Figure 49. Levels of achievements of French students in mathematical performance in P.I.S.A. 2000 vs P.I.S.A. 2009.

Explanation: The percentage of lowest grade level of students in reading which was less than $5 \%$ in 2000 , increased to more than $8 \%$ in 2009. At the same time, highest grade level performing students increased in percentage. For remedial measures, French government took some preventive measures ${ }^{94}$, which have been discussed later in this study.

- First level of action: Reform of the programs of the primary common base of knowledge and skills (the so-called 'socle commun'), with the ongoing reform literacy plan, and the future reform science plan.
- Second level of action: Reform of the personalized help in primary school with the ongoing reform personalized help in high school, and the future reform personalized help in sixth grade.
- Third level of action: New programs for priority education which were to be applied in 2011, creating two devices. One is called ÉCLAIR (Ecoles, Collèges, Lycées pour l'Ambition, l'Innovation et la Réussite, translation: primary, lower secondary and upper secondary schools for ambition, innovation and success). The second is called RRS (Réseaux de Réussite Scolaire, translation: networks for school success). ÉCLAIR includes school

[^69]structures of which students face huge social and learning difficulties, RRS receives publics more diverse ${ }^{95}$.

### 3.1.3.4. France and international compared results for reading, mathematics and science in P.I.S.A. 2012 ${ }^{96}$

In P.I.S.A. 2012, mean scores achieved by students aged 15 in reading literacy and scientific literacy are in average similar in 2012 than in previous P.I.S.A. editions. However, confirming the previous tendency shown in 2009, an increased polarization is shown in written understanding. The percentages of students of lowest and highest levels are climbing up significantly from 2000 to 2012, while the gap tends to decrease in all OECD countries.


Figure 50. Graphic of repartition of French students compared to OECD for written understanding (from P.I.S.A. 2012).

Explanation: In written understanding, the low level groups of students are more important in percentage than in the average of OECD countries, likewise the high level groups of students.

[^70]Graphic of repartition of students in level groups for scientific culture, in France and OCED:


Figure 51. Graphic of repartition of French students in level groups for scientific culture compared to OECD (from P.I.S.A. 2012).

Explanation: in scientific culture, France keeps the average of OECD regarding the level groups except for the lowest level group.

With an average score of 505 , the results of France in reading literacy show high stability. For the first time since the launch of PISA in 2000, France is to exceed the average of OECD countries. The share of French pupils with reading incapacities increased from $15.2 \%$ to $18.9 \%$ between 2000 and 2012, while over the same period the share of low level students decreased slightly in the average OECD countries.

Meanwhile, the proportion of students in high levels, which was $8.5 \%$ in 2000 climbed up to $12.9 \%$ in 2012, while it remains stable in the average of OECD countries.

The same tendency to 'big gap' is also observed in the case of sexes. Since 2000, the difference between the average scores of boys and girls increased in France by 15 points in favor of girls, against only 6 points on average in OECD countries.

With a score of 499 in scientific culture, the results of France are stable and are in the average of OECD countries. The only significant difference is that France has more low level students in this field also.

The results of P.I.S.A. 2012 provoked hard reactions and attacks against school system in France and in Belgium, so far as the two countries were ex-aequo in the $1^{\text {st }}$ place for the
school inequity between the socially and culturally gifted students and the others. In France, the result was in 2013 a new series of measures concerning priority education, among which the REP (Réseau d'Education Prioritaire - translation: network for priority education) gives more means to underprivileged students (for example: two teachers by classroom instead of one) and the reform called 'Réforme des rythmes scolaires' (translation: change of school time-table) which decided to lengthen school week while shortening school day, as commanded by some psychologists.

### 3.1.3.5. India and international compared results for reading, mathematics and science in P.I.S.A. 2009 and 2009+

In 2009, India was invited to apply PISA survey in the device of PISA $2009+$. Sixty-four economies originally participated in PISA 2009. Ten additional participants, who were unable to participate within the PISA 2009 project timeframe, participated in the PISA 2009 study on a reduced and delayed timeline in 2010. This is known as the PISA 2009+ project. Economies concerned by PISA 2009+ were: Costa Rica, Georgia, India (Himachal Pradesh \& Tamil Nadu), Malaysia, Malta, Mauritius, Venezuela (Miranda), Moldova, United Arab Emirates. PISA 2009+ tested just over 46,000 students across these ten economies, representing a total of about $1,377,00015$-years old. ${ }^{97}$

The result for India was an incomplete but interesting survey, tempted in two Indian states. The 15 -years old students of Tamil Nadu and Himachal Pradesh have been estimated to have the lowest level of PISA 2009 and PISA 2009+ for reading with more than $80 \%$ of students below the baseline of proficiency. Around one-fifth of students in these economies were very poor readers. The survey also showed the contrast picture of public and private performances. Students were assigned a reader profile based on their self-report to questions on two dimensions: effective learning strategies, and frequency of reading a range of materials.

Students in Tamil Nadu attained an average score on the PISA reading literacy scale that is significantly higher than those from Himachal Pradesh and Kyrgyzstan, but lower than all other participants in PISA 2009 and PISA 2009+.

[^71]In Tamil Nadu 17\% of students are estimated to have a proficiency in reading literacy that is at, or above the baseline needed to participate effectively and productively in life. Students in the Tamil Nadu attained a mean score on the PISA mathematical literacy scale which is the same as observed in Himachal Pradesh, Panama and Peru. This was significantly higher than the mean observed in Kyrgyzstan but lower than those of other participants in PISA 2009 and PISA 2009+.

In Tamil Nadu, $15 \%$ of students are proficient in mathematics at least to the baseline level at which they begin to demonstrate the kind of skills that enable them to use mathematics in ways that are considered fundamental for their future development. There was found no statistically significant difference regarding the performance of boys and girls in mathematical literacy.

Students in Tamil Nadu were estimated to have a mean score on the scientific literacy scale, which is below the means of all OECD countries, but significantly above the mean observed in the other Indian state, Himachal Pradesh. In Tamil Nadu, 16\% of students are proficient in science at least to the baseline level at which they begin to demonstrate the science competencies that will enable them to participate actively in life situations related to science and technology. In Tamil Nadu, there was also a statistically significant gender difference in scientific literacy, favoring girls.

Here we will examine a comparative chart of P.I.S.A. 2009 results, considering India versus France and O.E.C.D.

| State/country | Reading | Mathe- <br> matics | Science |
| :--- | :---: | :---: | :---: |
| Himachal -Pradesh (public) | 310 | 331 | 317 |
| Himachal-Pradesh (private) | 356 | 379 | 372 |
| Tamil-Nadu (public) | 325 | 334 | 339 |
| Tamil-Nadu (private) | 356 | 378 | 365 |
| O.E.C.D. (average of public and public performance) | 503 | 505 | 511 |
| France (average) | 497 | 498 | 496 |

Table 59. Comparison between Indian, French and O.E.C.D. students in reading, mathematics and science (from P.I.S.A. 2009).

Undoubtedly, Himachal-Pradesh and Tamil-Nadu made a very poor performance in comparison to O.E.C.D's. average, when they attempted in 2010 the questionnaires of P.I.S.A. 2009. From the comparison, we observe that the tendency of educational achievement is prominent in the three fields of education. Performance level of Indian students shows itself excessively low, and also the level of French students who could not reach to O.E.C.D. average.

Every survey is constructed for a particular purpose; naturally it does not fit to another one. But the essence of a particular survey can be followed later. U.N.E.S.C.O. in their $10^{\text {th }}$ meeting of Jomtien (Thailand) claimed that, in 2008 nearly 796 million of adults in the world were suffering by basic skills deficiency, which is one of the main causes of student dropout. In its comparative study, P.I.S.A. is dealing with evaluation of the status of basic learning subjects.

Moreover a specific relation between reading skill and student dropout has been proved. In the P.I.S.A. survey of $2006,15.2 \%$ of weakest readers had been detected who shared lowest performance level of gr-1 level or below. According to the report of the state of education $n^{0} .16$ (2006) of France, it has been estimated that $20 \%$ of dropout in the proportion of weakest readers would be expected by 2010. All these reasons justify our borrowing to PISA survey for the aims, the device and the methodology.

### 3.2. Framing of field-work related to this study

From the previous comparative study of chapter 1.4., (Factors influencing education system) one can realize that there are lot of diversities in the education system related to socio-economic and personal environment of the students in France and India.

Aiming to spot and underline the problems which face students, due to inconveniences in different aspects of education field and which lead them to drop out, we tried to compose some questionnaires, related to following three categories:


Figure 52. The three categories of questions in our questionnaires.

Questionnaires have been composed in order to collect the following informative items:

## - Personal affairs:

- Age of students.
- Need of extra help (private tuition).
- Personal school project (how far do they want to go in their studies?)
- First language biography (which portion of language learning they prefer to have to deal with?).
- Mathematics biography (in which part of mathematics they face inconvenience).


## - Family affairs:

- Parent's occupation.
- Parental involvement in daily studies.


## - School affairs:

- Number of grade retentions in class/classes.
- Duration and causes of absenteeism in school.


### 3.2.1. Methodology of survey of this study

In the methodology of this survey, at first we composed the following questionnaire of 10 questions (cf. Annex A) in English.

1. Name two subjects which you have a special interest to study within your school curriculum.
2. Name the subject for which you have less interest to study.
3. Do you face any problem in mathematics? If any in which part/parts you face inconvenience: algebra/geometry/calculus/trigonometry?
4. How far do you want to read before to get a job: Baccalauréat/ Licence/ Grande École/ University.
State the profession of your parents: *Father
*Mother
5. Particularly which part of your French curriculum do you like most: prose/poetry/grammar?
6. For the better accomplishment of your home-work you take help from: tutor/parents or some members of family?
7. How many days in last week you were absent in college? Explain the causes if any.
8. In which year French revolution started - 1589/1689/1789/1889.
9. Have you repeat a year in college previously? If yes how many times?

Then we translated the questionnaire in French and in Bengali (with adaptation of cultural referents) for conducting a survey in the collège Lei-Garrus (83470 Saint-Maximin) in France and in T.R.H.S school of $24-$ pgs in West-Bengal (which is a state of India). In France, we chose a $3^{\mathrm{e}}$ class, which is the final level of low secondary school; in India, we chose 9-th standard students which is equivalent to $3^{e}$ of French college. A preliminary survey was organized in the academic year 2009-10, with 20 French students and 40 Indian students of the same grade, in15/3 2010 in French school, and 20/6/ 2010 in Indian school. We have analyzed and compared the results according to the directives of self-determination theory.

The preliminary survey permitted to bring out common similarities of inconvenience in the area of mathematical learning in the students of both countries. Hence we organized a main survey with more students ( 50 French and 100 Indian students) in 2010-2011 schoolyear, stressing particularly some specific questions which were assumed to be more related with dropout problem. These additional questions, borrowed from the framework of P.I.SA. 2009 about teacher-student relationship were as follows:

1. Do you observe that most of the students don't listen to what the teacher says?
2. Do you observe that there are frequently noise and disorder in the class?
3. Do you observe that teachers have to wait for a long time for the students to quieting down?
4. Do you observe that students cannot work properly in the class?
5. Do you observe that most students delay a long time for working after the lesson starts?
6. Would you say that you get along well with most of your teachers?
7. Would you say that most of your teachers are interested in your well-going?
8. Would you say that most of your teachers give importance to your opinion?
9. Would you say that you receive extra help of most of your teachers when you need it?
10. Would you say that most of your teachers are fair in their behavior?

Results of the successive two years surveys were then compared. In addition to surveys, we interviewed several directors of low secondary schools and a director of elementary school in France and India to precise what factors are influencing student dropout and in what proportions. So in brief we have achieved the following field-works:
i/ Surveys for students were made in two categories, namely, preliminary and main.
ii/ We collected data from various sources and drove some interviews with few of the heads of institutions.
iii/ We interviewed Indian teachers with PISA -2009 questionnaires.

### 3.2.2. Common traits of the contexts ${ }^{98}$ of preliminary and main surveys in France and India

i/ To use same perimeter tools of survey we composed the same set of questions in French version (for French college) and in Bengali (for Indian-Bengali medium school) version.
ii/ Surveys were made in village school in both countries (in France and India).
iii/ Surveys were conducted in co-education schools (where boys and girls read together) within standard- 9 Indian students and $3^{e}$ standard students of French collège, which are equivalent.

### 3.2.3. Differences in the context of the surveys in France and India

In this stage of our study we have discussed about the following issues with preliminary survey reports

> i/ Status of working parents.
> ii/ Percentages of parents assisting in home- assignment.
> iii/ How far students want to reach in their education carrier.
> iv/ Student's age group related to their grade level of study.
> v/ Grade-retention of students.
> vi/ Competency in reading skill of students.

[^72]vi/ Absenteeism/Truancy.
We have been trying to incorporate (where available and applicable) some necessary required information i.e. state or countries statistics (within box) before the reports of preliminary assessments of the survey, in order to compare the existing credential statistics and survey results. From above seven factors of preliminary results, we chose three (iii, v and vi) of them, which assumed to be more related with the problem of dropout.

### 3.3. Responses to the ten questions of preliminary survey in France and India

The answers to the ten questions were collected in 2009, with the preliminary survey, within a class unit (section) in Lei- Garrus collège (located in Var in France) and in R.PVidyapith (in North-24 parganas of West-Bengal of India), Questionnaires were selected for three fields i.e. personal, parental and school affairs.

### 3.3.1. Survey report regarding working parents (question-5 in survey: State the profession of your parents: father / mother)



Figure 53. Percentage of parents having a professional activity in our panels of the preliminary surveys.
Clarification: Regarding parent's professional activities, French mother are well ahead ( $70 \%$ ) compared to Indian mother ( $25 \%$ ), but statistics revels that $60 \%$ French fathers are included within working class compared to $100 \%$ of Indian fathers, although in reality many rural Indian are involved in daily based working scheme as temporary workers.
$25 \%$ French students did not answer about their father's profession and most of them were girls. This might be put down to the increasing of single parent family status in France.

Further survey proclaims that French mother is indiscriminately involved in diversities of profession like bus driver, hair-cutter or server in restaurant, whereas Indian mothers are
mostly established in teaching profession. Survey report also shows that Indian girls mostly prefer to choose teaching profession; while French girls are more liberal for choosing diversities of professions. This survey clarifies that women or girls of Indian families are less interested in choosing variety of professions outside teaching compared to girls and women of France and underline the importance of mother example for girls' professional choices.

We have been also finding some discrimination in the economic status between the countries. In most of the French families, both parents are working but in most of the Indian families only the father is employed. Hence, French parents can spend more money in education of their children than Indian parents. This could be balanced by time given to homework supervision, but, in fact, not all parents have sufficient competences to assume it.

### 3.3.2. How far parents assist in performing the home-task of students (question-7 in survey: For the better accomplishment of your homework you take help from: tutor/parents/or some members of family)

$40 \%$ French students admitted about their parent's participation in preparing their daily homework against 55\% Indian students in comparison.

We found in A.S.E.R (2011) report that percentage of students taking tuition is highest in West-Bengal (67.9\%) and Bihar (42\%) in 2008-09, in secondary level among all the states of India.

In West-Bengal in 2001-02, students taking tuition were $57.24 \%$ in public school and $23.89 \%$ in private school, increased $63.64 \%$ and 58.02 respectively in 2008-09 (Pratichi trust) as shown by the schema below.


Figure 54. Increasing the tendency of getting extra help from parents from home (following Pratichi education report 2009).

In France, our survey report reveals that $50 \%$ French students admitted about their parent's participation in preparing their daily homework against $55 \%$ Indian students in comparison. But in our survey, no French student demanded about their dependence on their private tutors for assisting studies gave a positive answer. So we can wonder what deficiency in the school system of India leads student's dependence to private tutors.

### 3.3.3. How far students want to reach in their educational levels (question-4 in survey: How far you want read before to get a job: Baccalauréat; Licence, Grande Ecole/University)

In a specific question we have compared the statistics that how far students intend to study before being absorbed in a job. From the statistics we found following results


Figure 55. Statistics from our surveys showing how far students want to reach in their educational levels.
Clarification: $40 \%$ Indian boys, Indian girls and French boys intend to study up to the level of baccalauréat or higher secondary compared to $80 \%$ French girl (most of which chose professional courses). Most French girls are less interested in pursuing higher studies. But we have to remember that the survey was made on village schools, that is far from big cities and universities, most of the families, even in France, were by no means related to university or all sort of tertiary education.

### 3.3.4. Students age group in standard-9 / 3 e (From survey sheets' date of birth)

From the national statistics of France (Le système éducatif, 2009) we found that $69 \%$ girls and $61 \%$ boys were reading in the level of standard- 9 (3e).


Figure 56. Repartition of French boys and girls of 14 years in levels of Collège (from Le système éducatif 2009).

In our surveys' report we have compared the age groups of students according to education level, with the following results:


Figure 57. French and Indian student's age groups in our surveys.
Clarification: From the information of the French national statistics 2009, one can assume that the proper age group of a student of standard -9 ( $3^{\text {e }}$ in French concept) should be 14+
maximum students. $69 \%$ girls and $61 \%$ boys have been found pursuing their education in $14+$ age group).

In our survey (schema upper) we found that $40 \%$ French girls, $50 \%$ Indian girls, $80 \%$ French boys and $50 \%$ Indian boys were in 14+ age group. Due to grade retention or other causes $50 \%$ French girls, $10 \%$ French boys, $20 \%$ Indian girls and $30 \%$ Indian boys were found in 15+ age group.

In comparison to age group of $3^{\mathrm{e}}$ level or $9^{\text {th }}$ standard grade level studies, only $10 \%$ French boys and $10 \%$ French girls were found in unexpected age group (except $14+$ or $15+$ age group), but $30 \%$ Indian girls and $20 \%$ Indian boys were in the same case.

From the above discussion one can realize that Indian students are more heterogeneously mixed up in $3^{e}$ or $9^{\text {th }}$ standard class than the French students. This remembers us of what we saw previously in this study about the risk for drop out produced by heterogeneous group of students. Let us refer again to Allington (1995) who observed that in a heterogeneous group (regarding merit and age) of students, teachers cannot deliver instruction to the perceived ability level of the class.

### 3.3.5. Grade retention of students (question-10 in surveys: Have you repeat a year I college previously, If yes, how many times?)

Status of Grade retention had been collected from an urban elementary school of Nice (06) and from a rural college of France in Var (83) in the session (2009-2010).
i/ Report of elementary school of Nice (06)- From the collected information of École Annexe Élementaire J. M. Hyvert in I.U.F.M, Nice, it was found that there was no grade retention in C.M-2 classes, only one school failure was found in lower class, which concerns a non-French student who was struggling with a language problem.
ii/ Redoublement in the College 'LEI-GARRUS' of Saint-Maximin, Var (83)

| Grade | Total students | Grade Repetition | Percentage of repetition grade |
| :--- | :---: | :---: | :---: |
| Sixième (6 $\mathbf{e}$ ) | 150 | 2 | $1.5 \%$ |
| Cinquième (5 $\mathbf{5}^{\mathbf{e}}$ ) | 122 | nil | 0 |
| Quatrième (4 $\mathbf{4}^{\mathbf{e}}$ ) | 141 | nil | 0 |
| Troisième (3 ${ }^{\mathbf{e}}$ ) | 138 | 7 | $5.07 \%$ |

Table 60. Statistics of grade retention in the College 'LEÏ-GARRUS" from our preliminary survey.
iii/ Comparison of redoublement between state report/local report ${ }^{99}$ and survey report.

| Grade | Projected State <br> report (France) | Projected Local report <br> (Académie de Nice) | Survey report in <br> Var (83) |
| :--- | :---: | :---: | :---: |
| Sixième (6 $\mathbf{6}^{\mathbf{e}}$ ) | $4.5 \%$ | $4.4 \%$ | $1.5 \%$ |
| Cinquième (5 $\mathbf{5}^{\mathbf{e}}$ ) | $2 \%$ | $2 \%$ | - |
| Quatrième (4 $\mathbf{4}^{\mathbf{e}}$ ) | $3.5 \%$ | $3.3 \%$ | - |
| Troisième (3 $\mathbf{3}^{\mathbf{e}}$ ) | $4.3 \%$ | $5.5 \%$ | $5.07 \%$ |

Table 61. Comparison of grade retention between the College 'LEÏ-GARRUS" and the academy of Nice.
From this comparison we can summarize that grade retention is reducing in every level of college education except in the level of Troisième ( $3^{e}$ ).

By law, an Indian student is not allowed to repeat his grade before standard-viii ( $4^{\mathrm{e}}$ in French collège). Subsequently we found heavy grade retention in standard-ix ( $3^{\mathrm{e}}$ in French college).

Here is our preliminary survey report of redoublement / grade repetition:

| Gender | Not redoubled ever | Once redoubled | Redoubled more <br> than once |
| :--- | :---: | :---: | :---: |
| French girls | $50 \%$ | $30 \%$ | $20 \%$ |
| Indian girls | $40 \%$ | $30 \%$ | $30 \%$ |
| French boys | $80 \%$ | $20 \%$ | nil |
| Indian boys | $50 \%$ | $40 \%$ | $20 \%$ |

Table 62. Comparison of grade retention between France (in Troisième) and India (in standard-ix ).

[^73]About no repetition we see that there are better results for French boys than French girls, same results for Indian boys and French girls, and lower results for Indian girls. One repetition put the Indian boys in the lowest position, then French and Indian girls, then French boys. The results for more than one repetition confirm that French boys enjoy the most easy school career, then French girls and Indian boys, then Indian girls, who appear as having the most unfavorable career. According to Roderick, the students who repeated their grade more than once have $90 \%$ more possibility of dropping out in the future compared to students who never faced grade retention. But as the result shows a huge contrast between survey and existing reports, we should pursue a further survey regarding grade retention of students in the following part of our studies.

### 3.3.6. Incompetency in mathematical skill (question-3: Do you face any problem in mathematics? If any, in which part/parts do you face inconvenience: algebra/geometry/calculus/trigonometry?)

Before going to the statistical report of our survey, let us concentrate our view on some existing and credential reports from the education departments of both countries. In India, in 2007-2009, standard -v students declined their ability to do a simple division problem from $41 \%$ to $36 \%$. (Report of A.S.E.R-2010).

In France, in 2008, at the end of C.M-2, $40 \%$ to $50 \%$ students could do efficiently a decimal multiplication. They declined to $30 \%$ at the starting of $6^{\mathrm{e}}$. (Report: Education \& formation $\mathrm{n}^{\circ} 79$, décembre, 2010).

Both the statistics shows more or less similar status of the mathematical competence within the primary students of both countries.

In our survey, students were asked first to express their feeling about mathematic learning, the impression of suffering from any weakness in mathematics or not, and if it was the case, they were urged to indicate the special areas where they realized their incompetence, which was, by the way, the first step to struggle with. Indeed, our question was supposing that they should be able to nominate the problem and to know the didactic classification of mathematics matters, which was no sure at all.

Results show the following trends in French and Indian students. We present first the global chart. Then, we take every country separately.

At a first glance, we see that very few students declared no problem and they were boys. On the opposite, students who encounter problems in all parts of mathematics are more numerous, and among them, the most important group is formed by Indian girls. We distinguish also algebra as the most difficult and feared subject, followed by geometry and trigonometry at the same rank, except for Indian girls who seem to be afraid more of trigonometry than of geometry.


Figure 58. Incompetency of mathematical skills in our surveys.
In French college we found the following statistics:

| Category | Algebra | Geometric | Trigonometric | All area | No problem |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1- Girls | $60 \%$ | $50 \%$ | $50 \%$ | $30 \%$ | - |
| 2- Boys | $60 \%$ | $50 \%$ | $30 \%$ | $10 \%$ | $30 \%$ |

Table 63. Percentage of students having difficulties in areas of mathematics in our preliminary survey in France,
From the result we found that only $30 \%$ boys claimed that they have no problem in any areas of mathematics but there were no girls who could claim it. $10 \%$ boys and $30 \%$ girls answered that they have severe fear in mathematics in all areas. Common area of
inconveniences in mathematics is algebra ( $60 \%$ boys and girls) followed by geometry ( $50 \%$ of boys and girls).

In Indian schools we found following results:

| Category | Algebra | Geometry | Trigonometric | All area | No problem |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1. Girls | $70 \%$ | $40 \%$ | $60 \%$ | $60 \%$ | - |
| 2. Boys | $60 \%$ | $50 \%$ | $50 \%$ | $30 \%$ | $10 \%$ |

Table 64. Percentage of students having difficulties in areas of mathematics in our preliminary survey in India.
Only $10 \%$ boys claimed they have no problem in any areas of mathematics but no girls said so. Algebra is the main areas of their inconveniences followed by trigonometric ( $60 \%$ girls and $50 \%$ boys informed about their problems).So we found a few percentages of students who are fearless in mathematics. The most important findings in this regards in two countries that students are mostly struggling with their competence skill in algebra. $60 \%$ boys and girls of French college and $70 \%$ Indian girls and $60 \%$ Indian boys are struggling with algebra in mathematics.
Here we shall represent some comparative features about the learning status of mathematics in elementary (primary) stage of both countries.

### 3.3.7. Absenteeism (question-8 in survey: How many days last week you were absent in college? Explain causes if any)

In the survey $40 \%$ college students of France confessed that they became absent in college one or few days in previous week when the survey was made. In the case of Indian students $30 \%$ were found absent in a week. We cannot but state that, in India, due to the serve of mid-day meal regularly up to standard -viii, students' attendance has been improved remarkably.

### 3.4. Results of main survey and proposed ways of remedies

Our main survey took place in 2010 with other students of the same grade, in the same schools, with a total of 70 French students and 140 Indian students concerned for both years. Three issues of the 7 points of preliminary survey have been chosen for pursuing further investigations in the main survey. As we did with preliminary survey, we have only promoted the statistics of the survey results which we analyzed rather than submitting survey sheets.

### 3.4.1. Students competency in mathematics (Algebra) and proposed remediation

In the main survey we found that $60 \%$ French students and $72 \%$ Indian students are feared in mathematics. The survey also shows that 32 students out of 50 in French collège and 68 students out of hundred in Indian schools confessed to their weakness about algebra.

If we compare preliminary and main survey reports we find following percentages of students with inconsistence in the learning of Algebra in mathematics

| Country | Preliminary survey result | Main survey result |
| :--- | :---: | :---: |
| France | $60 \%$ | $62 \%$ |
| India | $60 \%$ | $68 \%$ |

Table 65. Comparison between preliminary and main survey reports with respect to students with inconsistence in the learning of Algebra in mathematics.

From the above result it can be assured that in both countries a huge percentage of students are suffering from the fovea of Algebra learning. This urges us to propose a method for easy learning of algebra.

A major finding we have been traced after analyzing the result of student's achievements in mathematics is that students of both countries have been facing a common phobia in learning algebra more than any other parts of mathematics. In this regard, we analyzed curricula and made conversation with some mathematicians and pedagogues to understand the situation.

According to their suggestions students have to develop more imagination and reasoning ability to solve algebra than arithmetic or geometry, this is why algebra starts in later grades of mathematic curriculum. In $6^{\text {th }}$ standard ( $6^{\mathrm{e}}$ in French college) algebra is taught first to the students which are very similar to the age group (11+) which Eric Erickson described, the stage of imaginary development. In standard-6 ( $6^{\mathrm{e}}$ in French college), they received the concept of plus (+) or minus (-) through graph, otherwise it is impossible for them to solve a problem like $2 a-4 a-a$. In $7^{\text {th }}$ standard ( $5^{\mathrm{e}}$ in French college) students are taught some theories (formulas) as: $(a+b)^{2}$ or $(a-b)^{2}$ most of which they are forced to memorize but this learning might not be stable. They might forget it after a certain period. In this case, it becomes much more important to develop conception than memorization.

Applying geometrical representation, learning of algebra can be simplified by using geometrical figures.

We propose the following laboratory work ${ }^{100}$ for the geometrical explanation of the law of Algebra, $(a+b)^{2}=a^{2}+2 a b+b^{2}$.

Tools: some specific square and rectangular shaped wooden blocks, chalks and scales.

## Description of the work:

1. One square wooden block is taken, where $\mathrm{a}=5$ inches, $\mathrm{b}=3$ inches, and the total area of the square is $(5+3) \times(5+3)=64$ square inches.
2. One bigger square (fig-1) is taken whose length and breadth are equal to $a+b$.


Figure 59. Relative sizes of wooden squares for the proof of $(a+b)^{2}=a^{2}+b^{2}+2 a b$.

[^74]3. Two squares (fig-2 and 3) of wooden block are taken whose areas are similar to $a^{2}$ and $b^{2}$ respectively.
4. Two rectangular wooden blocks (fig-4 and 5) are taken whose areas are similar to the measurement of $a \times b$.


Figure 60. Relative sizes and shapes of wooden rectangles for the proof of $(a+b)^{2}=a^{2}+b^{2}+2 a b$.
5. Finally the squares $a^{2}$ and $b^{2}$ (fig-2 and 3) and 2 rectangles (fig-4 and 5) perfectly match within the large square (fig-1). This is a geometrical representation of the algebra formula.


Figure 61. Reconstruction of the square $(a+b)^{2}$ using the two wooden squares and the two rectangles

### 3.4.2. Students with low-achieving target

According to self-determination theory, student's motivation to pursue a minimum level of his studies (as to baccalauréat or higher secondary level), might affect his further academic carrier. Our main survey in this regard shows that in France, 30 out of 50 students ( $60 \%$ students) want to reach level of baccalauréat or vocational formation, which is considered to be a minimum level of educational attainment to avoid dropout. In India, only $30 \%$ students want to reach higher secondary level (baccalauréat in France), which means they possess a high intention for pursuing higher studies.

Pedagogues claim that student's educational achievement depends partly on their selfconcept consciousness; results of our main studies confirm the results of the preliminary survey showing that aspiration for pursuing higher studies seems to be more prevalent in Indian girls than in French girls. Teachers, administrators, counsellors of concerned education systems should built an adapted self-concept with the students within their related peer groups so that they become aware of the evils of dropout. Teacher's expectation on students plays a big role in this concern.

### 3.4.3. Redoublement/ Grade-repetition

Our main survey report proclaims that in the year 2010, 8 out of 50 students in $3^{\text {e }}$ grade level of French collège have faced 'redoublement', hence the percentage of unsuccessful candidates is $16 \%$. Moreover, in the same year only 2 students i.e. $1.5 \%$ students in $6^{\text {e }}$ grade level have faced 'redoublement'. Thus comparative analysis shows that 'redoublement' in higher class $\left(3^{e}\right)$ is much higher than in lower grade.

From the statistics of academic year 2010 we found that, students who never repeated their grade throughout his/her carrier, were born in the year 1996. Hence in $3^{e}$ grade level, $84 \%$ students belong to $14+$ age and other $16 \%$ are in other age group. Besides, annual report (2010) of Leï Garrus collège shows a huge reduction of 'redoublements'. Within 551 students, only 9 students ( 2 in $6^{\mathrm{e}}$ and 7 in $3^{\mathrm{e}}$ ) repeated the year. This is a proof that a homogenous mixing of students in a class is desirable and suitable and should enable teachers to apply a similar kind of psychological treatments in the same classroom.

For Indian students in $9^{\text {th }}$ standard, we found $10 \%$ students who faced grade retention twice and $21 \%$ who repeated once. So in the classroom more heterogeneous age groups of students are found compared to France. The results of main survey are very similar to the situation of preliminary survey. This kind of situation makes difficult to maintain the same standard of teaching for a teacher in a class. Many researchers have underlined the evils of grade repetition but in reality if children are allowed indiscriminately to enter the next grade without making proper assessments, many of them would be feeble in some subjects which will result in increasing percentage of students' dropout. From research findings and reality, we have been found following contradictory opinions:

| If the students faced grade repetition. | If under achievers never faced grade <br> repetition. |
| :--- | :--- |
| It has a bad impact on students as M. <br> Rodrick (1995) found that $77 \%$ students <br> 'dropped out' repeated their grade once at <br> least, compared to $25 \%$ students who never <br> repeated in their academic carrier. | Students confront a severe deficiency in <br> learning and in future many of them might be <br> forced to exit from education system. |

Table 66. contradictory opinions between our research findings and reality.
From the previous discussion we have been noticed the fact that, tendency of grade repetition in standard-9 ( $3^{\mathrm{e}}$ in French collège) is more acute than in any grade, which is harmful enough as suggested by prior research works. Eventually we suggest the suspension of grade retention in any level of secondary studies. All students should be allowed indiscriminately to enter the next grade level after the completion of every school academic year. Academically weaker students should have to be transferred in a separate track (tracking of low achievers), in student's existing school or in adjacent school before they reach the standard of viii ( $4^{\mathrm{e}}$ in French collège), where more personal care or counselling should to be arranged for them.

### 3.4.4. Teacher-students relationship

We studied the teacher-students relationship by two ways:

- first by using directly the questionnaire of PISA 2009 within Indian teachers and students of our main survey, with slight reformulations, in order to assure a better understanding;
- then by comparing the results with the global results of PISA 2009 for France, and for OECD.

Within the questionnaires of survey, the first 5 questions were allotted to teachers and the remaining 5 to students.

1. Do you observe that most of the students don't listen to what the teacher says?
2. Do you observe that there are frequently noise and disorder in the class?
3. Do you observe that teachers have to wait for a long time for the students to quieten down?
4. Do you observe that students cannot work properly in the class?
5. Do you observe that most students delay a long time for working after the lesson starts?
6. Would you say that you get along well with most of your teachers?
7. Would you say that most of your teachers are interested in your well- going?
8. Would you say that most of your teachers give importance to your opinion?
9. Would you say that you receive extra help of most of your teachers when you need it?
10. Would you say that most of your teachers are fair in their behavior?

As shows the chart below. ${ }^{101}$, in the assessment of listening and working in the concerned classroom situation, French scores are very similar to average of O.E.C.D but Indian scores are far away from French and O.E.C.D average results.

## Comparative scoring in teacher-student relationship of France, India and O.E.C.D.

The following chart allows the scores of France to be compared to average OCDE in PISA 2009 and, for guidance only, to the results of our survey within Indian Teachers and students of West Bengal.

[^75]| Questionnaires | French <br> score PISA <br> 2009 in \% | Indian score <br> of main <br> survey in \% | O.E.C.D <br> average <br> score PISA <br> 2009 in \% |
| :--- | :---: | :---: | :---: |
| 1. Do you observe that most of the students <br> don't listen what the teachers says? | 64 | 54 | 71 |
| 2. Do you observe that there are frequently <br> noise and disorder in the class? | 56 | 51 | 68 |
| 3. Do you observe that teacher have to wait for <br> a long time for the students to quieten down? | 64 | 49 | 72 |
| 4. Do you observe that students cannot work <br> properly in the class? | 76 | 73 | 81 |
| 5. Do you observe that most of the students <br> delay a long time for working after the lesson <br> starts? | 63 | 59 | 75 |
| 6. Would you say that you get along well with <br> most of your teachers? | 78 | 52 | 85 |
| 7. Would you say that most of your teachers <br> are interested in your well-going? | 53 | 32 | 66 |
| 8. Would you say that most of your teachers <br> give importance to your opinion? | 62 | 16 | 67 |
| 9. Would you say that you receive extra help <br> of most of your teachers when you need it? | 80 | 48 | 79 |
| 10. Would you say that most of your teachers <br> are fair in their behavior? | 88 | 33 | 79 |

Table 67. Comparison between scores of France and average of O.E.C.D. in PISA 2009, with our survey within Indian teachers and students of West Bengal.)

For the five first questions, regarding the way teachers judge students' behavior, we see that French scores are generally equal to, or better than OCDE average, regarding specially students' attention, work atmosphere in class and rapidity of the students to set themselves to work. On these five points, Indian scores are a little back, the most distant score being that of the quietness in the class. Nevertheless they maintain themselves in a medium zone.

For the five last questions, regarding the way students judge teachers' behavior towards them, we observe that French scores are inferior to OCDE average for the good feeling experienced with teachers ( $\mathrm{n}^{\circ} 6$ ) the way teachers are interested in their situation and problems $\left(n^{\circ} 7\right)$ and the way they give consideration to their opinions and ideas ( $n^{\circ} 8$ ). Scoren ${ }^{\circ} 9$ about extra-help offered by teachers in class is quite equal to OCDE average and ${ }^{\circ} 10$ about the fair attitude of teachers is quite better. For these five questions Indian scores are much lower.

Students are suffering with unsatisfactory feelings about their relationship with teachers, stressing on a felt lack of care, of consideration, of fair, and of personal extra -help (which corroborates the increasing recourse to private tuition seen before).

We have to remember that this kind of survey is concerned prominently by the opinion of questioned people. So it gives information about personal and social feelings and representations. Thus we see that in France, teachers are more satisfied with students' behavior than the reverse. A situation we find again on a larger scale in India, where students seem to suffer from a sort of despair about their relationship with teacher, independently of the strict didactic communication.

Anyway one must be cautious in interpreting and evaluating these results. In fact, a low expectation of teacher can be owed to a poor opinion about students' capacities (due to negative stereotype) and be in the last resort harmful to them, whereas a too great an expectation can cause trouble to self-esteem of students if they don't succeed in answering it.

Donnelly (1987) described at-risk students as those who are not experiencing success in school. Minority people, male, low achievers, with low self-esteem are often labeled as potential dropouts. Research suggests a strong connection between dropout rates and poor school attendance, with underlying issues related to lack of student success in the classroom (Hayes, 2008). One reason cited for high dropout rates, particularly among males, is the lack of adult mentoring (Career Tech Update, 2008 ${ }^{102}$ ).

For promoting a better teacher- student relationship we recommend following remedies:

- Teacher should be impartial in his behavior with the students avoiding personal biasness.
- Teacher should test a particular procedure for teaching and grouping before using it, in order to ensure about its necessity, not just considering it as a convenient way of handling problem students or avoiding contact with some students.

[^76]- Teacher should introduce students to appropriate methods of self-criticism, perseverance and self-reward.
- Teacher should avoid destructive comparison and competition, encouraging students to compete with their own prior level of achievement.
- Teacher should encourage a student even if he becomes unsuccessful in a particular context. For example, after having failed in a test, student should not be interpellated in the class as 'bad boy' or 'bad girl'.
- Teacher should remember that a positive self-concept grows from success in operating in the world and from being valued by important people in the environment.
- Teacher should encourage students to take responsibility for their reactions to events, show them that they have choices in how to respond.
- Teacher should highlight the value of the attending ethnic groups - their cultures and accomplishments.


### 3.5. Conclusion of Chapter 3

In our previous discussions it was repeatedly said that a comparative study of student's dropout in France and India is a very difficult and challenging task to be executed. There are huge distinctions in literacy rate, G.D.P, educational infrastructures, percentage of students' enrolment, and dropout rate. It seems that the same remedial process for one factor is hardly possible. As an example mid-day meal which is the most popular remedy for dropout in India cannot be adapted in France in the same form. Anyway, after studying various diverse facts it has been realized that still there might be some possibilities to exchange the ideas of two countries concerning education so that both the countries could be benefited.

We have been noticed two possibilities of dropout according to their nature. Firstly, the common dropout, which happens when a student gives up the conventional education system. Secondly, the subjective dropout, when a student fails to understand his natural ability and enroll in a subject where he struggles.

Considering preliminary and main surveys within the $9^{\text {th }}$ ( $3^{\mathrm{e}}$ in French education level) standard students some prominent findings have been traced, which differ in France and India in the event of parent's profession, student's wish for higher studies, and student's dependence on private tutors.

But survey analysis also proclaims some similarities in comparison. These are inconvenience in mathematical learning which is mounting among students, and the fact that due to heavy reduction of recent policies of grade retention, students are suffering with their basic learning skills in either country.

In any case, when we compare two realities, we are compelled to underline in each part, some details that the other part can help to consider and analyze. For example, mid-day meal is showing its complete success in India, at the very time when in France, economical crisis makes canteen meal, which is not free but largely subsidized by local authorities, the only meal of the day for the most disadvantaged students. This must prevent the political deciders from increasing the prices of this meal, in spite of the financial difficulties faced by state, regions and cities. On the same way, though the features of drop out within girls are showing specific in each country, we can observe that, at the present time, a lot of French girls, even if they attend school, cannot think of themselves as persons capable to sustain higher studies and to deserve a high-wage employment. So we can say that one of the most important benefits of comparative studies is to increase the watchfulness of authorities.

## General conclusion

During the critical years of adolescence, as far as the study work is concerned, ability of young people to develop their capacities and life skills and to participate meaningfully in society hinges on a number of cultural, socio-economic and environmental factors which we have been trying to investigate throughout this study.

According to Hunt (2008), dropout is often a process rather than the result of one single event, and therefore has more than one proximate cause. Status of dropout in the 11 to 15 age group students, when we compared India and France, also manifests that there is not a single cause of dropout, but rather that there are multi factors in multidimensional forms.

In the previous discussions of this study we have met wide diversified factors like socioeconomical conditions, literacy rate, G.D.P, educational infrastructures, percentage of student enrolment which can be found in the two countries. Each factor brings its own contribution to students' dropout.

It has been also traced that there are two sharp levels of demarcation where major dropout happens in India and France. In India, major student dropout happens between i to viii grade levels, but in France, the same major student dropout happens much later between $2^{\text {nde }}$ (xi grade level) and $1^{\text {erre }}$ (xii grade level), and takes place on upper secondary school. The rate of dropout also differs in two countries. In the academic year of 2009-10, Indian student dropout rate was $42.39 \%$ which was more than three times the dropout rate ( $12.8 \%$ ) of France. But in the same year, dropout rate was $11.9 \%$ in Germany and $11.9 \%$ in Belgium. Hence it might be concluded that even students dropout status in France was more satisfactory, if contrasted with India, it was less convincing in comparison of other European countries.

In India, maximum cases of dropout prevail within different minority castes and religions (i.e. Muslim, scheduled castes and scheduled tribes). Similarly in France maximal dropout is found in Z.E.P. collèges and lycées where students come from underprivileged society. Education departments of both the countries evidently provide extra facilities for those underprivileged students.

Why prevention of student's dropout should get priority in the context of economic balance of a country? In France, the rate of unemployment was estimated (9.8\%) in 2010-11,
which was higher than Germany (5.5\%), Italy (8.5\%) and U.K (8.3\%). In India also the huge unemployment is always a biggest issue invariably related with dropout problem.

After analyzing our preliminary report, we found major diversities in two countries regarding related age group of students according to their grade levels, in the field of choosing professions, aspiration for higher studies, and reliability for private tutors.

But from the preliminary survey we also found some similarities, whereas students of both countries sustain a major inconvenience in different fields of mathematics (especially in algebra) and grade retention has been lowering down in the education system of both the countries. Consequently we manipulated a further comprehensive survey (main) for justification of preliminary surveys and found more or less similar results.

According to P.I.S.A.'s assessment of 2010, lower grade level of students in mathematical attainment is mounting in France, and for Indian students, it showed worse result. As mathematics is a basic learning subject ${ }^{103}$. As mathematics is a basic learning subject, certainly some protective measure should be installed to resist student dropout.

In relation to above all our surveys (Ch-3) and findings, we found following major and important issues related with dropout problem and suggested recommendations, which are believed to have some effective measures in reducing student dropout in both France and India. They are related to:

## - Incompetency in basic learning subjects

In the $10^{\text {th }}$ meeting of UNESCO of Jomtien in 2008, it was explained that more than 100 millions of students worldwide had been suffering by the deficit of basic learning, which is a severe predictor of students' dropout.

Our survey report allied with the reference of P.I.S.A. proclaims that incompetence to basic learning subjects (reading and arithmetic) is climbing up in students of both the countries. In this regard we recommend constructing international interconnected assessment and curriculum in each grade level of students, providing sufficient scope for ethnic pride of

[^77]each associated countries. Also it is important to add some improvisation of practical works, supplementary to theoretical classes ${ }^{104}$ in especially basic learning subjects.

## - Grade retention/ Redoublement

Numerous researchers around the world have been found several evil effects of grade repetition. From their recommendations and after discussions with pedagogues it seems that grade retention of student should to be discarded from any level of studies. Academically weaker students should have to be transferred in a separate track (tracking of low achievers) in existing or adjacent school before they reach to the standard of viii ( $4^{\mathrm{e}}$ in college), where more personal care or counseling is available. After monitoring, weakest academic students should have to be channelized in different categories of vocational streams according to their perceived level of achievement.

## - Proper implementation of vocational courses

The use of vocational courses to increase participation in school attainments is a longstanding feature of educational policy of France. School based vocational courses were upgraded from the mid-1960 and continued to enroll a high proportion of secondary students ( $41 \%$ in 1972-73, Delion, 1973). Evidently, vocational courses' enrolment enables academically weaker children to avoid grade repetition and also, more probably school dropout ('school dropout and completion': International comparative studies in theory, page 346, edited by Stephen P. Lamb, publisher: Springer, 2010).

Proper implementation of vocational courses is still demanded in the field of Indian education, which might be a major prevention of dropout. For French education system, what is needed is a proper counseling for a student before his enrolment in any categories of vocational streams from general stream and vice- versa rather than being distributed indiscriminately.

## - Adult education

At the World Education Forum in Dakar Senegal (2000) ${ }^{105}$, governments of 164 countries pledged to achieve E.F.A. (Education For All), which is a global commitment to provide

[^78]quality basic education for all children, youth and adult. They provided a framework for an extensive assessment on E.F.A. They amended a time scheduled target for adult educational scheme by achieving $50 \%$ improvement of existing level of adult literacy, especially for women, and equitable access to basic and continuing education for all adults. Extensive discussion has been formulated earlier in this study with proposed scheme, on how adult education can contribute to reduce dropout in either countries of France and India.

## - Early pre- primary enrolment

Pre-primary enrolment of students enhances their skill of learning language and the capacity to seek solution to their own problems helped by another person's view, as mentioned by Piaget. So we can consider that pre-primary schooling is certainly a measure for the prevention of school dropout.

According statistics, $70 \%$ French students are enrolled at the age of 2 in pre-primary level and $30 \%$ within the age of 3 , but in India, pre-primary enrolment is still neglected, and has very feeble scores.

## - Science dropout ${ }^{106}$

Another important finding of the studies is the science dropout in France, which is very similar to what we observe in Indian education system. Due to lack of proper counseling, many science oriented students enroll and struggle in other disciplines, in realizing what may be called a 'science dropout'.

Concerning science study in French primary school and college, we found disproportionate study hours in the curriculum. Especially, in CM2 grade and in $6^{\mathrm{e}}$ grade we observed an insufficient number of study hours compared to French language and mathematics. In this regard, a strategy should to be built so that disparity in study hours between different subjects can be removed. Some recommendations have been suggested earlier regarding which might enhance the active participation for the young school goers.

- School environment and mentor' appointing

[^79]Derlega, McAnulty, Strout and Reavis (1980) suggested that the cognitive interpretation of expectancy information by teachers in the form of their attribution for student's performance may provide an explanation for the effect of teacher's expectation on students. They insist upon the importance of teacher's non verbal behaviors on students. This research work shows how important it is for an educational concern to review the teacher-students relation at least once in a year.

Cheryl A. Johnson, Bernice Dodor, \& Barbara Woods ${ }^{107}$ (2010-11) found a positive role of teacher- mentors in their research on middle school students in U.S.A.

Hence, it is of great importance to appoint a professional mentor who will take care in academic achievement of students and will correlate teachers, students and parents' needs.

In relation to this research work, we have been also followed some recent seminars, research findings and amendments ${ }^{108}$.

This study requires some restriction or limitation also. For example, as the survey work of this study was organized in two village schools of India and France, results might have been changed if the same survey had been done in urban area.

Future works in connection of this study might be a comprehensive monitoring about basic learning deficiency within secondary level students which is increasing as was remarked in this study, and to review the curriculum of basic learning subjects (first language and mathematics) in different grade levels of secondary education which is inevitably related with student dropout as indicated by different sources of this study.

Finally, we would add two more global and systemic recommendations which could help to reduce drop out. They have sprang naturally from our very work and the way we have driven it. The first part of them refers to teachers training. Our first chapter's study shows that teachers ought to be informed of the cognitive structures of mind, and of the learning capacities evolution in time not theoretically but by observing students acting together in

[^80]classes, by speaking with them and asking them about their learning strategies, and by reflecting about their way of teaching, using videos of their courses and discussing of them with colleagues and teachers' supervisors. All this training devices are well known and practiced in the French Training Teachers Institutes (former IUFM, now ESPE).

Here again, the practical method must be privileged. Not only statistics of international surveys must be explained, replaced in their specific context, then compared and stitchcrossed together but teachers must be trained to make their own surveys, in order to increase their expertise and capacity of prevent discouragement and further the drop out of students. They have also to be sensitized to the importance of speaking the language of their students in case of plurilingual situations, and if incapable, to use all means (gestures, translation, recourse to peers students for explanation) to make them understand all about the treated subject.

Our second trail of recommendations will deal with comparative methodology of which we made the discovery at the occasion of this study. We will conclude it by pleading for taking into account both the technical aspects and the cultural, philosophical and anthropological implications of comparative method. From a technical point of view we have learnt by experience how to avoid false resemblances, and false differences, how to pay attention to visible differences but also to the less visible. But what we will keep as a strong memory of this research is the progressive discovering that comparison supported by knowledge and scientific purpose is the best defense against prejudice and the best weapon to struggle against stereotype which can be considered as the evil face of the comparing mind.

## Conclusion générale

Pendant les années critiques de l'adolescence, par laquelle cette étude est concernée, la capacité des jeunes à développer leurs capacités et leurs compétences de vie et à participer utilement à la société repose sur un certain nombre de facteurs culturels, socio-économiques et environnementaux sur lesquels nous avons essayé d'enquêter tout au long de cette étude.

Selon Hunt (2008), le décrochage est souvent un processus plutôt que le résultat d'un seul événement, et a donc plus d'une cause immédiate. Le statut du décrochage chez les élèves de 11 à 15 ans, lorsque nous avons comparé l'Inde et la France, manifeste aussi qu'il n'y a pas une seule cause à l'abandon, mais plutôt qu'il existe des facteurs multiples dans des formes multidimensionnelles.

Dans les discussions précédentes de cette étude, nous avons rencontré des facteurs largement diversifiés comme les conditions socio-économiques, le taux d'alphabétisation, le PIB, les infrastructures éducatives, le pourcentage d'inscription des élèves, qui se retrouvent dans les deux pays. Chaque facteur apporte sa propre contribution au décrochage scolaire.

Il a également été reconnu qu'il y a deux niveaux de démarcation où intervient le pic de décrochage en Inde et en France. En Inde, le pic de décrochage scolaire se situe entre les niveaux $i$ et viii, mais en France, le même pic arrive beaucoup plus tard entre la $2^{\text {nde }}$ (niveau xi) et la $1^{\text {ère }}$ (niveau xii), et prend place dans l'enseignement secondaire supérieur. Le taux de décrochage scolaire diffère également dans les deux pays. Pendant l'année scolaire 2009-10, le taux de décrochage des élèves indiens était de $42,39 \%$, ce qui représente plus de trois fois le taux de décrochage ( $12,8 \%$ ) de la France. Mais la même année, le taux de décrochage était de $11,9 \%$ en Allemagne et de $11,9 \%$ en Belgique. On peut en conclure que le statut du décrochage en France s'il apparaît satisfaisant en comparaison de l'Inde, est moins convaincant si on le compare à celui des autres pays européens.

En Inde, les taux les plus forts de décrochage prévalent dans les différents groupes religieux et castes minoritaires (i.e. musulmans, castes et tribus répertoriées). De même en France le décrochage maximal se trouve dans les collèges et lycées des ZEP où les élèves appartiennent à des milieux sociaux défavorisés. Les départements de l'éducation des deux pays fournissent évidemment des aides supplémentaires pour les élèves défavorisés. Pourquoi la prévention du décrochage scolaire doit-elle avoir la priorité dans le contexte de l'équilibre
économique d'un pays? En France, le taux de chômage était estimé à $9,8 \%$ en 2010-11, ce qui était plus élevé que l'Allemagne (5,5\%), l'Italie (8,5\%) et le Royaume-Uni (8,3\%). En Inde également l'énorme taux de chômage est toujours un gros problème invariablement associé au problème du décrochage scolaire.

A l'issue de l'analyse des résultats de notre enquête préliminaire, nous avons trouvé de grandes différences entre les deux pays en ce qui concerne le rapport entre l'âge des élèves et leur niveau scolaire, leurs choix professionnels, leur aspiration à des études supérieures, et le recours aux leçons privées. Mais à partir de l'enquête préliminaire, nous avons aussi trouvé quelques similitudes, puisque les étudiants des deux pays présentent un déficit majeur dans les différents domaines des mathématiques (en particulier l'algèbre) et que le taux de redoublement a été abaissé dans le système éducatif des deux pays. Par conséquent nous avons réalisé une nouvelle enquête (principale) pour vérifier les résultats de l'enquête préliminaire des enquêtes préliminaires et avons trouvé des résultats plus ou moins similaires.

Selon l'évaluation de PISA 2010, le nombre d'élèves ayant de mauvais résultats en mathématiques s'est accru en France, et pour les élèves indiens, les résultats empirent également. Dans la mesure où les mathématiques constituent un objet d'apprentissage fondamental ${ }^{109}$, il faudrait sans nul doute instaurer des mesures de protection contre le décrochage scolaire.

En relation avec nos enquêtes et les résultats que nous avons exposés au chapitre 3, nous avons trouvé les questions majeures suivantes liées au problème du décrochage et nous avons suggéré des recommandations qui nous ont paru susceptibles d'être efficaces pour réduire le décrochage scolaire en France et en Inde. Elles sont liées aux variables suivantes:

## - Insuffisance des compétences de base

Lors de la $10^{\text {ème }}$ réunion de l'UNESCO de Jomtien en 2008, il a été expliqué que plus de 100 millions d'élèves à travers le monde étaient atteints par le déficit des apprentissages de base, qui est un strict prédicteur de décrochage scolaire. Notre rapport d'enquête allié à la référence de PISA indique que l'incompétence dans les sujets d'apprentissage de base (lecture et calcul) est en train de grimper chez les élèves des deux pays. À cet égard, nous recommandons la construction d'une évaluation internationale et de curriculums

[^81]interconnectés pour chaque niveau scolaire tout en réservant une marge à la fierté ethnique de chaque pays.

En outre, il est important d'améliorer l'enseignement en complétant les cours théoriques ${ }^{110}$ par des travaux pratiques en particulier dans les sujets d'apprentissage fondamentaux.

## - Redoublement

De nombreux chercheurs de par le monde ont identifié plusieurs effets nocifs du redoublement. D'après leurs recommandations et après discussion avec des pédagogues, il semble que le redoublement doit être écarté pour tout niveau d'études. Les élèves les plus faibles devraient être transférés avant d'atteindre le niveau viii ( $4{ }^{\text {ème }}$ du collège français) dans une filière séparée permettant le suivi des élèves en difficulté dans l'école ou à proximité, où plus de soins personnels et de conseils leur seraient prodigués. Après contrôle, les étudiants les plus faibles dans les matières académiques devraient être canalisés dans les différentes catégories de filières professionnelles en fonction du niveau de compétence constaté.

## - La mise en œuvre correcte de cours de formation professionnelle

Le recours à l'enseignement professionnel pour améliorer la réalisation des objectifs scolaires est une caractéristique de longue date de la politique éducative de la France. Les filières de formation professionnelle en milieu scolaire ont été mises en place au milieu des années 1960 et ont continué à recruter une forte proportion d'élèves du secondaire ( $41 \%$ en 1972-73, Delion, 1973). Évidemment, l'inscription dans les filières de l'enseignement professionnel permet aux enfants académiquement plus faibles d'éviter le redoublement et aussi, plus probablement le décrochage scolaire ('School dropout and completion’: International comparative studies in theory, page 346, Stephen P. Lamb ed., publisher: Springer, 2010).

La mise en œuvre d'un programme de formation professionnelle correct est toujours attendue dans le domaine de l'éducation en Inde, ce qui pourrait un moyen de prévention majeur du décrochage. Pour le système éducatif français, ce qui est nécessaire pour les élèves

[^82]est un conseil personnalisé et approprié avant l'orientation dans un parcours quelconque des filières académique ou professionnelle, au lieu de les répartir sans discernement.

## - Formation des adultes

Au Forum Mondial de l'Éducation à Dakar, Sénégal (2000) ${ }^{111}$, les gouvernements de 164 pays se sont engagés à réaliser le projet de l'E.F.A. (Education For All: Éducation Pour Tous), qui est un engagement global à fournir une éducation de base de qualité pour tous, enfants, adolescents et adultes. Ils ont établi un cadre pour une évaluation approfondie de l'E.P.T. Ils ont dressé un programme d'éducation des adultes pour parvenir à une amélioration de $50 \%$ du niveau de l'alphabétisation des adultes, en particulier pour les femmes, et à l'accès équitable à l'éducation de base et continue pour tous les adultes. Une longue réflexion a été formulée précédemment dans cette étude avec une proposition de schéma, sur la façon dont l'éducation des adultes pouvait contribuer à réduire le décrochage en France et en Inde.

## - La scolarisation pré-primaire

La scolarisation pré-primaire des élèves améliore leurs compétences d'apprentissage de la langue et leur capacité à chercher une solution à leurs propres problèmes aidés par le point de vue d'une autre personne, comme l'a montré Piaget. Donc nous pouvons considérer que l'enseignement pré-primaire est certainement une mesure pour la prévention du décrochage scolaire. Selon les statistiques, $70 \%$ des étudiants français sont inscrits à l'âge de 2 ans dans le niveau pré-primaire et $30 \%$ avant l'âge de 3 ans, mais en Inde, l'inscription dans le préprimaire est encore négligée, et a des scores très faibles.

## - Le décrochage scientifique ${ }^{112}$

Une autre constatation importante de cette étude est le décrochage scientifique en France, ce qui est très similaire à ce que nous observons dans le système éducatif indien. En raison de l'absence de conseils appropriés, de nombreux étudiants primitivement orientés en sciences s'enrôlent et peinent dans d'autres disciplines, réalisant ce qu'on peut appeler un décrochage scientifique. En ce qui concerne l'étude des sciences à l'école primaire et au collège en France,

[^83]nous avons trouvé des heures d'étude mal proportionnées dans le curriculum. En particulier pour les classes de CM2 et de $6^{\text {ème }}$, nous avons observé un nombre insuffisant d'heures d'étude par rapport au français et aux mathématiques. À cet égard, une stratégie doit être mise au point pour supprimer la disparité des heures d'études entre les différentes matières.

Certaines recommandations ont été suggérées plus haut au sujet de ce qui pourrait améliorer la participation active des jeunes écoliers à l'enseignement des sciences.

## - Environnement scolaire et recrutement de tuteurs

Derlega, McAnulty, Strout et Reavis (1980) ont suggéré que l'interprétation cognitive de l'attente d'information des enseignants sous la forme de leur attribution d'une note à la performance de l'élève peut fournir une explication de l'effet de l'attente de l'enseignant sur les élèves. Ils insistent sur l'importance de l'effet des comportements non verbaux de l'enseignant sur les élèves. Ce travail de recherche montre combien il est important pour tout appareil éducatif d'examiner en détail la relation enseignant- élèves au moins une fois par an.

Cheryl A. Johnson, Bernice Dodor, \& Barbara Woods ${ }^{113}$ (2010-11) ont jugé positif le rôle des enseignants-tuteurs dans leur recherche sur les élèves de collège aux U.S.A.

Par conséquent, il est d'une grande importance de nommer un tuteur professionnel qui va prendre soin de la réussite scolaire des élèves et sera étroitement relié avec les enseignants, les élèves et les besoins des parents.

En relation avec ce travail de recherche, nous nous sommes aussi attachés à des rencontres, résultats de recherche et amendements récents ${ }^{114}$.

Cette étude appelle aussi certaines restrictions ou limitations. Par exemple, comme le travail d'enquête de cette étude a été organisé dans deux établissements de l'Inde et de France, situés dans des villages les résultats auraient pu être différents si le même sondage avait été fait dans des zones urbaines.

[^84]De futurs travaux en relation avec cette étude pourraient consister en un examen complet des carences dans les apprentissages de base chez les élèves du secondaire, qui augmentent comme on l'a remarqué dans cette étude. On passerait en revue le curriculum des apprentissages de base (langue première et mathématiques) dans les différents niveaux de l'enseignement secondaire qui est inévitablement lié au décrochage scolaire comme indiqué par différentes sources de cette étude.

Enfin, nous aimerions ajouter deux recommandations plus globales et systémiques qui pourraient aider à réduire le décrochage scolaire. Elles ont surgi naturellement de notre travail même et de la façon dont nous l'avons mené. La première d'entre elles concerne la formation des enseignants. L'étude de notre premier chapitre montre que les enseignants doivent être informés des structures cognitives de l'esprit, et de l'évolution des capacités d'apprentissage dans le temps non pas théoriquement, mais en observant les étudiants agissant ensemble dans les classes, en parlant avec eux et en leur posant des questions sur leurs stratégies d'apprentissage, et en réfléchissant sur leur façon d'enseigner, à l'aide de vidéos de leurs cours partagées avec leurs collègues et leurs superviseurs. Tous ces dispositifs de formation sont bien connus et pratiqués en France dans la formation des enseignants, proposée dans les ESPE (anciennement IUFM).

Là encore, la méthode pratique doit être privilégiée. Non seulement les statistiques des enquêtes internationales doivent être expliquées, replacées dans leur contexte spécifique, puis comparées et croisées, mais les enseignants doivent être formés à faire leurs propres enquêtes, en vue d'accroître leur expertise et leur capacité à prévenir le découragement et le décrochage des élèves. Ils doivent également être sensibilisés à l'importance de parler la langue de leurs élèves en cas de situation plurilingue, et s'ils n'en sont pas capables, d'utiliser tous les moyens (gestes, traduction, recours à d'autres élèves pour l'explication) pour faire comprendre tout ce qui concerne le sujet traité.

Notre deuxième piste de recommandations portera sur la méthodologie comparative dont nous avons fait la découverte à l'occasion de cette étude. Nous conclurons en plaidant pour la prise en compte à la fois des aspects techniques et des implications culturelles, philosophiques et anthropologiques de la méthode comparative. D'un point de vue technique, nous avons appris par expérience comment éviter les fausses ressemblances et les fausses différences, comment faire attention aux différences visibles mais aussi à celles qui sont moins visibles. Mais ce que nous allons garder comme un souvenir fort de cette recherche est la découverte
progressive que la comparaison soutenue par la connaissance et le but scientifique est la meilleure défense contre les préjugés et la meilleure arme pour lutter contre le stéréotype qui peut être considéré comme la face négative de l'esprit de comparaison.

## Bibliography

## Pedagogy and school system

Allington, R. L. (1995), Rethinking learning for students at risk, Centre for Research on education for the Students Placed at Risk (CRESPAR), Johns Hopkins University/Howard University www.ncrel.org .

Allmendinger, J. (1989), "Educational Systems and Labor Market Outcomes", European Sociological Review, volume 5, Issue 3, pp. 231-250.

Alton-Lee, A. (2003), Quality teaching for diverse students in schooling: Best Evidence Synthesis Iteration (BES), Publication: ministry of education of New-Zealand government, www.educationcounts.govt.nz .

Arneburg M. (2009), Completion rate in upper secondary education (page-3), Background Paper for the informal Meeting of OECD Ministers of Education, Oslo $9^{\text {th }}$ and $10^{\text {th }}$ of June. www.regjeringen .

Astone, N., McLanahan, S. (1994), "Family structure, residential mobility, and school dropout", Demography n³1, 575-84.

Auduc, J.-L. (2008), Le système éducatif, un état des lieux, Paris : Hachette.
Baizán, P. \& Martín-García, T. (2006), "Endogeneity and joint determinants of educational enrolment and first birth timing in France and West Germany," Genus LXII (2), pp. 89117.

Banks, J. A. (2001), Cultural diversity and education, Allyn \& Bacon, Boston: Pearson education publishing ltd.

Barber, M. \& Moursched, M. (2007), How the world's best-performing school systems come out on top, London: McKinsey \& Co.

Baudelot, Ch., Establet R., (1973). L'école capitaliste en France, Paris : Francois Maspero.
Blanden, J., Gregg, P. and Machin, S. (2005), Intergenerational mobility in Europe and North America: Report for the Sutton Trust, London: Centre for Economic Performance.

Boudesseul G. \& Vincent C. (2012), "Early school leaving: towards a common system of measurement", Training \& Employment, $\mathrm{n}^{\circ} 100$, July-August, Newsletter on employment
and training research from Céreq, Publications manager: Alberto Lopez, Editor: Annie Bouder, www.cereq.fr., pp.1-3.

Braiker, B. (2004), "Time off helps," Newsweek, March 17, 2010, http://www.newsweek.com/id/54649.

Brophy, J. (2006), Grade repetition, Educational policy series, vol. 6. Jointly published by: The International Institute for Educational Planning (IIEP), 7-9 rue Eugène Delacroix 75116 Paris, France and: The International Academy of Education (IAE) Palais des Académies, 1 rue Ducale1000 Brussels, Belgium, pp. 19-24, http://www.unesco.org .

Cannon, J. S., Lipscomb S. (2011), "Early Grade Retention and Student Success: Evidence from Los Angeles, Technical Appendices", Public policy institute of California, ERIC: ED 517458.

Chiu, M., Khoo, L. (2005), "Effects of resources, distribution inequality, and privileged bias on achievement: Country, school, and student level analyses", American Educational Research Journal, ${ }^{\circ}$ 42, pp. 575-603.

Cohn, E., Addison, J. T. (1998), "Economic Returns to lifelong learning in OECD countries", Education Economics, vol. 6, Issue 3, December, pp. 253-307.

Comer, J. P., Haynes, N. M.(1992), Creating the School Climate and Structures to Support Parent and Family Involvement, edited by C. Fagnano and B. Werber, Boulder, CO: Westview Press.http://www.ncrel.org .

Comer, J. P., Haynes N. M., Joyner Ed. T., Ben-Avie M. (eds) (1996), Joining the Whole Village: The Comer Process for Reforming Education, New York: Teachers College Press, Columbia University.

Covington, M. V. (1998), The will to learn: A guide for motivating young people, Cambridge: Cambridge University Press.

Curran N. R. (2009). "Falling Off during the Transition to HIGH School: What We Know and What Can Be Done", America's High School, v. 19, n¹, spring 2009.

Deci, E. L., Ryan, R. M. (1985), Intrinsic motivation and self-determination in human behaviour, New York: Plenum.

Delannoy, C. (2000). Élèves à problèmes, écoles à solutions ?, Paris: ESF.

Desnoyers, J., Pauker, J. D., Pauker, R., Ontario (1988), School attendance and nonattendance in Canada and the United States, Toronto, Ont.: Ministry of Education.

De Witte, K., Cabus, S., Thyssen, G., Groot, W., Maassen van den Brinck, H. (2014), "A critical Review of the Literature on School Drop Out, The working Paper series, Amsterdam university, Maastrick university, Rijkuniversity of Groningen, TIER WP 14/14, TIERù20WP\%2014-14[1].pdf]

Dörnyei, Z. (2001). Motivational strategies in the language classroom, Cambridge: Cambridge University Press.

EGREES [European Group for Research on Equity in Educational Systems] (2005). "Equity in European Educational Systems: a set of indicators", European Educational Research Journal, pp.4, 2, 1-151.

EGREES (2008) Developing a sense of justice among disadvantaged students: the role of schools, Birmingham: European Group for Research on Equity in Education Systems, 141 pages.

Elias M. J., O'Brien M. U., and Weissberg R. P. (2006), "Transformative Leadership for Social-Emotional Learning". Source: Dewaney, E., O’Brien, M. U., Resnik, H., Kreister, S., and Weissberg R. P. (2006), "Sustainable schoolwide social and emotional learning (SEL): Implementation guide and toolkit". Chicago, IL: CASEL, pp.10, 11, 12, Students' services, déc. 2006 .

Emmerij, L. (1974). Can the school build a new social order?, New York: Elsevier scientific publishing company.

Equity and quality of education, http://www.oecd.org/education/school/50293148.pdf .
Esterlé M., (2011), 'School truancy and drop out in France is visible to outside observers but not always within the school', an interview taken by Elizabeth Winkel, EUKN, 22 Mars.

Fiske, E., Ladd, H. (2000), When schools compete: a cautionary tale, Washington DC: Brookings Institution Press.

Fuller, R. B. (July 12, 1895 - July 1, 1983), Wikipedia.
Gathmann C., Hendrik, J., Steffen, R. (2012), Compulsory Schooling Reforms, Education and Mortality in Twentieth Century Europe, PDF, posted 12, March on SSRN Social Science Research Network.

Global Educational Change: A Compendium of International Documents - 9788174503244, National Council of Educational Research and Training, 2004, ISBN $10: 8174503242$, pages 4-7, 16-21, 352-370 (discussion about Basic learning skills).

Gorard, S., Rees, G., Salisbury, J. (2001), "The differential attainment of boys and girls at school: investigating the patterns and their determinants", British Educational Research Journal, 2, 27, pp. 125-139.

Gorard, S., See, B. H. and Shaheen, R. (2009), "Educating for citizenship: some lessons from England 2008", Citizenship Teaching and Learning, 5, 1, pp. 35-45.

Grenet, J. (2011), Supplementary material to "Is it Enough to Increase Compulsory Education to Raise Earnings? Evidence from French and British Compulsory Schooling law" pp. 5, 6, [Genet_2011_appendix[1]-pdf] .

Grenfell, M., Harris, V. (1999), Modern languages and learning strategies: In theory and practice. London: Routledge.

Hammack, F. (1996), "Large School Systems. Dropout Reports: An Analysis of Definitions, Procedures, and Findings", Teachers College Record, 87, pp. 324-341.

Heider, F. (1958), The psychology of interpersonal relations, New York: Wiley.
Hirsch, W. E. D. (1987), Wikipedia.
Hunt, F., Dropping Out from School: A Cross-Country Review of Literature, Centre for International Education, Sussex School of education, U.K., http://www.create-rpc.orgof , pp. 3-9.

Karweit N. L. (1999), Grade Retention:Prevalence, Timing, and Effects (pages 8-9), publisher : Center for research, U.S. Department of Education (R-117-D40005).

Kennedy R. L., Morton J. H. (1999), A School for Healing, Publisher: Peter Lang. New York:Publication Year

Kepner, A. (4/11/2006), "Dropouts Give Reasons (PDF), why do students leave high school without a diploma?", New Journal, http://educationalissues.suite101.com/article.cfm .

Lamb S. \& Markussen E. (2011), School Dropout and Completion, editors: Lamb, S. Markussen, E., Teese, R., Polesel, J.; Sandberg, N.

Lamb, S., Markussen, E., Teese, R. (2011). School dropout and completion, editor: Sandberg, N., Polesel, J., Springer.

Lawton, S. B. (1994), "Dropping Out: A Literature Review, 1988-1994", ERIC, U.S. Department of education, Adobe Reader [ED42727[1].pdf] pp. 19-20.

Leischer, C. 'Threepeaters', Student retention in ninth grade and preventing Retained student drop out", https://www.smem.edu , pp. 4, 5, 11, [Cameron Leischer-MRP[1].pdf]

Literacy rate of India-2011, http://www.indiaonlinepages.com/population/literacy-rate-inindia.html.

Lyche, C. (2010), "Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving", OECD Education Working, Paper No. 53, OECD, Paris.

Means, B., Knapp, M.S. (1991). Rethinking teaching for disadvantaged students. In Means, B. Chelemer, C. \& Knapp, M.S. (Eds), Teaching advanced skills to at-risk students: Views from research and practice (pp. 1-26). San Francisco: Jossey-Bass.

Menacker, J., Hurwitz, E., Weldon, W. (1988), "Parent-Teacher Cooperation in Schools Serving the Urban Poor", Clearing House, Volume: 62: (November 1988) pp. 108-112 https://www.ncjrs.gov/App/publications/Abstract.aspx?id=141078 .

Middleton, J., Ziderman, A. (1997), "Overview: World Bank policy research on vocational education and training", International Journal of Manpower, Vol. 18 Iss: 1/2, pp. 6-28

No Child Left Behind, Elementary and Secondary Education Act (ESEA), http://www2.ed.gov/nclb/landing.jhtml .

OECD (2012), Equity and Quality in Education: Supporting Disadvantaged Students and Schools, CHAPTER 1. INVESTING IN EQUITY IN EDUCATION PAYS OFF, pp. 1521 OECD , www.oecd.org/edu/school/50293148.pdf, http://dx.doi.org/10.1787/9789264130852-en

Owens, 2004; Rumberger, 1987, Effective strategies for improving school completion (PDF), http://www.aeuvic.asn.au/professional_files_Lamb_7_1.pdf.

Palincsar, A., Klenk, L. (1991). Learning dialogues to promote text comprehension. National Institute of Child Health and Human Development: PHS Grant 059.

Psacharopoulos, G., Patrinos H. A. (2004), "Returns to investment in education: A global Update", Education Economics, vol.12, n², August, http://siteresources.worldbank.org/INTDEBTDEPT/Resources/468980-1170954447788/3430000-1273248341332/20100426_16.pdf.

Reynolds, D. (1992), "School effectiveness and school improvement", http://www.scotedreview.org.uk/media/scottish-educational-review/articles/51.pdf .
"Rethinking learning for students at risk", http://www.ncrel.org/sdrs/areas/issues/students/atrisk/at700.htm

Right to Education act of India (2002), Department of School Education \& Literacy, Ministry of Human Resource Development, Government of India, http://mhrd.gov.in/rte .

Roberts, F. (2011), "America's Lost Boys: Why ARE so many young men failing to grow up?" http://www.dailymail.co.uk/news/article .

Roderick, M. (1993), The Path to Dropping Out: Evidence for Intervention, Westport, CT: Auburn House: Greenwood Publishing Group.

Roderick, M. (1995), "Grade Retention and School Dropout: Investigating the Association", American Educational Research Journal, 31 (4), pp. 729-759.

Rumberger, R. W. (1995). "Dropping Out of Middle School: A Multilevel Analysis of Students and Schools", American Educational Research Journal, 32, (3), pp. 583-625.

Rumberger, R. W. (1987). "High School Dropouts: A Review of Issues and Evidence", Review of Educational Research, 57, (2), 101-122.

Global Educational Change: A Compendium of International Documents - 9788174503244, National Council of Educational Research and Training, 2004, ISBN $10: 8174503242$, pages 4-7, 16-21, 352-370 (discussion about Basic learning skills).

Russell W., Rumberger, R. (2011), Dropping Out, Why students Drop Out of High-School and What Can Be Done About it, Cambridge, U.S.A and London, U. K.: Cambridge University Press, 400 p .

Schultz, T. W., (1977), "Investment in Human capital", in J. Karabel and A. H. Halsey (eds.) Power and Ideology in education, (12-15).

Selwyn, N., Gorard, S. and Furlong, J. (2006), Adult learning in the digital age, London: Routledge Falmer.

Shepard, U. A., Smith, M. L. (1990), "Synthesis of research on grade retention", Educational Leadership, 47, pp. 84-88, www.ascd.org .

Smith, A. (2003) "Citizenship education in Northern Ireland: beyond national identity", Cambridge Journal of Education, 33, 1, pp.15-31.

Smithers, A., Robinson, P. (2000), Copying with teacher shortages, Liverpool: University of Liverpool, Centre for Education and Employment Research.

Smyth, E., McCoy, S. (2009), "Investing in Education, Combating Educational disadvantage," ESRI Research Series 006, Dublin: The Economic and social research institute.

Snow, C. E., Burns M. S., and Griffin, P. (eds.), (1998), Preventing difficulties in young children, Washington, DC: National Academy Press.

Snow, C. E., Griffin, P, and Burns, M. S. (eds.), (2005), Knowledge to Support the Teaching of reading: Preparing teachers for a changing world, San Francisco, CA: John Wiley\& sons, Inc.

Speed, E. (1998) Gender issues and differential achievement in education and vocational training: a research review, Manchester: Equal Opportunities Commission.

Standard, R. P. (2003), "High school graduation rates in the United States: Implications for the counselling profession", Journal of Counselling \& Development, 81, (2), pp.217-221.

Stratton, L. S., O’Toole, D. M., Wetzel J. N. Are the Factors Affecting Dropout Behavior Related to Initial Enrollment Intensity for College Undergraduates?, Research paper (pages-13, 14, 15).

Student individualised growth model and assessment (SIGMA-page- 2), Source: U.S. Bureau of the Census, 2005.

Thomas, L. L., Kuncel, N. R., \& Credé, M. (2007), "Non-cognitive predictors of academic performance: The case of the Non-Cognitive Questionnaire (NCQ)", Educational and Psychological Measurement, 67, pp. 635-657.

Tomlinson, S. (2001), Education in a post welfare society, Buckingham: Open University Press.

Traag, T., Van der Velden, R. K.W. (2008), Early school-leaving in the Netherlands, Research Memoranda 003. Maastricht: ROA, Research Centre for Education and the Labour Market.

Traag, T. (2012), Early school leaving in the Netherlands, A multidisciplinary study of risk and protective factors explaining early school-leaving, PhD. Thesis, The Hague/ Heerlen. http://www.cbs.nl/NR/rdonlyres/CAFDC1FC-E23B-49C8-9833-

2AE9E639E4E3/0/2012X11Traagpub.pdf .
Training \& Employment $\mathrm{n}^{\circ}$ 100, (page-1), July-August 2012, www.cereq.fr .
Tuijnman, A. C. \& Belanger, P. (1997), "New Patterns of Adult Learning Publication: A sixcountry Comparative Study," ERIC (ED417290), 266 pages.

Walker, S. P., Grantham-McGregor, S. M., Himes, J. H., Williams, S. and Duff, E. M. (1998), "School Performance in Adolescent Jamaican Girls", Journal of Adolescence, 21, (1), pp. 109-122.

Waslander, S, Thrupp, M. (1995), "Choice, competition, and segregation", Journal of Education Policy, 10, 1, pp. 1-26.

Carbery, R., Garavan, T. N. (2006), "An Analysis of the Determinants of Participation in Training and development Opportunities", www.ufhrd.co.uk/wordpress/wp.../06/62_carbery_garavan.pdf

## History

Banerjee, J. (1994), Education in India, Central library, 15/3 Shyama charande street, calcutta-700073.

Corbeill, A. (2001), "Education in the Roman Republic" in Y. L. Too (ed.) Education in Greek and Roman Antiquity, Leiden and Boston: Brill. Van Bremen, R. 1996. www.articlemyriad.com.

Gorard, S. R. G., Fevre, R. (1999), "Two dimensions of time: the changing social context of lifelong learning", Studies in the Education of Adults, n ${ }^{\circ} 31,1$, pp. 35-48.

Gorard, S., Sundaram, V. (2008), "Equity and its relationship to citizenship education", in Arthur, J., Davies, I. and Hahn, C. (Eds.) The Sage Handbook of Education for Citizenship and Democracy, London: Sage, pp. 71-79.

Gorard, S., Smith, E. (2010), Equity in Education: an international comparison of pupil perspectives, London: Palgrave.

Koeller. D, (2003), Mediterranean Basin chronology, http://www.thenagain.info .

## Sociology:

Baudelot, C., Establet R., (2009), L'élitisme républicain, Paris : Seuil, 2009.
Bernstein, B. (1961). Education, economic and society, New York: Halsey, A. H., free press.
Broh, B. A., (2002). "Linking extracurricular programming to academic achievement: Who benefits and why?" Sociology of Education, n ${ }^{\circ} 75$, pp. 69-91.

Bandura, A. (1977). Social learning theory, International encyclopedia of psychiatry, psychology, psychoanalysis, and neurology, (Vol. 10). New York: Van Nostrand Reinhold, http://www.uky.edu .

Coleman, J. S. (May 12, 1926 - March 25, 1995), Wikipedia.
Durkheim, E. (1969). L'évolution pédagogique en France, Paris: Presses Universitaires de France.

Elias, M. J. (2006), The Connection between academic and social- emotional learning (pages 5-6), reprinted from The Educator's Guide to Emotional Intelligence and Academic Achievement, edited by M. J. Elias and H. Arnold, Thousand oaks, CA: Corwin Press.

Gorard, S. (2000), Education and Social Justice, Cardiff: University of Wales Press.
Gorard, S. (2004), "The international dimension: what can we learn from the PISA study?", In Gender in Education 3-19, Edited by Hilary Claire, chapter 2, pp. 27-33.

Gorard, S., See, B. H. (2010), "How can we enhance enjoyment of secondary school?: the student view", British Educational Research Journal, ,37(4), pp. 671-690.

Haahr, J., Nielsen, T, Hansen, E. and Jacobsen, S. (2005), "Explaining pupil performance: evidence from the international PISA, TIMSS and PIRLS surveys", Danish Technological Institute, www.danishtechnology.dk .

Karabel, J., Halsey, A. H. (1977), Power and ideology in education, New York, Oxford: Oxford University Press. It is composed of several chapters which were written by different authors.
(1) Education and social structure: Emile Durkheim (page- 87).
(2) Education and social selection: A. H. Halsey (page- 167).
(3) Education, human capital and the labour market: Theodore W. Schultz (page-307).
(4) The politics of education (page-367): David K. Cohen (page-373).
(5) Cultural reproduction and the transmission of knowledge (page-451).

Luyten, H. (2006), "An empirical assessment of the absolute effect of schooling: regressiondiscontinuity applied to TIMSS-95", Oxford Review of Education, n ${ }^{\circ} 32$, Issue 3, pp. 397429.

Marx, K., Friedrich, E. (1947), The German ideology. New York: international publishers.
Pring, R. (2009), "Education cannot compensate for society: reflections on the Nuffield Review of 14-19 Education and Training", Forum, 51, 2, 197-204.

Print, M., Coleman, D. (2003) "Towards understanding of social capital and citizenship education", Cambridge Journal of Education, 33, 1, 123-149.

Rawls, J. (1971), A Theory of Justice, Oxford University Press, Oxford, UK.
Reynolds, D., Jones, D. and St Leger, S. (1976), "Schools do make a difference", New Society, 37, pp. 223-225.

Rousseau, J.-J. (1712-1778), Wikipedia.
Rumberger, R. W., Palardy, G J. (2005), "Test Scores, Dropout Rates, and Transfer Rates as Alternative Indicators of High School Performance", American Educational Research Journal, 42, (1), pp. 3-42.

Sampson, R. J., Groves, W. B. (1989), "Community structures and crime: Testing socialdisorganization Theory", American Journal of Sociology, n ${ }^{\circ}$ 94, pp. 774-802.

Sirkin, R. M. (2006), Statistics for the Social Sciences, $3{ }^{\text {rd }}$ Edition, London: Sage.
Smyth, E. (1999), "Educational Inequalities among School Leavers in Ireland, 1979-1994", Economic and Social Review, 30, (3), 267-284.

Sorensen, A. (2006), "Welfare states, family inequity, and equality of opportunity," Research in social stratification and mobility, volume 24, Issue $4,4^{\text {th }}$ quarter, pp. 367-375.

## Psychology:

Ames, C., Archer, J. (1988), "Achievement goals in the classroom: students' learning strategies and motivation processes", Journal of Educational Psychology, 80 (3) pp. 260267.

Fancher, R. E. (1998). "Alfred Binet, General Psychologist." In Portraits of Pioneers in Psychology, Vol. 3, ed. Gregory A. Kimble and Michael Wertheimer, Hillsdale, NJ: Erlbaum.

Schunk, D. H. (1999), Social cognitive and constructive views of learning, PDF, pp. 322. www.itma.vt.edu .

Sudman, S., Bradburn, N. M. (1974), Response effects in surveys: A review and synthesis. Chicago: Aldine Publising Co.

Thomas, L. L., Kuncel, N. R. and Crede, M. (2007), "Non cognitive variables in college admissions", Educational and Psychological Measurement, 67, (4), pp. 635-657.

Willms, D., Echols, F. (1992), "Alert and inert clients", Economics of Education Review, vol.11, Issue 4, pp. 339-350.

Willms, J. D. (2002), Vulnerable children: Findings from Canada's national longitudinal survey of children and youth. Edmonton AB : University of Alberta Press.

Woolfolk. A., Educational psychology (2004), publisher: Pearson education (Singapore), www. Pearsoned.co.in, pages-24-27, 531.

## Survey and statistics:

Annual Status of Education Report (ASER) 2011, report of the status of education of rural India. http://files.www.teachertraining-dns.org/countries/india/aser_2013.pdf

Bulletin officiel $n{ }^{\circ} 23$ (4th June, 2009), Prévention du décrochage scolaire (RLR: 506-3) : Prévention du décrochage scolaire et accompagnement des jeunes sortant sans diplôme du système scolaire instruction $\mathrm{n}^{\circ}$ 09-060 JS du 22-4-2009 (clarifications about some remedial processes of dropout by French education department).

Bussière, P., Cartwright, F., Crocker, R., Ma, X., Oderkirk, J. et Zhang, Y. (2001). À la hauteur: la performance des jeunes du Canada en lecture, en mathématiques et en sciences: étude PISA de l'OCDE: premiers résultats pour les Canadiens de 15 ans.

Eu22.eu European statistics-Beta 0.2 (November 2009), Early leavers from education and training by gender, http://eu22.eu/social-cohesion/early-leavers-from-education-and-training-by-gender/

The Pratichi Education Report II (2009), Primary Education in West Bengal: Changes and Challenges, Pratichi (India) Trust. http://pratichi.org/sites/default/files/Pratichi_Education-Report_II.pdf.

Céreq (2010). Quand l'école est finie... Premiers pas dans la vie active d'une génération, enquête 2010 (page 47).
www.cereq.fr/index.php/content/download/4347/.../file/Gene2007.pdf .
Maulik, M. K., Biagioli, N. Science dropout and remedial measures, JOSR Journal of Humanities and Social Science (JOSRJHSS) ISSN: 2279-0845 Volume 1, Issue 2 (sep.oct 2012), pp 17-20. www.josrjournals.orgwww

PISA 2009 Note de présentation (France), statistics analyser: Eric Charbonnier, pp. 1, 2, 3, http://www.oecd.org/pisa/46624019.pdf

PISA 2012 Results in Focus. What 15-year-olds know and what they can do with what they know. http://www.oecd.org.

The state of Education from nursery school to higher education, no16 (2006), media.education.gouv.fr/file/68/0/3680.pdf

## Survey reports

Core B Consortium, Cito Institute for Educational Measurement, University of Twente, University of Jyväskyla, Institute for Educational Research, Direction de l'Evaluation de la Prospective et de la Performance (DEPP), School Questionnaires for PISA- 2009, Main survey, pp. 4-23. http://pisa.nutn.edu.tw/download/web_qa/school_qa_ENG1.pdf
Le Projet académique, academie_nice_2010-2014_livret 2, deuxième partie, les indicateurs de performance.
http://cache.media.education.gouv.fr/file/Academie/21/2/projet academie_nice_20102014_livret2_234212.pdf .

OECD (2012), "How many young people finish secondary education?", in Education at a Glance 2012: Highlights, OECD Publishing, pp. 16-17. http://dx.doi.org/10.1787/eag_highlights-2012-5-en

Progress Overview of Research: SSA (2014), "Researchers at national level under SSA," http://punarbhava.in/index.php?option=com_content\&view=article\&id=1507\&Itemid=78 $\underline{2}$

Flash statistics DISE-2011-12, "Elementary education in India Progress towards UEE", (page-22), http://www.dise.in/Downloads/Publications/Publications\ 2011-12/Flash\ 2011-12.pdf

Flash statistics DISE-2013-14, "Elementary education in India Progress towards UEE", http://www.dise.in/Downloads/Publications/Publication2013-14/FlashBook2013-14.pdf

UNESCO (2014), Progress in getting all children to school stalls, but some countries show the way forward Policy Paper 14, Fact Sheet 28, June 2014 (pages 1, 3, 10), http://unesdoc.unesco.org/images/0022/002281/228184E.pdf

# Annex <br> <br> Annex A. Questionnaires of surveys <br> <br> Annex A. Questionnaires of surveys <br> <br> A.1. for interviewing students upon basic skills learning 

 <br> <br> A.1. for interviewing students upon basic skills learning}

## A.1.a. In French

## QUESTIONNAIRE pour les ÉLÈVES DE TROISIÈME DE COLLÈGE (FRANCE)

CLASSE:
DATE DE NAISSANCE :
SEXE:

COLLÈGE :

1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette année :
2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année :
3. As-tu éprouvé des difficultés en mathématiques? Si oui, Dans quel (s) domaine(s) ? (entoure ) : Algèbre, Géométrie, Calcul, Trigonométrie.
4. Jusqu'où penses-tu poursuivre tes études avant de chercher un travail (entoure) :
formation professionnelle, baccalauréat, licence,
grandes écoles, université.
5. Quelle est la profession de tes parents?
ton père : $\qquad$
ta mère: $\qquad$
6. Quelle partie du cours de français te plaît le plus?
(entoure) l'étude des textes en prose, l'étude de la poésie,
l'étude de la grammaire, écrire des textes.
7. Pour tes devoirs, tu demandes de l'aide à : (entoure)
(entoure) : un tuteur, un parent ou quelqu'un de ta famille personne, tu te débrouilles seul (e).
8. As-tu été absent(e) du collège les sept derniers jours? Si oui, pour quelle raison?
9. En quelle année a commencé la Révolution française ?

$$
\text { (entoure): } 1589, \quad 1689, \quad 1789, \quad 1889
$$

10. As-tu déjà redoublé durant tes études? Si oui, combien de fois et quelles années?

Merci d'avoir bien voulu répondre à ce questionnaire.

## A.1.b. In English

## QUESTIONNAIRE for STUDENTS of $\mathbf{9}^{\text {th }}$ HIGH SCHOOL (INDIA)

CLASSE:
DATE OF BIRTH:
SEX:

SCHOOL:

1. Name two subjects which have interested you the most to study in mathematics this year.
2. Name two subjects which have interested you the least to study in mathematics this year:
3. Did you face problems in mathematics this year? If which, in what part?
(surround ): Algebra, Géometry, Calculus, Trigonometry.
4. How far do you want to read before getting a job ?
(surround): $\quad$ Vocational training, Termination exam (end of secondary)?
Graduation, University.
5. State the profession of your parents:

Father:

Mother:
5. Which portion of language and literature course attracts you the most?
(surround): Prose, Poetry, Grammar, Writing texts
7. For preparing your home task, you often take the help of
(surround): A tutor, A parent or any member of your family,

Nobody, but yourself
8. Have you been absent in school in last week? If yes, how many days and for what reason?
9. Which is the Republic day of India?...
10. Have you repeated a year during previously? If Yes, how many times and in what level(s)?

Thank you for your acceptance of responding this questionnaire.

## A.2. for interviewing students and teachers about teacher-students relationship

## A.2.a. In French

## QUESTIONNAIRE DE P.I.S.A - 2009

| Questionnaire élèves $\quad / \quad$ Répondre $\ll$ oui>> ou <<non>> |  |
| :--- | :--- |
| CLASSE: | DATE DE NAISSANCE: |
| COLLEGE: |  |

1. Diriez-vous que les élèves ne sont pas, pour la plupart, attentifs à la parole de leur professeur?
2. Constatez-vous souvent des problèmes de bruit et de désordre dans la classe?
3. Voyez-vous souvent les professeurs attendre longtemps pour que les élèves se mettent en place?
4. Selon vous, est-ce que les élèves travaillent assez pendant les cours?
5. Selon vous, les élèves mettent-il longtemps avant de rentrer en classe après la récréation?
6. Diriez-vous que vous restez volontiers avec vos professeurs ?
7. Diriez-vous de vos professeurs qu'ils sont attentifs à vos progrès dans les études?
8. Selon vous, est-ce que la plupart de vos professeurs donnent de l'importance à votre avis?
9. Avez-vous obtenu des aides de la plupart des enseignants, en plus du travail habituel?
10. Diriez- vous de vos professeurs qu'ils ont un comportement juste et impartial?

## A.2.b. In English

## QUESTIONNAIRE from P.I.S.A - 2009

## Questionary student/ answer <<yes>> or <<no>>

CLASS: DATE OF BIRTH :

## COLLEGE:

1. Do you observe that most of the students don't listen to what the teacher says?
2. Do you observe that there are frequently noise and disorder in the class?
3. Do you observe that teachers have to wait for a long time for the students to quieten down?
4. Do you observe that students cannot work properly in the class?
5. Do you observe that most students delay a long time for working after the lesson starts?
6. Would you say that you get along well with most of your teachers?
7. Would you say that most of your teachers are interested in your well- going?
8. Would you say that most of your teachers give importance to your opinion?
9. Would you say that you receive extra help of most of your teachers when you need it?
10. Would you say that most of your teachers are fair in their behaviour?

## Annex B. Report of preliminary survey

Answers of French students to preliminary surveys are studied in chapter 3 and are given in Annex I. As Indian students replied in Bengali, the statistics of their answers have been translated in English and the report is given in chapter 3. We repeat here the statistics of answers question by question

## - Date of birth (at the top of the survey paper):

$20 \%$ Indian boys and $30 \%$ Indian girls are over aged against $10 \%$ French boys and girls in the correspondence of their study level ( $3^{\text {ème }}=9^{\text {th }}$ grade )

Q3 I How many students face inconveniences in Mathematics?
$90 \%$ Indian boys and $100 \%$ Indian girls face inconveniences in different areas of Mathematics against $70 \%$ French boys and $100 \%$ French girls.

## Q3 ii In which area of mathematics are they weaker?

Algebra is the most quoted inconvenience.

## Q4 How far students want to reach in their study level?

40\% Indian boys and $30 \%$ Indian girls are not intending to pursue their study at least in general stream after higher secondary level against $40 \%$ French boys and $80 \%$ French girls.

## Q 5 Employment of the parents:

$100 \%$ fathers are employed and $25 \%$ mothers in India against $75 \%$ fathers and $70 \%$ mothers in France.

Q7 How far parents assist their children in performing their home-task:
$55 \%$ in India, a little more than in France: $50 \%$.
Q8 In the last week, how many days were they absent?
Average attendance of Indian students shows slightly better than French students'attendance.
Q10 How many times students have repeated their grades?
$50 \%$ Indian boys and $40 \%$ Indian girls have never repeated their grades against $80 \%$ French boys and 50\% French girls.

## Annex C. -Report of French main survey

Answers of students are given in Annex J. 50 students were surveyed: 23 girls, 27 boys, corresponding to two classes $3^{\text {ème }} \mathrm{B}$ and $3^{\text {ème }} \mathrm{E}$.

Q1 Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette année :

9 none, 10 equations, 9 Pythagore theorema (twice alone, five times with Thales, once with equations, once with remarkable identities), 8 litteral calculus, 8 trigonometry, 7 Thalès theorema.

9 lacks of answer represent $18 \%$, signifying a disengagement of some students, the same who confess having great difficulties in all or most of parts of mathematics course. Pythagore and Thalès are symbolic, quite mythic mathematic objects; equations begin to be shown as parts of a complete system.

Q2 Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année :

9 none, 1 everything, 8 equations, 6 geometry, 5 trigonometry.

We found again 9 lacks of answer, which call on the same comment. A mark of disinterest for a subject is often a sign that students are uncomfortable with it and begin to feel discouraged, which can be observed here with algebra (equations) geometry and trigonometry.

Q3 As-tu éprouvé des difficultés en mathématiques? Si oui, dans quel (s) domaine(s) ?

6 all, 5 all except calculus, 16 algebra ( 6 alone, 10 with others), 16 geometry ( 8 alone, 8 with others), 8 trigonometry (once alone), 6 calculus (twice alone).

Algebra and geometry are the principal dangers for students suffering with mathematics disease. Trigonometry is yet new at this level, calculus should be secure, but for some it is not.

## Q4 Jusqu'où penses-tu poursuivre tes études avant de chercher un travail ?

2 none, 19 vocational training, 11 'baccalauréat', 8 'grandes écoles', 7 university, 5 graduation.

19 vocational training and 11 'baccalauréat' make $60 \%$ students foreseeing short studies and $40 \%$ superior studies. 'Grandes écoles' and University are more often quoted by students whose parents have a high type of employment, and have been graduated or postgraduate. One notes four students' wishing to overtake family school level, and three wishing to stay back, but this can be also due to crisis of relationship children-parents during adolescence, or simply to a lack of self-confidence.

## Q5 Quelle est la profession de tes parents ?

Father: 11 none, 39 working among whom 12 university cursus and high employment.

Mother: 18 none, 32 working with almost 10 university cursus and high employment.
$22 \%$ no answer for father, $36 \%$ no answer for mother are surprising. This could been explained by difficulties found in denominating the type of employment, or considering an activity as employment: for example mother who "is kitchnening at home", or confessing unemployment of parents (only two did it, no doubt they were more).

## Q6 Quelle partie du cours de français te plaît le plus?

5 none, 18 prose (among which 15 alone), 14 writing texts (among which three associate with prose and two with grammar), 11 poetry (among which one associate with prose and writing texts), 9 grammar.

Reading prose first, then writing texts, then poetry. This result is matching the curriculum: in 3ème, students must read fluently and write narrative, descriptive and argumentative texts. Grammar is seen ordinarily as a subject matter learnt in previous levels. Poetry is the genre the most representative of academic literature.

## Q7 Pour tes devoirs, tu demandes de l'aide à :

22 parents, 25 work alone, 3 parents+alone.
$50 \%$ of students are used to work alone by themselves, the other are receiving help from family. No private tuition.

Q8 As-tu été absent(e) du collège les sept derniers jours? Si oui, pour quelle raison?

36 no, 14 absent (one for family problem, 3 for strike problem, 9 for sickness, one because there were no more assessments done)
$72 \%$ were attending in the last week. Strike is a recurrent French problem.

## Q9 En quelle année a commencé la Révolution française?

3 none, 8 false, 39 true.
$78 \%$ true. A quite good result for historical knowledge of the country

Q10 As-tu déjà redoublé durant tes études? Si oui, combien de fois et quelles années?
43 no, 7 yes (one CE1, two CE2, one $6^{\text {ème }}$, three $3^{\text {ème }}$ ).
$14 \%$ grade repetition with a well-known critic level: $3^{\text {ème }}$.

## Annex D. -Report of Indian main survey

i/ Status of working parents.
ii/ Percentages of parents assisting in home- assignment.
iii/ How far students want to reach in their education carrier.
iv/ Student's age group related to their grade level of study.
v/ Grade-retention of students.
vi/ Competency in reading skill of students.
vii/Absenteeism/Truancy.
viii/ National day in India.

## i/ Status of working parents

| Subject | Percentage |
| :--- | :---: |
| Working fathers | $98 \%$ |
| Non working mother/Did not mentioned | $2 \%$ |
| Working mother | $12 \%$ |
| Non working mother/Did not mentioned | $84 \%$ |

Table 68. Statistics of the status of working parents in our Indian main survey.
Remarks: We found most of the working father works as farmer. Although regarding father's occupation main survey resembles with preliminary survey ( $98 \%$ against $100 \%$ ), regarding mother's occupation we find low ( $12 \%$ against $25 \%$ ) scores.

Comments: It shows a sharp distinct discrimination between the working status of parents.

## ii/ Percentages of parents assisting in home-assignment

Result: 68 \% replied that they get home-assistance from their parents. We found a fair up gradation of statistics in main survey result in this category than in preliminary survey ( $68 \%$ against 55\%).

## iii/ How far students want to reach in their education carrier :

| Gender | Want to read up to higher secondary level <br> or less | Want to reach post <br> higher secondary level |
| :---: | :---: | :---: | :---: |
| Boys | $34 \%$ | $68 \%$ |
| Girls | $24 \%$ | $76 \%$ |

Table 69. Willing objectives of study in our Indian main survey.
Remarks: Apparently it seems in main survey that Indian girls are more interested in higher study than boys. In both category of boys and girls, the statistics of main survey shows improvement ( $68 \%$ of boys and $76 \%$ of girls against $60 \%$ in both category of preliminary survey).

Comments: Girls shows better aspiration than the boys to pursue in post higher secondary studies

## iv/ Student's age group related to their grade level of study :

| Gender | 14+age gr. | 15+age gr. | Others age gr. |
| :--- | :---: | :---: | :---: |
| Boys | $48 \%$ | $32 \%$ | $20 \%$ |
| Girls | $10 \%$ | $32 \%$ | $52 \%$ |

Table 70. Statistics of student's age group vs their grade of level study.

In the main survey's result of boys we found a similar result regarding other age group of students ( $20 \%$ in both main and preliminary survey) but in girls section we found a huge difference in comparison of main survey with preliminary survey result ( $52 \%$ versus $30 \%$ ).

Comments: Heterogeneous mixing is mounting specially in girls. It creates problems for a teacher to deal with class room teaching.

## vii/ Absenteeism/Truancy.

In this category we found an average of $24 \%$ students confessing that they became absent in last week from their school. It is more or less similar to the preliminary survey result (24\% versus $30 \%$ )

Comments: Due to mid-day meal operation absenteeism is reducing.

## viii/ Which is the Republic day in India?

$84 \%$ of students gave the right answer: January $26^{\text {th }} ;$ a good score
N.B: We have already mentioned the result of $\mathbf{v} /$ and $\mathbf{v i} /$ in our previous text.

## Annex E. Comparative report of French and Indian main surveys

Q- Students having problems in mathematics
$60 \%$ of Students in India and in France are facing problems in mathematics.

## Q- Students having more specific problems in Algebra

68\% Indian students and 62\% French students are facing problems in Algebra.

## Q- How far students wish to study?

Only $30 \%$ Indian students and $40 \%$ French students want to pursue beyond the level of higher secondary.

## Q. Grade repetition

$10 \%$ Indian students repeated twice and $21 \%$ once against $14 \%$ French students who repeated once.

## Q. National memory

The results are $78 \%$ for the beginning of French revolution and $84 \%$ for the National day in India. It must be noted that the questions were not exactly the same. For France, the question concerns an historic knowledge. To have the equivalent to the question asked to Indian Students, one should have asked :what is the national day in France (14 juillet). The equivalent knowledge for Indian students should have concerned the beginning of Indian Struggle for independence. Anyway, we see that in each country, school succeeded in confirming a global national identity.

# Annex F. District information System for Education (DISE) report of Lakshmipur Shamidi Seva Sangha High School (2010-11) 

## District Information System for Education （School Information Schedule） <br> 201011

## A．School Particulars

1．School name LAKSHMIPUR SHAMITI SEVA SAN CHA HIGH SCHCOL（H．S．）
2．School located in Rural area or Uitoan area［Rural $=1$ ．Uitann＝2］［D

4．Village name（Rural Area）Ward No．（Urban Area）LAKSHMI PUR
5．Pin code
5．Village Panchayat name（Rural areas only）LAKSHMIPUR，BER GCOM－1 GRAM PANCHAYAT
7 Name of Cluster Resource Centre（CRC）．
B．Revenue BlockMunicpaity name＊HABAF F－I
9．Educational PlochCLRCICircle name＊HAF：\＆F－1
10．Assembly Constituency＊97－GAIGKATA ASSEPMF．．－
11．Municipality（faspolicable）＂in 12．Cay（N／A）N／A
13．Geographical information of the school，if available
a）Latitude
밈ㅁㅁㅁำ


14．Phone／Mobile No
（i）Citioehtead of School
sion



15．Distance of scticol in Kms

Whether school is approachable by all weather roads？［Yes＝1， $\mathrm{Now}^{2}$ ］
7．Year of establishment of school

Year of recognition of school ir recesaired 800
a Year of upgradation from Primary to Upper Primary only（if applicable）पロロロ
1．Type ot school $\mid$ Boys $=1$, Girts $=2$, Coeducational $=3]$ 由
2．School category
Primary（1）／Primary with Upper Primary（2）／Primary with upper primary and secondary higher secondary（3）／Upper Primary only（4） Upper Primary with secondary／higher secondary（5）／Secondary Only（6）$/$ Secondary with Hr ．Secondary（7）／ Hr ．Secondary Only（8）／
21 Managed by（School Management）
■凹

Department of Education（1）／Tribal／Social Welfare Department（2）／Local body（3）／Pvt Aided（4）／Pvt Unaided（5）／others（6）／Central
Govt．Schools like（K．V．S，Novodaya Vidalaya，Military schools and other schools managed by Central Govt）（7）／Un－recognised（8）
Wadrasha Recognized（by Wald board／Madrasah board）Education（97）／Madrasha Unrecognized（98）／Panchayat 8 Rural
Development（12）／Madrasah siksha Kendra（13）／NCLP（14）
$\begin{array}{llll}\text { 22．Lowest class in school } & \text { 23．Highest Class in school } \\ \text { 24．Medium of Instruction } & \text { a）目远 } & \text { b）} \square \square\end{array}$
（for elementary education only）
02 －Bengali（2）／ 04 －Hind（4）／11－Nepali（11）／ 12 －Oriya（12）／ 17 －Telugu（17）／18－Urdu（18）／19－English（19）／Sartali（30）／ 98 －None（98）／9 0－Others（99）］

## A（I）School Particulars

1．Pre－primary section（other than AngianwadiECCE）attached to school［Yes＝1，No＝2］ If yes，a）Total students
b）Total teachers
2．Anganwadi Centre／ECCE in or adjacent to school［Yes＝1，No＝2］ It yes，a）Total students
b）Total teachers／Anganwadi workers
3．Is the school residential［Yes $=1$, No $=2]$
If yes．Type of residential school

2


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2．
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$[$ Ashram（Govt）$=1$ ，Non－Ashram type（Govt）$=2$ Others $=4$, Not Applicable＝5，Kasturba Gandhi Balika Vidnyalaya（ $K G B V$ ）$=$（ $]$
4．Whether this is a Special school only for CWSN？［Yes＝1／No＝2］
．Is the school building used as a part of shift school［Yes＝1， $\mathrm{No}=2$ ］
6．Last academic year details
a）Number of academic inspections
$\square$ III b）Number of visits by CRC coordinators
$\square \square$
c）Number of visits by Block Resource Persons $\square \square$ d）Number of visits by Resource Teacher／SE for CWSN $\square \square \square$
7．School funds（last completed financial year）excluding MDM（Not to be lilled by unaided schools）
$<$

|  | Receipt（ ） | Expenditure（＇） |
| :---: | :---: | :---: |
| 9．School Development Grant（under SSA） | पПロロロ | पロएロロ |
| D School Maintenance Grant（Under SSA） | 口пロロロロ | प口ロロ口ロ |
| c TLMATeachers Grant（Under SSA） | प口ロロ口 | पロ■■口 |
| d Funds from cther sourdes（Donatiori） | उपषएप | ロロロロロロ |

8．Staff category

|  |  | No．of Sanctioned posts（if applicable）． |  |  |  | Number in Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Primary | $\begin{gathered} \text { Upper } \\ \text { Primary } \end{gathered}$ | Secondary | $\begin{gathered} \mathrm{Hr} \\ \text { Secondary } \end{gathered}$ | Ptimary | $\begin{aligned} & \text { Upper } \\ & \text { Primary } \end{aligned}$ | Secondary | $\begin{gathered} \mathrm{Hr} \\ \text { Secondary } \end{gathered}$ |
| a． | Teaching Statf（Regular Teachers） | － | 6 | 13 | 5 | － | 6 | 11. | 4 |
| b | Para Teachers | － | － | － | － | － | 5 | － | － |
| $c$ | Par－time instructor（ifor upper primary classes） | － | － | － | － | － | － | － | － |
| d | Non－teaching Staif | － | 2 | 3 | － | － | 2 | 3 | － |

## A (ii) School Particulars

1. Dotailis of instructional days and school hours

|  | Primary level | Upper primary level |
| :--- | :---: | :---: |
| Number of instructional days (previous academic year) | - | 189 |
| Schooi hours for children (per day) - Number of hours chidren stay in school (current academic year) | - | $5 \frac{1}{3}$ |
| Teacher working hours (per day) - Number of hours teachers stay in school (current Bcademic year) | - | $5 \frac{1}{2}$ |



| 32 Only for Aided schools |  |  |
| :--- | :--- | :--- |
| a) | Percentage of Aid being received form Govt for elementary education | Wiold |
| b) Number of children admitted in gradel (for Free education) | $\square \square \square$ |  |



## B．Physical facilities and equipment

1．Status of School Building
Private $=1$ ，Rented＝2，Government＝3，Government school in a rent free building＝4，No Building＝5，Dilapidated＝6，Under Construction＝7］
．2．Details of classrooms and other rooms（not to be filled for schools without building）

$$
\begin{array}{lll}
\text { a) Total Classrooms used for instructional purposes } \square \square \square 8 & \text { b) Total other rooms }
\end{array}
$$


Source of drinking water facilty［Hand pumps $=1$ ，Weil $=2$, Tap water $=3$ ，others $=4$ ，none $=5$ ］ ..... II
a．Whether drinking water facility functional $\left[\right.$ Yes $=1, \mathrm{No}_{0}=2!$ ..... II
0．Status of electricity connection in school $\left[\mathrm{Yes}=1, \mathrm{No}=2, Y_{e s}\right.$ but not functional $\left.=3\right]$ ..... （1）
11．Boundary wall ..... ［1］
Puccaw1，Pucca but broken＝2，barbed wire fencing＝3，Hedges＝4，No boundary wall＝5 others＝6．Partial＝7．Under Construction＝ 日
12．Whether school has Library［Yes＝1，Now2］II If yes，12a．No．of books in school library（Yes $=1, N 0=2$ ］ it189．if Ramp（s）is／are available，whether Hand－rails for ramp is available［Not Appilicable＝0，Yes＝1，No＝2］田
19 Furniture for Teachers $[A \hat{A}=1$ ，Some＝2．None＝3］ （1）20．Furniture for Students $[$ A $\mid=1$ ，Some $=2$ ， None $=3]$ ..... （1）21．Whether measured campus plan prepared［Yes＝1， $\left.\mathrm{No}_{\mathrm{o}}=2\right]$ 这

## B（i）．Mid Day Meal Information

## （Only for Govt．I Aided Schools）

1．Status of Mid－day Meal
［ Not applicable $=0$ ，Not provided $=1$ ，provided \＆prepared in school premises $=2$ ，provided but not prepared in school pramisesm3］ （i）if＇Provided \＆prepared in school premises＇；
a．Give status of Kitchen Shed［Not appícable $=Q$, Availabie＝1，Not Availabiev2，Under Construction＝3，Classioom used as kitchen＝4］$\square$ b．No of Cook－aum－helpers available Male $\square \square$ Femaie 24
（ii）If＇Provided but not prepared in school premises＇，
Provide source of MOM［From nearby school $=1$, NGO $=2$ ，Sell Help $G r o u p=3$, PTAMTA $=4$ ，others $=5$, Gram panchayat＝6］立
2．Did the school receive the one－time Kitchen Devices Grant［Not applicabie $=0, Y e s=1$, No $=2]$
3．Number of student opted for MDM during the last academic year Boys $\square \square \square \square \square$ ．Girts $\square \square \square \square$

4．Total number of meals served during the previous academic year

5 Number of days on which MOM was served during the previous academic year
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$8_{\square}^{8}$

6．Number of inspections made by the supervisory otficial during the previous academic yeat
7．Number of inspections made by the comminity members during the previous academic year
Whether Adequite uitensils for MOM me pugitabie I Yes $=1 / \mathrm{NO}=2 \mathrm{~g}$


## Other Schemes Information

1．School is covered under NPEGEL（ $Y$ es $=1 /$ No $=2$ ）
2．KGEV（Kasturba Gandhi Balika Vidalaya）Model（Model $1=1 /$ Model $2=2 /$ Model $3=3 i$ Not Applicable $=4$ ）
C．Teachers and Part－time instructors（Here total no．of Teachers should be matched with the $2^{\text {nd }}$ page report）

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1．Social Category－［General＝1，$S C=2, S T=3, O B C=4, O R C=5$ ，Others $=6]$
2．Type of teacher $-[$ Head teacher $=1$, Acting head teacher $=2$ ，Regular Teacher＝3，Para Teacher＝4，Part－time instructor positioned as per RTE＝5］
3．Academic qualification－［Eelow secondary $=1$, Secondery $=2$ ，Higher secondary＝3，Graduate＝4，Post graduate $=5$, M．Phil．or Ph．D． P ．$]$
4，Professional qualification－［Diploma or certifcate in basic teachers＇training of a duration not less
equivalent $=3, M$ ．Ed．or equivalent $=4$ ，Others $=5$ ，None $=6$ ，Diploma／degree in speclal education $=7]$
5．Classes taught－［Primary only $=1$ ，Upper primary onily $=2$ ，Mostly primary $=3$ ，Mostly upper primary
5．Classes taught－［Primary only $=1$ ，Upper primary onily $=2$, Mostly primary $=3$ ，Mostly upper primary $=4$, Secondary $=6$ ，Mostly Secondary $=7$ ，Hr．Secondary $=8]$
6．Subjects taught $-[$ All subjects $=1$, Language $=2$, Mathematics $=3$ ，Environment studies $=4$, Sports $=5$, Music $=6$, Science＝7，Social atudies＝8，Art education＝91，Health $\delta$ physical
education $=92$ ，Work education $=93$ ，Other＝0］
7．Disability－［Not applicable $=1$ ，Locomotor＝2，Visual＝3，others＝4］
9．Religion－$[$ Hindu $=1$, Muslim $=2$ ，Christian $=3$ ，Buddhist $=4$ ， Others $=5]$


1. Social Catogory $-[G$ eneral $-1, S C=2, S T=3, O B C=4, O R C=5$, Others $=$ б $]$
2. Type of teacher -[Head teacher $=1$, ACting head teacher $=2$, Regular Teacher=3, Para Teaccier=4, Parrtime instructor postioned as per RTE $=5]$
3. Protesic qualinal
4. Profesilonal qualif cation - [Diploma or certificato in basict teachera' training of a duration not iess than two yearsa $=1$, Bachelor of Elementary Education $($ P.El. Ed. $)=2$, , B.Ed. or


5. Dlabability - [Not applicable=5, Locomotor=2, Visua/=3, others=4]
6. Rolligion $-[$ Hindu $=1$, Musilm $=2$, Christian $=3$, Buddrilat $=4$, Others $=5]$


















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| Note：Total students（class wise） |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { should mat } \\ \text { vI } \end{gathered}$ |  | vil |  | vill |  | IX |  | x |  | xı |  | XII |  |
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| 8 | － | － | － | － | － | － | － | － | 1 | － |  |  | 可 |  |  |  |  |  | $\square$ |  |  |  |  |  |
| 9 | － | － | － | － | － | － | － | － | 109 | － | $\pm$ |  |  |  |  |  |  |  | 4 |  | － |  |  |  |
| 10 | － | － | － | － | － | － | － | － | 25 | － | 131 | － |  |  |  |  |  |  | 1 |  |  |  |  |  |
| 11 | － | － | － | － | － | － | － | － | － | － | － | － | 125 | － |  |  |  |  |  |  |  |  |  |  |
| 12 | － | － | － | － | － | － | － | － | － | － | － | － | 23 | － | 130 | － | － | － |  | $\pm$ |  | $\underline{4}$ |  |  |
| 13 |  |  | － | － | － | － | － | － | － | － | － | － | － | － | 17 | － | 128 | － |  | 12 | 2n | －18 |  |  |
| 14 |  |  |  |  | － | － | － | － | － | － | － | － | － | － | － | － | 02 | － | 136 | － | － | － |  |  |
| 15 |  |  |  |  | － | － | － | － | － | － | － | － | － | － | － | － | － | － | 12 | － | 98 | － | － | － |
| 16 |  |  |  |  | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － |  | 106 | － |
| 17 |  |  |  |  | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | 11 | － |
| ${ }^{18}$ |  | 4 |  |  | － | － | － | $\cdots$ | － | － | － | － | － | － | － | $\cdots$ | － | － | － | － | － | － | － |  |
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| 21 |  | $\square$ |  |  | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | ． | － | － | － |
| ＞21 |  |  |  |  | － | … | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － | － |
| Total | － | － | － | － | － | － | － | － | 134 | － | 131 | － | 148 | － | 147 | － | 130 | － | 148 | － | 98 | － | 117 | － |

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[^87]School Code: $n_{3}-2077$
(State Defined Supplementary Variables)

| 8 | Variable Description | Max. Length | Value |
| :---: | :---: | :---: | :---: |
| 018 | Previous year DISE School code ( In case of Relocation) | 7 | $\cdots / \mathrm{A}$ |
| 1 | SEMIS School Code (Sec. / H.S. Schools Orily) | 11 | $\checkmark$ |
| 2 N | Number of ACR sanctioned under SSA ( till date) | 2 | 4 |
| 3 Hf | if Sanctioned, No of ACRs Completed | 2 | 3 |
| 4 N | Name of the Mouza / Revenue Village | 40 | NAKFUL |
| 5 | JL No of the Mouza / R.Village | 3 | 160 |
| 6 | Average daily attendance (upto class VIII only) | 4 | 550 |
| 7 | Distinct feature of the catchment area of the school: <br> SC concentrated-1/ST concentraled-2/OBC concentratod=3/Minonty (Mualimjconcentratednd/Others=5 | 1 | 1 |
| 8 | in which of the following areas is the school located? <br> Slums=t/intemational Border=2/fiood Prone=3/Forast $=4 /$ Hilly $=5 / 0$ mers=6 | 1 | 6 |
| 9 | Is water facilty available for Toilot? (Yes-1/No-2No Response-9) | 1 | 1 |
| 10 | Total Number of Urinals avalable | 3 | 13 |
| 11 | Syllabus followed <br> t - State 2 - CRESE, 3-ICSE, 4-Others, 5-Nan= | 1 | $1$ |
| 12 P | Postal Address | 75 |  |
| 13 | No. of Days food supplied in previous academic year | 3 | 08 |
| 14 | is Guest Teacher appointed in school? (Yes-1/No-2No Response-9) | 1 | 2 |
| 15 | Number of Guest Teacher appointed in School | 3 | $N / A$ |
| 16 | Number of Classrooms used for Class IX \& X | 3 | 4 |
| 17 | No. of Classrooms used for Class XI \& XII | 3 | 10 |
| 18 | Total Avea of Vacant Land (in Sq.fit) avalable for construction | 10 | 2880 |
| 19 | Number of Classrooms used for Class I to IV | 3 | $N / A$ |
| 20 | No. of Classrooms used for Class V to VIII | 3 | 8 |
| 21 | 1 No. of Contract Teachers | - 2 | $N / A$ |

## 

District Information System for Education (DISE)
Academic Year : 2010-11


Certified that the information collected in the DCF have been shared with
(M. inters of Community/VEC/ PTA)


Certified that the data collected in DCF have been checked by the undersigned -
$\mathrm{CPC} / \mathrm{Al}$
Name of the Circle/ Sub-division

Signature with date

# Annex G. List of Indian teachers who participated to the interviews of the PISA questionnaires regarding teacher-student relationship 

Students and teachers were surveyed with the separate sets of questions papers.
(A) Name, designation of teachers and their domains :

| Name | Subject of teaching | Attached educational concern |
| :---: | :---: | :---: |
| Manashita Basak | Geography | L.S.S.S high school (H.S) |
| Piyali Mondal | Bilogical-science | Same- |
| Sarmistha Mondal | Geography | Same- |
| Dhiman Sarker | History | Same- |
| Nemai ch. Mahato | Bengali( $1^{\text {It }}$ language) | Same- |
| Suvankar Chowdhury | Math/ physics | Same- |
| Tarak ch. Nath | Bengali( $1^{\text {rt }}$ language) | Same- |
| Amalendu Bikash Sarker | History | Same- |
| Achin kr Dey | Bengali | Same- |
| Pintu Bhattacharya | English | Same- |
| Syad Ikbal Mustak | Math | Same- |
| Nirmal Pui | Math | Same- |
| Samit kr Chakraborty | Eng | Same- |
| Saumya Banerjee | Chem.. | Same- |
| Amal Biswas | Work-edu. | Same- |
| Moloy Banerjee | Phys. | L.S.S.S high school (H.S) |
| Babul kr.Dutta | Life-sc. | Same- |
| T.D | Life-sc. | Same- |
| Manjusree Dattachowdhury | Bengalif | Same- |
| Payal Dam | Sanskrit | Same- |
| Bandana Banerjee | math | Baranagar mayapith nari siksha ashram |

# Annex H. Annual report of collège Lei Garrus about grade retention in 2010 

## LES ÉLÈVES

## EFFECTIES A. A A RANTREW 200

| Niveau | Nb élèves | effect/classe | Demi-pens | doublants |
| :--- | :---: | :---: | :---: | :---: |
| Sixième (6) | 150 | 25 | 134 | 2 |
| Cinquième (5) | 122 | 24 | 105 | 0 |
| Quatrième (6) | 141 | 24 | 110 | 0 |
| Troisième (5) | 138 | 28 | 113 | 7 |
| total | 551 |  | 462 |  |
| pourcentage |  |  | $84 \%$ |  |

Particularites:
En sixième : une classe avec enseignement adapté pour les dyslexiques. En cinquième, quatrième et troisième : latin.
En quatrième : une section européenne en Anglais et une en Espagnol.
En troisième : Option facultative : Découverte professionnelle 3 h (DP3)


| classe | Seconde |  | $\begin{aligned} & \text { Txpassage } \\ & \text { seconde } \end{aligned}$ | 2nde BEP | 1ère CAP | Apprentis. | Redoubl. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -6iste | GT ${ }^{\text {a }}$ | Pro |  |  |  | Apher | \%-1 | Totaux |
| 3ème A | 12 | 6 | 66,7\% | 2 | 1 | 4 | 3 | 4 |
| 3ème B | 18 | 3 | 77,8\% | 1 | 0 | 5 | 0 | 28 |
| 3ème C | 18 | 1 | 70,4\% | 2 | 1 | 0 | 4 | 27 |
| Seme D | 9 | 4 | 48,1\% | 3 | 0 | 5 | 2 | 26 |
| 3ème E | 15 | 2 | 63,0\% | 2 | 0 | 3 | 1 | 23 |
| Totaux | 72 | 16 | 65,2\% | 10 | 2 | 17 | 10 | 23 |
|  |  |  |  |  |  |  |  | -127 |

## Annex I. Answers of French students to preliminary survey

```
QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)
    CLASSE:30A /DATE DE NAISSANCE:OG/OH/199S /SEXE:F /COLLEGE lii galul
    1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette
année .....&es inoquatian .....t....es...atatistsquad
    2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année*
        bas fonction
    3. As-tu éprouvé des difficultés en mathématiques? Si ouj, Bans quel (s) domaine(s) ? (entoure )
```

Algèbre
Géométrie
Calcul
Trigonométrie
4. Jusqu'oủ penses-tu poursuivre tes études avant de chercher un travail (entoure)

```
-formation professionnelle
```

-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

ta mère:- conducteus d'engin (TP)
6. Quelle partie du cours de français te plait le plus (entoure)
l'étude des textes en prose
l'étude de la poésie
l'étude de la grammaire

## écrire des textes

7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
-un parent ou queiqu'un de ta famille
-personne, tu te débrouilles seul (e))
8. As-tu été absent(e) du collège les sept derniers jours ? Si oui, pour quelle raison ?
mon
9. En quelle année a commencé la Révolution française (entoure)

1589

1689
1789
1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?
non

Merci d'avoir bien voulu répondre à ce questionnaire.

QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)

CLASSE: 3¢ /DATE DE NAISSANCE: 29/08/95/SEXE: marontion/COLLEGE

1. Cite deux sujéts qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette

2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année* Fadtarisation (miu c'our bin quand mita)
3. As-tu éprouvé des difficultés en mathématiques? Si oui, Dans quel (s) domaine(s) ? (entoure)

Algèbre
Géométrie
Calcul
Trigonométrie
4. Jusqu'où penses-tu poursuivre tes études avant de chercher un travail (entoure)
-formation professionnelle
-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

* ton père: - oty d'entreprite,
ta mère:

6. Quelle partie du cours de français te plait le plus (entoure)
l'étude des textes en prose

| l'étude de la poésie | Collège "LEI GARRUS" Proviso Quartier MIRADE |
| :---: | :---: |
| P'étude de la grammaire | Tél: 0494781506 |

écrire des textes
7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
-un parent ou quelqu un de ta famille
-personne, tu te débrouilles seul (e)
8. As-tu été absent(e) du collège les sept derniers jours ? Si oui, pour quelle raison ?

9. En quelle année a commencé la Révolution française (entoure)

1589

1689
1789
1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ? nen

Merci d'avoir bien voulu répondre à ce questionnaire.
De rien.

QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)

CLASSE: $3^{\circ} \mathrm{A}$ /DATE DE NAISSANCE: $\mu$ Mo/gS /SEXE: $M$ /COLLEGE Leigarik.

1. Cite deux sujets quil t'ont particulièrement intéressé(e) dans le programme de mathématiques cette

2. Cite le sujet quii t'a le moins intéressé dans le programme de mathématiques cette année* Polygones régulier.
3. As-tu éprouvé des difficultés en mathématiques? Si oui, Dans quel ( s ) domaine(s) ? (entoure )

Algèbre
Géométrie
Calcul

Trigonométrie
4. Jusqu'où penses-tu poursuivre tes études avant de chercher un travail (entoure)
-formation professionnelle
-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

* ton père:--.-Policier /
ta mère:-Assistante als.alured

6. Quelle partie du cours de français te plait le plus (entoure)
l'étude des textes en prose
l'étude de la poésie

## (écrire des textes

7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
-in parent ou quelqu'un de ta famille
-personne, tu te débrouilles seul (e)
8. As-tu été absent(e) du collège les sept derniers jours ? Si oui, pour quelle raison ?

9. En quelle année a commencé la Révolution française (entoure)

1589

1689
1789
1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?

Merci d'avoir bien voulu répondre à ce questionnaire.

```
QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)
```

CLASSE:3'A CTICIIC/DATE DE NAISSANCE: O31O4/94 /SEXE: F /COLLEGE

1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette

2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année*
3. As-tu éprouvé des difficultés en mathématiques ? Si oui, Dans quel (s) domaine(s) ? (entoure )

Algèbre
Géométrie

## Calcul

Trigonométrie
4. Jusqu'où penses-tu poursuivre tes études avant de chercher un travail (entoure)

```
-formation professionnelle
-baccalauréat
-licence
-grandes écoles
-université
```

    5. Quelle est la profession de tes parents:
    - ton pere: informaticion, chof a'entre priso
ta mere technicienve

6. Quelle partie du cours de français te plaít le plus (entoure)
l'étude des textes en prose
r'étude de la poésie
l'étude de la grammaire

## écrire des textes

7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
un parent ou quelqu'un de ta famille
-personne, tu te débrouilles seul (e)
8. As-tu été absent(e) du collège les sept derniers jours? Si oui, pour quelle raison ?

9. En quelle année a commencé la Révolution française (entoure)

1589 je no scuis pas
1689

1789
1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?
Oui,

lune fo's

Merci d'avoir bien voulu répondre à ce questionnaire.

```
QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)
```

1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette année $\qquad$ Aluown
2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année* TOUT
3. As-tu éprouvé des difficultés en mathématiques ? Si oui, Dans quel (s) domaine(s) ? (entoure )

## Algèbre

Géométrity

## Calcul)

Trigonométrie
4. Jusqu'où penses-tu poursuivre tes études avant de chercher un travail (entoure)
-formation professionnelle
-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

- ton père: Mócanicien - /
ta mère:-Enployf cormmencial.

6. Quelle partie du cours de français te plaît le plus (entoure)
l'étude des textes en prose
l'étude de la poésie
rétude de la grammaire

écrire des textes
7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
-un parent ou quelqu'un de is famille
-personne, tu te débrouilles seul (e)
8. As-tu été absent(e) du collège les sept derniers jours ? Si oui, pour quelle raison ?

Gui, pour un stage
9. En quelle année a commencé la Révolution française (entoure)

1589
1689
1789
1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?

Oui la zème, l'année demiêre.
J'ai padou blé 1 fois.
Merci d'avoir bien voulu répondre à ce questionnaire.

## Annex J. -Answers of French students to main survey

## QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)

Classe: $3^{\circ} \mathrm{B} \quad /$ DATE de naissance: $27 / 121999$ /SEXE: M. /COLLEGE léc Garruo

1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette année . 8 b the tornsme de Pilhas cos.
2. Cite le sujet qui t'a le moins intéressé dans le programme de mathémątiques cette année* les inctenvile semoncarle ex. Gs ise quatrion.
3. As-tu éprouvé des difficultés en mathématiques ? Si oui, Dans quel ( $s$ ) domaine(s) ? (entoure )

## Algèbre

Géométrie
Calcul
Trigonométrie
4. Jusqu'où penses-tu poursuivre tes études avant de chercher un travail (entoure)
-formation professionnelle
-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

* ton père /
ta mère- Ssusies es (hopirale.

6. Quelle partie du cours de français te plaît le plus (entoure)

Yétude des textes en prose
l'étude de la poésie
l'étude de la grammaire
écrire des textes
7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
-un parent ou quelqu'un de ta famille

## personne, tu te débrouilles seul (e)

8. As-tu été absent(e) du collège les sept derniers jours ? Si oui, pour quelle raison ?
9. En quelle année a commencé la Révolution française (entoure)

1589
?
1689
1789

1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?


Merci d'avoir bien voulu répondre à ce questionnaire.

$$
\sum<r i \infty
$$

## QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)

CLASSE: /DATEDE NAISSANCE: 2O/O1/96 /SEXE: Femirin /COLLEGE<br>$3^{e} E$<br>bi-garraco.

1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette année ...équations $\qquad$ et Pythigore $\qquad$
2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année* thale's.
3. As-tu éprouvé des difficultés en mathématiques ? Si oui, Dans quel (s) domaine(s) ? (entoure )

## Algèbre

Géométrie
Calcul

Trigonométrie
4. Jusqu'oủ penses-tu poursuivre tes études avant de chercher un travail (entoure)
-formation professionnelle
-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

- ton père : chauffour-Livreur,
ta mère:........-

6. Quelle partie du cours de français te plaït le plus (entoure)

P'étude des textes en prose
l'étude de la poésie
l'étude de la grammaire
écrire des textes
7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
-un parent ou quelqu'un de ta famille
-personne, tu te débrouilles seul (e)
8. As-tu été absent(e) du collège les sept derniers jours ? Si oui, pour quelle raison ?

9. En quelle année a commencé la Révolution française (entoure)

1589
1689
1789
1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?


Merci d'avoir bien voulu répondre à ce questionnaire.

QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)
CLASSE:
/ Date de naissance: $27 / 01 / 96 /$ /sexe: $M$
/COLLEGE
$3^{\circ} \mathrm{E}$

1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette année ..SINUS.LCsinus Ito $P$ PGCD
2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année*
3. As-tu éprouvé des difficultés en mathématiques? Si oui, Dans quel (s) domaine(s) ? (entoure )

Algèbre
Géométrie
Calcul
Trigonométrie
4. Jusqu'oủ penses-tu poursuivre tes études avant de chercher un travail (entoure)
-formation professionnelle
-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

* ton père: Chimiote ,
ta mère:
11

6. Quelle partie du cours de français te plait le plus (entoure)

P'étude des textes en prose
l'étude de la poésie
'étude de la grammaire
écrire des textes
7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
-un parent ou quelqu'un de ta famille
-personne, tu te débrouilles seul (e)
8. As-tu été absent(e) du collège les sept derniers jours ? Si oui, pour quelle raison ?

9. En quelle année a commencé la Révolution française (entoure)

1589
1689
1789
1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?


Merci d'avoir bien voulu répondre à ce questionnaire.

## CLASSE: $3^{\circ} \mathrm{B} \quad /$ DATE DE NAISSANCE:03/09/96 /SEXE: Masulin /COLLEGE

Lei Garrus.

1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette année ........he.......thardme.....de....pythagure......................................
2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année* Le ińquations.
3. As-tu éprouvé des difficultés en mathématiques ? Si oui, Dans quel (s) domaine(s) ? (entoure)

## Algèbr

Géométrie


Trigonométrie
4. Jusqu'où penses-tu poursuivre tes études avant de chercher un travail (entoure)

## -formation professionnelle

-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

- ton père : ontereprise tof cusementy
ta mère:- Sans.

6. Quelle partie du cours de français te plait le plus (entoure)
l'étude des textes en prose
l'étude de la poésie
l'étude de la grammaire

## écrire des textes

7. pour tes devoirs, tu demandes de l'aide à (entoure)
-un tuteur
-un parent ou quelqu'un de ta famille
-personne, tu te débrouilles seul (e)
8. As-tu été absent(e) du collège les sept derniers jours? Si oui, pour quelle raison?
...nom
9. En quelle année a commencé la Révolution française (entoure)

1589
1689
1789
1889
10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?
famais

Merci d'avoir bien voulu répondre à ce questionnaire.
derien.

## QUESTIONNAIRE pour les ELEVES DE TROISIEME DE COLLEGE (FRANCE)

CLASSE: 3 eB / DATE DE NAISSANCE: $03109 / 96$ /SEXE: forminin /COLLEGELeiGQNuEs. ;

1. Cite deux sujets qui t'ont particulièrement intéressé(e) dans le programme de mathématiques cette année Colcul liltaual ot équations Linóquations
2. Cite le sujet qui t'a le moins intéressé dans le programme de mathématiques cette année* angles inscrits anglos au contile.
3. As-tú éprouvé des difficultes en mathématiques ? Si oui, Dans quel (s) domaine(s) ? (entoure) Non,

## Algèbre

Géométrie

Calcul
Trigonométrie
4. Jusqu'où penses-tu poursuivre tes études avant de chercher un travail (entoure)
-formation professionnelle
-baccalauréat
-licence
-grandes écoles
-université
5. Quelle est la profession de tes parents:

* ton père: vendeus. $\qquad$ /
ta mère:Conseill dre bancaine

6. Quelle partie du cours de français te plait le plus (entoure)
l'étude des textes en prose
l'étude de la poésie
l'étude de la grammaire
```
écrire des textes
    7. pour tes devoirs, tu demandes de l'aide à (entoure)
    -un tuteur
    -un parent ou quelqu'un de ta famille
```

    Rersonne, tu te débrouilles seul (e)
    8. As-tu été absent(e) du collège les sept derniers jours ? Si oui, pour quelle raison?
    Non
    9. En quelle année a commencé la Révolution française (entoure)
    1589
    1689
    1789
    1889
    10. As-tu déjà redoublé durant tes études ? Si oui, combien de fois et quelles années ?

Non.

Merci d'avoir bien voulu répondre à ce questionnaire.
De rien.

## Annex K．Answers of Indian students to preliminary survey

## নবম শ্রেনীর（IX）ছাত্র／ছাত্রীদের সমীক্⿰ার জন্য প্রশ্নপত্র ：

एन्म जारिश：3क1997

－भाजिিनिত $\square$
－श्याविति $\square$
＊बिद्यোপামিिक

－मব जशハাই $\square$
＊बোন जशハब नया
$\square$

＊माध्रविक $\square$
＊উफमाधायिक $\square$
＊बख्यেन অन्दून

－भলिढेকनिक $\square$

＊भ্রাতक

＊आানোলেল্যে $\square$

－बादा

उप 极

＊গদ্যাeশ $\square$
＊পদ্যাঁশ $\square$
＊বাকরศ

©1 তোমার পড়াতনা লার ততৃাবধানে হয়্র－
＊গৃৃথিক্কের্গ
＊अडिडाব＜大কর


＊काর़ा नয় $\square$
$\square$


＊1st জनूयाइडी $\square$
－ 15 आ泉 $\square$
－ 26 छानूयाबी

＊2nd অन্धোবর $\square$

250920

＊शो＊नाँ

सांक्ना，जीरण किज्युान
विभ্木াनয়ের नाম： सु


## নবম শ্রেনীর (IX) ছাত্র/ছাত্রীদের সমীকার জন্য ধশ্নপত্র:

बन्म जात्रिथ : 1944
लिभ: - ছाब / एाब्तों


* বोजগनिত $\square$
* भाটির্গিিত $\square$
- घ্যামিতি $\square$ * ब্রিকোোমিিি


২। তুমি কোন পর্ষত্ত পড়ালোনা কর্রতে চাও ?

* মाधाমिक

* পলিটৌ"बनिक

* উकमाधाমिक
- खड्यেन्ট जन्दून्भ $\square$
* স্যাতক

- म্রাতোর্লাতর $\square$
৩) তোমার ‘বাবা’ ও ‘মা’ এর भেশা কি ?
* बाया $\qquad$ वर्णचिकीखि * म $\qquad$
81 বাংলা পাঠ্যু্রেন কোন অংশ তোমান পড়তে ভালো লাগে ?
- গদ্ताशब

* শদ্যাए। $\square$
* বাককন্গ $\square$
(«) ঢোমার পড়াख্তনা কার তত্রাবষানে হয্ন -
* अভिलाবকেল্ল

* গूरीিझक \& अভिভाবক
* करूরा नয় $\square$
$\square$
(৬) গ丁মসে তুমি কতमिन বিদ্যালয়ে অनুপস্থিত ছিনে ? অनूপস্থিতিন্ন প্পষান কারণ বি ?

91 ढোন দিনটিকে ভারতেত গণতষ্ष্র দিবস হিসাবে চিহ্তিত করা হয় ?

* 1st बानूखুারী $\square$ - 26 बानूয়ারী

* 15 आø建

* 2nd অढ্টোবর




जशी * ना

य०लन, ऊीच चिलकुत
বিদ্যালয়ের नাম: $\qquad$



## নবম শ্রেনীর（IX）ছাত্র／ছাত্রীদের সयীझ্ञার জন্য श্యমপত্র：

 खन्म जब्रिए ：．ग9）จे9s1 অक्षের পাঠ্যক্রমের কোন অеশে তোমান দুর্বলত আছে ？
＊বोबभनिए $\square$
＊পাबिर्গानिए $\square$
＊ज्यामिতि $\square$
 $\square$
＊मब অशバई $\qquad$ －दब小न खणखেই नड़ा $\square$

21 তুমি কোন পর্ষষ্ত পড়ালোনা কর্জত চাও ？
＊माधायिक $\square$
＊পলিটেককনিক

＊উफ্দমাধ্ধমিক

＊म্মাতক


－প্রাতোলোজ্র $\square$

৩）তোমার ‘বাবা’ ৪＇মা’ এর্ন পেশা कि ？
＊बादा
 ．मा डरू र्यू

81 বাश्লা পাঠ্যুমের কোন অংশ তোমার পড়তে ভানো লাগে ？
＊গদ্যাeশ

＊পদ্যাःশ $\square$
＊बाकबत्ञ $\square$
«। তোমার পড়াওনা কার তত্হাবধানে হয়－
＋अधिडाবढ़र $\square$

＊काड़ारा नয় $\square$



－1st आानूয়ারী $\square$ － 26 জानूয়ারী


जरहण सरि श्रूवि

－री

> * ना


$$
\text { साप्जा, } 2 \text { م220 }
$$

বিলালয়ের नाম：


## नবম শ্রেনীর（IX）ছাত্র／ছাত্রীদের সমীক্⿰ার জন্য ষ্ণশ্ণপত্র：

बन्य जর্बिथ ： $\qquad$ 19961997

निभ：－एबब／छोड़ी



२1 पूमि दোন পर्यন্ঠ পড়ালোনা কর্তে চাও ？
＊आधाविक $\square$
＊भলिढ़কनिक

＊উफमधानिक $\square$
＊माजक $\checkmark$
＊इब्यान बन्दान
＊भाजতাबে／্র $\square$

৩）তোমার ‘বাবা’’ ও＇মা’ এর পেশা কি ？
－बादा $\qquad$ ＊गा $\qquad$

＊5／hyाex

－প্যাएশ $\square$
＊बााकন্नब $\square$
（4．）ঢোমার পড়াশ্লনা কান্র তজ্ৰাবধানে হ্য－
＊গृरশিকক大্রে


＊কারো नয় $\square$
$\square$


＊1st Gानूया़ी $\square$ ＊ 26 जनूनाब़ी

＊ 15 आधाष्ट $\square$ －2nd অढ्द⿸厂 $\square$

जरुणजा रूेने

－आा
＊ना

शिदन बिक्रुन जयं，रूश्रु
दिम्यानख़ের नाম： $\qquad$


## নবম শ্রেনীর（IX）ছাত্র／ছাত্রীদের সমীক্ষার জন্য ஜ্থশ্নপত্র：

खना जार्रिथ ：つつ） 2 \＆
लिश ：－श्रর／ছाड़ी



২1．पूমি কোন পর্যন পড়াণোনা ক্যচত চাও ？


৩）ঢোমার ‘বাবা’＇＇মা’ बর পেনা কি ？
＊बादा
जनमझुT ＊गा प्रुकर्क

＊গদ্যাং＂ $\square$
＊পদ্যাएশ $\square$ ＊ব্যাক্রুণ $\square$
«1 ঢোমার পড়াত্না কার তত্রাবষানে হয়－
＊গৃशশিক্ষকের্ন
＊अ刃िखाबदকর


＊কারো নয় $\square$




b－1 এ পর্যন্ত তুমি কোন ক্সাসে অকৃতকার্य হক়্েছ ？ক্তবার ？
कान यौ नचु।
৯）』 বছর তুমি স্কুল शেকে＜োन अशिक সাহया ӊেয়ো कि？
＊रूत्रा
＊ना

－2（ब刀）$-4 \sqrt{2}$
बिদालड़ের नाম ： $\qquad$ $-$

## Annex L．Answers of Indian students to main survey

## নবম শ্রেনীর（IX）ছাত্র／ছাত্রীদের সমীক্ষার জন্য প্ৰণপত্র：

बन्म जातिथ：$\partial 2) \stackrel{2}{2}$


－दौसभनिত $\square$
－भाঢिशीविज
＊ख্যামিতি $\square$ ＊ब্রিকোেোমিতি

＊गব जएथか $\square$ ＊＜बनन जश्लশई नड़ $\square$

2）তুমি কোন পর্যন্ত পড়ালোনা করজে চাও ？
＊माधायिक $\square$
＊উफมाध্রমिक $\square$ ＊बत्यেनট बन्दुान्त्र $\square$
＊পলিটেকন্কিক $\square$ ＊স্রাতक

－স্মারোরোত্র $\square$
（－）তোমার ‘বাবা＂B＇ম্যা’ ज্র পেশা কি ？
＊बादा $\qquad$ कृसिशी ही

81 বাथলা পাঠ্যু্রুমে কোন অংশ তোমার পড়তেে ভালো লালে？？
＊গদ্যাং＂ $\square$ ＊পদ্যাং $\square$ ＊ब्याকরव $\square$
Q1 তোমার পড়াधनা কার্র उত্বাবষাनে হয়－
＊গৃহশিকক্কেন্ন
＊अडिভাবককে

＊গুহিিক্ক ও अভिडाবক
＊काর্রা नয়



$$
22 \text { - आागोरो जनझior ag }
$$


＊1st खानूয়ाরী $\square$ ＊ 26 জानूयाय़ी

＊ 15 आগ唐

－2nd जढ़্কোবর $\square$

जा

৯। এ বছর ঢুমি স্কুল てেকে কোন আর্থিক সাহাय چেয়েছ কি ？

> - श
－नो
शृर्यद
．गा $\qquad$

## 

জन्म তার্बিখ ： $\qquad$ －22 $2(2$


निकः－फुत्र／可迆
＞1 অक্षের পাঠাত্রম্মের কোন অशশে তোমার দুর্বনতা আছে ？


र। তুমি কোন পর্यঠ্ঠ পড়ালোনা কবতে চাও ？
＊মাধামিক

－পলিটেকনিক

＊উकमाध्यशिक $\square$
＊मानक

 $\square$
৩）তোমার＇বাবা＇в＇মা＇এর পেশা কি ？
＊बादा EमयबIsi
$\qquad$ ＊गा

＊সাতোলোতর $\square$

81 বাशना পাঠगক্মে রোন অशশ তোমার পড়তে ভালো লাগে ？
＊भদ্যाशख $\square$ ＊भদ্যাংশ $\square$ ＊ব্যাब्নव $\square$

Q1 তোমার পড়াওনা কার তত্রাবथানে হয়－
$\square$
＊अडिভाবকেন্ল

＊গৃথশিক্ষক 18 अভিভাবক
＊काরো नয $\square$



＊1st जानूয়ाबती $\square$ ＊ 26 खानूयाड़ी

＊ 15 আগষ্ট

＊2nd অ㡽াবর

b－এ পর্यস্ঠ তুমি কোন ক্রাসে অকৃতকার্य হয়েए ？কতবান ？

৯）এ বছর তুমি স্কুল থেকে কোন আর্থিক সাহাযা পেয়েছ কি ？
＊श $\downarrow$＊ना

＊गxizn＊cerg रिख्रुत
বিদ্যাল্যের नाम： $\qquad$


## নবম শ্রেনীর（IX）ছাত্র／ছাত্রীদের সমীক্ষার জন্য প্রন্নপত্র：

बन्म जाরিश ：つつ）》 2


＊বोधगनिए
$\square$
＊भটिি্গািিত
＊জाামিতি $\square$
＊সব অரশ্ই $\square$
＊बিকেেেোমিতি $\square$
＊কোন অাঙ্রে নয়


২। ডুমি কোন পর্यন্ত পড়ালোনা কব্রতে চাও ？
＊মাষ্যমिक $\square$ ＊উচ্চমাध্যিि $\square$ ＊জढ্যেन्ট এन्धाাम $\square$
＊পলিऐৌनिক $\square$ ＊স্वाতक $\square$
＊স্নাজোবোজ্র


ज）তোমার ‘বাবা’ ও ‘মা＇এর ӊেশা दि ？

－गा


81 বাহলা পাঠায্রমের কোন অएশ তোমার্র পড়তে ভানো নাগে ？
＊গদ্যাংশ $\square$ ＊পদ্যাएশ

＊ब्याबत्रन $\square$
（ৰ। তোমার পড়াত্না কার্ন তত্রাবষানে হয়্য－
＊গৃशশিক্ষকের্র

＊काরো নয়



＊1st बानুয়ারী $\square$ ＊ 26 জानूয়ারী

＊ 15 आभंष्ध $\square$ ＊2nd जট্টাবর $\square$



＊शौ＊ना
Sol বিদ্যালয় পাঠ্যক্নে কোন ইটি বিষয় ঢোমার পড়তত সরচাইতে ভালো লাগে？
बनलन，हङाल ।
বিদালয়ের नাম： $\qquad$ ev


## 

জन्म তার্রিथ A/4t/10995 9/4/1995 लिध : - एब्ब / एाबो



২। पूমি কোন পর্ষন্ঠ পড়ালোনা করত্ে চাও ?

* गाथ्यविक $\square$
* भनिएうलनिक

* ऊक्याधविक्य
- मांजक

* एल्यেय্ট बनाम $\square$
* आাত্তােোबs $\square$

- बाया $\square$ के० हि? * गा $\qquad$ sč2 सर्थि

* গुजाएवस

* बाক্রब $\square$
(ब) ঢোমার্ পড়া৫না কার্র তড্ৰাবষানে হয় -
* अडिडाবद大কু

* গृఇশিক্ষক ও অडिভ|বক
* काज़ো नय $\square$
$\square$


* 1st छनूयूाड़ी $\square$ * 26 बानुगयाब़ी

* 15 आबाष $\square$
 $\square$


. शो
* ना

विमाबड़ुत नागः



## নবম শ্রেনীর（IX）ছাত্র／ছাত্রীদের সমীক্ফার জন্য প্ৰম্ণপ্র：

बन्म जाর্রিश ： $\qquad$ 1997

लिञ ：－ছाত্র／ছाত্রী

－बीजर्ञनिए $\square$
＊भाঢिभिविज
＊छार्शिक $\square$
 $\square$
＊बिढ़ानानार्यिक $\square$
＊रु小न जशल
$\square$


＊भनिढ़কनिक


＊मাতक

＊बไ্রেন बनुुन्म $\square$
＊মানতাকোভs $\square$

ज）তোমান ‘বাবা’＊＇মা’ এর পেশা কি？
－वाবा $\qquad$ का शे श्यद्य
．गा รशर्यद

＊গগ্যা＜

＊পদ্যাথশ $\square$
＊वाকत্রव $\square$
（4）ढতোমা木 পড়া৫नা কান্র তত্থাবধানে হয়－






＊1st জानूयाड़ी＊ 26 जानूयाड़ी

－ 15 आभ⿸⿻一丿口子

＊2nd जॉ্টোবর


ज्युणकान एय़ि

－श
＊ना

रैधिशा，रू० नीड्य
विमानढ़ाর नाমः



[^0]:    ${ }^{1}$ Students who repeated at least one grade have $77 \%$ of dropout compared to $25 \%$ for students who never repeated a grade ('The path of dropping out', Roderick 1993, p. 103).

[^1]:    2 "America's lost boy": http://www.dailymail.co.uk. The psychologist Leonard Sax has pointed to the greater success of countries like Finland, where children don't start their formal schooling until the age of seven. This created a 'new debate' about the proper age of the students in formal schooling.
    ${ }^{3}$ Literacy rate of India-2011, www.Indianonlinepages.com

[^2]:    ${ }^{4}$ IUFM: Institut Universitaire de Formation des Maîtres (Teachers Training College in France), replaced by ESPE (Superior School For Teaching and Education) since September 1 ${ }^{\text {st }}, 2013$.
    ${ }^{5}$ Le projet académique (2010-4), Académie de Nice. Les sorties sans qualification, p. 16.
    ${ }^{6}$ Z.E.P. (Zone d'Education Prioritaire) in this institution most of the students are from working or unemployed families. In 2005, 877 «collèges » in France were ZEP (Auduc, J.-L., Le système éducatif, Hachette, 2005, p. 308).

[^3]:    ${ }^{7}$ S.R.I. (Social \& Rural Research Institute) provided statistics in 2009 with the collaboration of Indian government about the dropout and the not-enrolment in school of students aged 6 to 13 years.

[^4]:    ${ }^{8}$ Pratichi trust was founded by Amarya Sen, a Nobel laureate, whose research relates to primary education and child health in India and in Bangladesh.

[^5]:    ${ }^{9}$ The Right of Children to Free and Compulsory Education Act, or Right to Education Act (RTE) was passed by the India parliament on $4^{\text {th }}$ August 2009.

[^6]:    ${ }^{10}$ Les élèves qui redoublent au moins une année ont $77 \%$ de risques de décrochage alors que les élèves qui n'ont jamais redoublé n'en ont que $25 \%$ ('Path of dropping out', Roderick 1993, p. 103).
    11 "America's lost boy": http://www.dailymail.co.uk. Le psychologue Leonard Sax a mis l'accent sur les meilleurs résultats de pays comme la Finlande, où les enfants ne commencent pas leur scolarité formelle avant l'âge de 7 ans. Ceci a provoqué un 'nouveau débat' sur l'âge convenable pour le début de l'enseignement formel.
    ${ }^{12}$ Taux d'alphabétisation de l'Inde-2011, www.Indianonlinepages.com

[^7]:    ${ }^{13}$ Les IUFM, Instituts Universitaires de Formation des Maîtres, ont été remplacés par les ESPE (Écoles Supérieures du Professorat et de l'Éducation le 1 ${ }^{\text {er }}$ septembre 2013.
    ${ }^{14}$ Le projet académique (2010-4), Académie de Nice. Les sorties sans qualification, p. 16.

[^8]:    ${ }^{15}$ Dans les Z.E.P. (Zones d'Éducation Prioritaire), la plupart des élèves appartiennent à des familles dont les parents ont des emplois faiblement rémunérés ou sont chômeurs. En 2005, il y avait 877 collèges ZEP en France. (Auduc, J.-L., Le système éducatif, Hachette, 2005, p. 308).

[^9]:    ${ }^{16}$ Le S.R.I. (Social \& Rural Research Institute: 'Institut de recherche sur la ruralité et la société') a réalisé des statistiques en 2009 avec la collaboration du gouvernement indien sur le décrochage scolaire et la non-inscription à l'école des enfants de 6 à 13 ans.

[^10]:    ${ }^{17}$ La fondation Pratichi a été créée par Amartya Sen, lauréat du Nobel dont les recherches portent sur l'éducation primaire et la santé de l'enfant en Inde et au Bengladesh.

[^11]:    ${ }^{18}$ L'Acte sur le droit des enfants à une éducation gratuite et obligatoire, ou Acte du droit à l'éducation (RTE) a été voté par le parlement indien le 4 août 2009.

[^12]:    ${ }^{19}$ Durkheim (1858-1917) explained: "Throughout the whole history of human society, education has been a product of the social classes. The content and orientation of education are therefore determined by the social classes which are in power" - it is called social transformation" (quoted in Power and ideology in education, Karabel, J., Halsey, A.H. eds., 1977, 92).

[^13]:    ${ }^{20}$ In 1972 UNESCO formed an international commission headed by the former French President du Conseil, Edgar Faure. The report of the commission was disclosed under the title "learning to be". In late sixties, a sense of unrest was witnessed in various agitations occurring in several countries. In this background, the report emphasised life-long education and focused on the learning societies.
    ${ }^{21}$ Sanskrit: it is an historical Indo-Aryan language i.e. many Indian languages (Bengali, Oriya) were originated from Sanskrit.
    ${ }^{22}$ Swami Vivekananda (1863-1902) was born at Kolkata in India. Vivekananda is considered as the pioneer of introducing Indian concept of religion, education and Yoga in Europe and America in $19^{\text {th }}$ century. Branches of 'Ramkrisna mission' (institution of education) which had been established by his followers are now widely spread not only in India but also abroad. His teachings influenced the thinking of many Indian national leaders and philosophers like Mahatma Gandhi, Subhas Chandra Bose, Arabinda Ghose and Radhakrisnan ('illustrated Biography of Swami Vivekananda'-published by Varun Publishing house, Lalkurti, Meerut, India, page-iv of preface).

[^14]:    ${ }^{23}$ According Rousseau, well regulated freedom provides the only valid basis and aim of sound education. Only through a constant self-improvement and self-understanding an individual can be truly happy. Rousseau's idea about child education brought an idea of alternative education which is different in view from formal education, resulting of which in the year 1909, Dr. Montessori conducted her first Montessori Course to teachers from around the world. Between 1939 and 1949, Maria Montessori conducted sixteen Indian Montessori Training Courses. So, Rousseau's ideas about child education brought in the form of Montessori teaching were included in the curriculum of teacher training courses in India since long ago. See for an example annex F.

[^15]:    ${ }^{24}$ The role of education system in the reproduction of the division of labour is the subject of much discussion in France. Althusser (1972) provides a theoretical analysis of the role of schools as ideological state apparatus in the perpetuation of capitalist hegemony.

[^16]:    ${ }^{25}$ Vedic period was the age when Vedas were composed and the knowledge was orally transmitted.

[^17]:    ${ }^{26}$ Hunter commission is recognized as the first education commission of India, established in $3{ }^{\text {rd }}$ February, 1882, and appointed by Lord Ripon (http://www.kkhsou.in) .

[^18]:    ${ }^{27}$ Ashoka the Great ruled India from 269 B. C. to his death in 232 . He was the first ruler to unify India.

[^19]:    ${ }^{28}$ Raja Ram Moha Roy is considered as the "Father of Modern India". By introducing western ideas belonging to liberal democracy and reaffirming his faith in Avinta Vedanta, he gave a direction to the course of India's future development. It was the result of his persistent campaign that the cruel custom of Sati (in which married women were forced to burn alive with the dead body of their husband) was declared illegal in 1829 by W. Bentick. Besides, he translated Vedic scriptures into English.
    ${ }^{29}$ Education in the Roman Empire, www.articlemyriad.com
    ${ }^{30}$ Mediterranean Basin chronology: David Koeller, 2003 (http://www.thenagain.info ).

[^20]:    ${ }^{31}$ Falloux's law (1863) created one academy by department decentralising university of France.
    ${ }^{32}$ Mudaliar commission (1952-53) was the second education commission of the Republic of India.

[^21]:    ${ }^{33}$ Today's $10+2$ arrangement of secondary education system was first planed by Kothari commission.
    ${ }^{34}$ Loi Haby established the current system of single low secondary school ("le collège unique").

[^22]:    ${ }^{35}$ Source: ‘The Hindu Business line', http://www.thehindubusinessline.com/industry-and-economy/economy

[^23]:    ${ }^{36}$ In India, average teacher/student ratio is $1: 40$ but it is worse in Bihar (1:83), which is a province of India. In France, teacher/student ratio was 1:25 in 2011 in collège and lycée, this ratio is the worst of the 34 O.E.C.D. countries (MEN, 2012, Les chiffres clefs du système éducatif). In fact, students per teacher ratio are close to average in collège and lycée, but very low in primary school and university.

[^24]:    ${ }^{28}$ Primary education of West-Bengal (province of India where the survey work of this study has been conducted) extends up to 4 years ( 1 to 4 ), but in other zones it continues for 5 years.

[^25]:    ${ }^{38}$ Mathematics and French special classes are arranged for the students when it is urged by their parents or recommended by subject teachers.
    ${ }^{39}$ 'Levels of three stages': Jean- Louis Auduc (2008), Le système éducatif, Paris: Hachette (2011), p. 17.

[^26]:    ${ }^{40}$ According to law weekly 26 hours duration is allotted for a primary student.

[^27]:    ${ }^{41}$ In 1975, French collège became the site of a uniform curriculum which was offered to every student by Haby's law.
    ${ }^{42}$ The three indicators of lycée are available in 'Lycée performance table'- education.gouv.fr

[^28]:    ${ }^{43}$ There is reservation system for the Z.E.P students to get admission in 'grandes écoles' which is similar to the caste reservation system in India.

[^29]:    ${ }^{44}$ Repères et références statistiques (RERS-2011) http:// www.inca.org.uk- 'organisation of school year \& school day', December, 2011.

[^30]:    ${ }^{45}$ According to RTE act-2009 of India, in an academic year, it is mandatory for the schools to arrange 200 days teaching provision to standard 1 to v standard students and 220 days for VI to VIII standard students.
    ${ }^{46}$ Toussaint is the French holiday in the remembrance of saints which is comparable to the Dussehra of India which is celebrated throughout the country in the worship of God.

[^31]:    ${ }^{47}$ In the three zones of metropolitan France, C zone is the smallest with Bordeaux, Créteil, Paris and Versailles.

[^32]:    ${ }^{48}$ http://www.enpferney.org/secondary/new pupils hand book.htm

[^33]:    ${ }^{49}$ Date and marks divisions of $1^{\text {st }}$ unit test, WBBSE -2012, (wbbse.org/notice.htm ).

[^34]:    ${ }^{50}$ From 2009, C.B.S.E (Central Board of Secondary Education of India) took the decision to treat secondary examination as optional for the students instead of compulsory.

[^35]:    ${ }^{51}$ NCERT -National Council for Educational Research and Training assumes a huge responsibility in building curriculum, setting teacher's training, etc.

[^36]:    52 "La France dans PISA-2009" shows how students are being polarized regarding their reading skills; it also provides the information of upcoming reforms.

[^37]:    ${ }^{53}$ Trends of student enrolment in lycée in consecutive decades, In Jean- Louis Auduc (2008), Le système éducatif, Paris: Hachette, p. 21).

[^38]:    ${ }^{54}$ From 1858 to 1912, during British period, Calcutta, now capital of West Bengal, was the capital of India. At this time, West Bengal played a central role in India and was the source of many educational movements. In this study we first discuss about the educational status of West Bengal, then of India.

[^39]:    ${ }^{55}$ DISE (District Information System of Education), collects every year datas from the schools of the different states, and points what it is possible to know of the various aspects of Indian school system. In this study we have attached a sample of DISE in Annex-F.
    ${ }^{56}$ In this study the statistical reports of ASER (2011), SRI (2010) and 'Pratichi trust' (2009) have been used frequently to understand the status of Indian education, as well as the 'The state of education no16 (2006 issue), projet_academie_nice_20102014_livret2, Eurostat, to find out the different events of school system in French education.

[^40]:    ${ }^{57}$ La nouvelle organisation du temps scolaire à l'école, www.education.gouv.fr

[^41]:    58 "After an embarrassing show in 2009, India has backed out of the Programme for International Student Assessment (PISA) slated for 2015", Hemali Chhapia, June, 1, 2013, Times of India.
    ${ }^{59}$ Ajay Shah's blog: The first PISA results for India: The end of the beginning, Times of India.
    ${ }^{60}$ Indian students fare poorly in international evaluation test, New Delhi, January, 16, 2012, The Hindu.
    ${ }^{61}$ India backs out of PISA again, Hemali Chhapia, Times of India.

[^42]:    ${ }^{62}$ 'Research paper in comparative and international education', p. 392, vol. 8, $\mathrm{n}^{\circ} 3,2013$, www.wwwords.co.uk/RCIE

[^43]:    ${ }^{63}$ In India, Lakh is utilized for 100 000, and Crore for 100 Laks, that is 10 million.

[^44]:    ${ }^{64}$ Conservation refers to the ability to determine that a certain quantity will remain the same despite adjustment of the container, shape, or apparent size (Wikipedia).

[^45]:    ${ }^{65}$ Self-determination theory (Desi and Ryan, 2000): Motivational characteristics are influential in shaping adolescents' desire to persist in some acts or to discontinue them. The self-determination theory is successful to explain the dropout's scenario of adolescents regarding sports activities.

[^46]:    ${ }^{66}$ June, 2014, Out of school children- Institut de statistique de l'Unesco, www.uis.unesco.org and the statistics released by the UIS and the Education for All Global Monitoring Report.

[^47]:    ${ }^{67}$ Equity and quality of education (page-21), http://www.oecd.org/education/school/50293148.pd

[^48]:    ${ }^{68}$ The state of education no. 16 (20006 issue)- In 1965, dropout rate was more than $35 \%$ in France, Academic de Nice: le projet académique 2010-2014: Status of dropout rate in France: Average Student dropout rate was $10.5 \%$ and $11 \%$ in $2005 \& 2007$.

[^49]:    ${ }^{69}$ Traduction: "In France, $13 \%$ of all 18 to 24 years old not in education have neither CAP, BEP or baccalauréat and are early leavers" in 2005. Making or not studies, $17 \%$ of young people aged 20 to 24 , have likewise neither CAP, BEP or baccalauréat (against $83 \%$ of graduates from upper secondary). In the generations of their parents (born in 1947à 1956), 4 in 10 are in this case".

[^50]:    ${ }^{70}$ The state of education no. 16 (20006 issue)- In 1965, dropout rate was more than $35 \%$ in France.
    ${ }^{71}$ Source: Gender issues and dropout rate in India, Ministry of Human Resource Development of India (13456) \& Rajya Sabha Unstarred Question No. 867, dated on30.11.2012, www.confabjournals.com/confabjournals/images/6520138445228.pdf

[^51]:    ${ }^{72}$ School enrolment, secondary, worldbank.org
    ${ }^{73}$ Source: UNESCO (2006): Education in India, 1998-99 and Selected Educational Statistics, 2002-03 www.hss.iitb.ac.in

[^52]:    ${ }^{74}$ According to the 2011 Census, Uttar Pradesh has the largest rural population in India
    ${ }^{75}$ To consult on http://rue89.nouvelobs.com/2014/07/01/ministere-devoile-carte-france-lechec-scolaire 253345.

[^53]:    ${ }^{76}$ http://www.cafepedagogique.net/lexpresso/Pages/2010/03/LChatelPlanluttecontreillettrisme.aspx

[^54]:    ${ }^{77}$ Jere Brophy, Grade repetition, education policy series, booklet (page-6), http://www.unesco.org

[^55]:    ${ }^{78}$ PISA IN FOCUS, 2011/6 (July) - © OECD 2011, page-1.

[^56]:    ${ }^{79}$ Elementary education in India, www.dise.in/Downloads/...10/Flash\%20Statistics\%202009-10.pdf

[^57]:    ${ }^{80}$ Lamb,S. Markussen,E. And Teese, R. School dropout and completion (page-2), editor: Sandberg, N. Polesel, J., Springer.

[^58]:    ${ }^{81}$ Agence Nationale de Lutte contre l'Illettrisme ; translation: National Agency for illiteracy's prevention.
    ${ }^{82}$ Source:Rapport: Prévention et lutte contre l'illettrisme, 232 pages, CNPTLV (Conseil National de la Formation Professionnelle Tout au Long de la Vie, translation: National Council of life long on training, 2013 December, Premier Minister, Adobe reader [0000[1].pdf], p. 17.
    ${ }^{83}$ Op. cit. p. 37.

[^59]:    ${ }^{84}$ See For Delhi's migrant children, a school under a bridge offers hope, First Post, 25 March 2015, http://www.firstpost.com/living/for-delhis-migrant-children-a-school-under-a-bridge-offers-hope-752975.html

[^60]:    ${ }^{85}$ STUDENT INDIVIDUALIZED GROWTH MODEL AND ASSESSMENT (SIGMA), Source: National Dropout Prevention Centre, "A School and Community Approach to Help Students Graduate," 2009 linux3.dti.supsi.ch/~mazza.
    Note: ISS here stands for Information of student system (page-3).

[^61]:    ${ }^{86}$ The council of ministers of education of Canada suggested developing adult learning and skill development programme as a prevention of dropout (school dropout and completion, page-313)

[^62]:    ${ }^{87}$ europe-2020-in-a-nutshell/targets/index_en.htm

[^63]:    ${ }^{88}$ R.M. Chetsingh (1980), The Indian Journal of Adult Education, Volume n 41.

[^64]:    ${ }^{89}$ Source: From Cultural diversity and education (2001), written by James.A.Banks, published by Allyn \& Bacon, Boston through Pearson education publishing ltd.

[^65]:    ${ }^{90}$ Early Grade Retention and Student Success ,Jill S. Cannon and Stephen Lipscomb, www.ppic.org

[^66]:    ${ }^{91}$ The figures have been quoted from New directions in Indian psychology (page-314) edited by A.K.Dalal and G.Misra and published in 2002 by Sage publications India pvt. Ltd, M-32 market, greater kailash, New-Delhi110048.

[^67]:    ${ }^{92}$ The Progress in International Reading Literacy Study (PIRLS) is a research study that provides both trend and snapshot information on the reading literacy of New Zealand's Year 5 students in both the international and national contexts. PIRLS-2010/2011 was the third cycle of the study to be administered. Reference http://www.educationcounts.govt.nz/publications/series/2539

[^68]:    ${ }^{93}$ PISA2009 PROFILES BY COUNTRY, stats.oecd.org

[^69]:    ${ }^{94}$ La France dans P.I.S.A.-2009,(7 ${ }^{\text {th }}$ December, 2010), media.education.gouv.fr

[^70]:    ${ }^{95}$ Source: Assemblée nationale, $\mathrm{n}^{\circ}$ 1295, Rapport d'information déposé par la mission d'information commune sur la politique d'éducation prioritaire, présenté par Mme Carole Delgard et M. Xavier Breton, députés, Adobe reader-[i1295[1].pdF]
    ${ }^{96}$ Source : http://www.education.gouv.fr/cid54176/pisa-2012-les-performances-des-eleves-francais-de-15-ans-restent-stables-en-comprehension-de-l-ecrit-et-en-culture-scientifique.html\#Chiffres-clés

[^71]:    ${ }^{97}$ Source : http://www.acer.edu.au/media/article/acer-releases-results-of-pisa-2009-participant-economies

[^72]:    ${ }^{98}$ Sample questionnaires of the survey have been attached in annex A and B.

[^73]:    ${ }^{99}$ State and local report have been found from Le Projet Académique 2010 2011,www.ac-nice.fr

[^74]:    ${ }^{100}$ This type of experimentation is also available in www.youtube.com/user/khan academy

[^75]:    ${ }^{101}$ Source: OCDE (2010) PISA 2009 Results, Volume IV, What makes a school successful? Resources, Policies and Practices, Figure IV.4.2, available at http://dx.doi.org/10;1787/888932343418

[^76]:    ${ }^{102}$ Association for Career and Technical Education, https://www.acteonline.org/ctu/

[^77]:    ${ }^{103}$ This issue was specifically discussed in UNESCO's Paris meeting in 1997.

[^78]:    ${ }^{104}$ Some international attempts in this regards have been commenced recently, www.youtube.com/user/khanacademy

[^79]:    ${ }^{105}$ The next World Education Forum will take place, May 19-22 2015, in Incheon, Republik of Corea. The proposed goal is Education and lifelong learning for all by 2030, with as theme :Transforming life through education. See http:///www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-forall/
    ${ }^{\frac{110}{106}}$ Maulik M. K. \& Biagioli N. Science dropout and remedial measures, JOSR Journal of Humanities and Social Science (JOSRJHSS) ISSN: 2279-0845 Volume 1, Issue 2 (sep.-oct 2012), pp 17-20. www.josrjournals.orgwww

[^80]:    ${ }^{107}$ Monitoring "at-risk" middle school students, WWW.ncmle.org/journal
    ${ }^{108}$ World declaration on 'education for all' and framework for action (UNESCO, 1990), Woman's education in developing countries: barrier, benefit and policy (World bank, 1991), The Delhi declaration a framework for action (UNESCO, 1993), The Salamanca statement and framework for action on special needs education (UNESCO, 1994), Beijing declaration and platform action (UNESCO, 1995), Increasing girls and women's participation in basic education (UNESCO, IIEP, 1997), Education for all: status and trends 2000 (UNESCO, 2000), The Dakar framework for action (UNESCO, 2000), Action against child labor (ILO, 2000), Children in the new millennium (UNEP, 2002), A future without child labor (ILO, 2002).

[^81]:    ${ }^{109}$ Cette question a fait l'objet d'une discussion spécifique lors de la rencontre de l'UNESCO qui a eu lieu à Paris en 1997.

[^82]:    110 Sur ce chapitre, certaines tentatives internationales ont récemment vu le jour, www.youtube.com/user/khanacademy

[^83]:    ${ }^{111}$ Le prochain Forum Mondial de l'Éducation aura lieu les 19-22 May 2015, à Incheon, République de Corée. L'objectif propose est Education et apprentissage tout au long de la vie pour tous en 2030, avec pour thème Transformer la vie à travers l'éducation. Voir http:///www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-all/
    ${ }^{112}$ Maulik M. K. \& Biagioli N. 'School drop out and remediation' ('Décrochage scientifique et remédiations'), JOSR Journal of Humanities and Social Science (JOSRJHSS) ISSN: 2279-0845 Volume 1, Issue 2 (sep.-oct 2012), pp 17-20. www.josrjournals.orgwww

[^84]:    ${ }^{113}$ Monitoring "at-risk" middle school students, www.ncmle.org/journal
    ${ }^{114}$ Déclaration mondiale sur l'éducation pour tous et cadre pour l'action (UNESCO, 1990), Éducation des femmes dans les pays en voie de développement : obstacles, bénéfices et politiques (Banque mondiale, 1991), La déclaration de Delhi : un cadre pour l'action (UNESCO, 1993), Le compte-rendu et cadre pour l'action de Salamanque sur les besoins éducatifs particuliers (UNESCO, 1994), la déclaration et la plateforme d'action de Pékin (UNESCO, 1995), Augmentation de la participation des filles et des femmes à l'éducation de base (UNESCO, IIEP, 1997), Education pour tous : statut et orientations 2000 (UNESCO, 2000), Le cadre pour l'action de Dakar (UNESCO, 2000), Action contre le travail des enfants (ILO, 2000), Les enfants dans le nouveau millénaire (UNEP, 2002), Un futur sans travail des enfants (ILO, 2002).

[^85]:    

[^86]:    

[^87]:    

