



THE IMPACTS OF A SCHOOL'S MANAGEMENT STRATEGY ON THE PERFORMANCE OF ITS EDUCATIONAL SYSTEM

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ABSTRACT

Since its independence, Madagascar has not been able to easily improve its economic situation. This situation is also reflected in the educational system. The economic incapacity justifies the long-term financial dependence of the Malagasy education system on international organizations. Despite this, the success rates in public schools are very low compared to those in private schools. The analysis of the results of a survey of a sample of 80 private school managers in the Antananarivo renivohitra Cisco, allowed us to detect the reasons for the success of the educational system of these schools. The pedagogical strategies and the management system that they have adopted play a major role in their performance. Discipline, culture, academic achievement, and the quality of educational services offered are the hallmarks of an effective private educational institution. At the same time, the experience of private schools in resource management, their organizational cultures and the satisfaction of their teachers, justify their performance.

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INTRODUCTION

Since its independence, Madagascar has not been able to effectively improve its economic situation. A large part of the population still remains in poverty. The reality shows that the efforts of the State to improve the different domains, including education, have not brought satisfactory results. Illiteracy is still a problem to be solved. In order to improve the performance of the education system, the Indian Ocean and East African countries have come together in the "Education for All" program, which consists mainly of sensitizing parents to send their children to school and improving the school completion rate. However, the country's economic incapacity remains a block to the realization of this program in public schools. The abandonment and absenteeism of students are added to the closure of public schools due to their poor condition and the impossibility of the state and parents to rehabilitate the destroyed buildings. The inadequacy and incompetence of the staff and the lack of teaching materials in almost all the public schools determine their failure.

It is for these various reasons that some parents turn to the private sector, which frequently shows positive results. According to the article written by LovaRabary RAKOTONDRAVONY¹(2006), 47% of students from second grade to 12th grade attend private high schools. This percentage already speaks for itself and leads us to ask the following questions: Is the education offered by private schools reliable and effective? If so, what are their secrets compared to those of public schools? How and what strategies and pedagogies have they adopted to be effective? Let's note that the insufficiency of public institutions gives birth to private institutions. The search for answers to these questions leads us to identify the reasons for the effectiveness of private schools. Thus, this research aims to analyze the effects of the strategies and pedagogies adopted by the leaders of private schools in the performance of their educational system. Our research problem will therefore be to determine: "By what actions do school leaders participate in the performance of private schools? ".

¹ Journaliste malgache

The main objective of this article is to verify whether human resource management and pedagogical disciplines condition the performance of a school. In order to answer this question, the methodology of this research is divided into three stages. The first step consists of qualitative research. A literature on the theme of education, pedagogy, strategy and performance has been prioritized. The second stage is devoted to the field survey whose results will be analyzed and interpreted in the third stage. In reference to our objective, a sample survey of school leaders was conducted in the Cisco of Antananarivo renivohitra. Our sample is composed of 80 school leaders. Our survey was only conducted among functional institutions with staff. From a proportion of 50% obtained in a sample of 80 observations, the estimated proportion in the population is within the range (or confidence interval): $39.04\% < p < 60.96\%$. The potential error is therefore 10.96%. More generally, the maximum error (reached for a frequency of 50%) on this sample is 10.96%, which characterizes its precision. This result, established at a 5% risk, is based on the theory of random sampling.

Among these targets, information related to their strategy, management system, pedagogy and performance should be collected. It is then of interest to know how the managers of private schools recruit, dismiss and motivate their teaching staff. We try to assess the influence of strategy on the performance of the institution, the understanding of the role of human resource management and the corporate culture. The validity of the information collected will be demonstrated by Chi-square and Fisher tests (testing for dependence between the variables: strategy, pedagogy and performance). Open and closed questions are formulated in our interview guides and survey questionnaire. An open-ended question can be numerical, non-numerical, or semi-open-ended. A closed-ended question can be a single-choice question; the interviewer has only one answer for each question asked. When there are multiple choices, a multiple-choice question is preferable. In the case of opinion evaluations, a two-answer question called a dichotomous question is used. Based on the overall purpose, specific objectives, hypotheses, and findings of this thesis, the research tools adopted are the use of dichotomous closed-ended questions, ordered and unordered multiple choice questions, and the Likert scale where measures are generally set from 1 to 4, specifically from "strongly disagree" to "strongly agree. The use of group variables or latent variables was also of fundamental use in our study where the associated items are generally constructed by theoretical bases or the results of interviews carried out beforehand. The data processing was carried out with the data analysis software Sphinx and SPSS. Indeed, various tests must be carried out on the results obtained to meet the requirements of a doctoral research. Thus, the use of robust statistical tools, such as the Chi-2-test, linear regression, uni and multivariate analysis and, first and foremost, the analysis of the reliability of the items in the latent variables using Cronbach's Alpha or the KMO index could prove judicious so that the scientific processing or validation of the information obtained could be relevant.

Conceptual and methodological bases of the study: Our basic training and experience in the field of education allowed us to identify the inconsistency of the education program with the requirements of the economic environment. This scourge pushed us to direct our research on the educational system in order to analyze the situation of failure from the root. Because knowledge is not easily acquired, the different entities

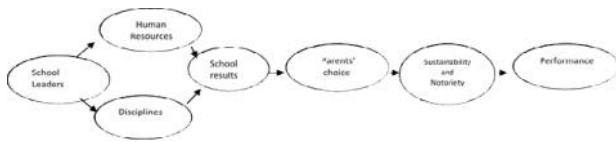
concerned, namely the State, school leaders, parents and teachers, must work together to find ways of transmitting knowledge. The stay at school has a particular importance in the being of the child, the essential lines of his attitude towards life. In order to help him to realize his vocation as a man, to do this, immerse him, from his arrival and during the whole time of his formation, in a bath of confidence and affection, of work and order. In the creation of this climate, the role of the educators seems to be of primary importance, hence the need for a school community. The school community is the group of teachers in a school, grouped around their principal, who is, in fact, the first educational environment. Scheerens² pointed out that managing a school, like any other organization, is about making a good allocation of the resources available to it to maximize the production of outputs. The author also showed that performance levels vary from one school to another and depend on the quality of management, the degree of commitment of the teaching staff in defining and pursuing pedagogical objectives, the quality of relations between teachers and students, and the quality of administrative and pedagogical management by the principal. Rocheleau³ in the same vein, he adds that in a successful school, the principal adopts a management style that is open to all stakeholders.

Our theme leads us to focus first on the prerequisites for the creation of a school and secondly on the management systems of a school: the management of their staff, the respect of accounting standards and principles. Finally, it will be necessary to analyze the relationship between these management systems and the performance of the school. A private school is both a business and a living organism, confronted with an environment whose various components the manager identifies in order to be able to adapt his behavior and strategy. According to Scheerens, school performance refers to the performance of an organizational unit called a "school" as measured by its level of output, i.e. the success rate of students at the end of the formal school cycle. Furthermore, Scheerens noted that performance levels vary from school to school and depend on the quality of management, the degree of commitment of the teaching staff in defining and pursuing pedagogical objectives, the quality of the relationship between teachers and students, the quality of the principal's administrative and pedagogical management, and the participation of parents. These elements combine to create an environment conducive to student learning and success.

The performance of an organization is explained by both its sustainability and its reputation in its field. Any educational institution leader, dedicated to this performance, must submit to the criteria of choice of parents, generally based on academic results in the search for the sustainability and reputation of their company. The latter are in turn a function of a pedagogical discipline, of human resource management, in particular of the participatory management style of the school's hierarchical leaders, especially the owners, the directors and the teachers.... Our discussions are based on the interaction between these variables, which are generated in the search for educational performance and are illustrated by the diagram below:

²Scheerens, "Improving school effectiveness", Institut international de planification de l'éducation, UNESCO, Paris 2000.

³Rocheleau J., « Une approche de gestion pour l'école informatisée » .LICEF, Montréal (Québec), 1998.



Source: Author.

Figure 1. School performance factors

RESULTS

Characteristics of private schools in Madagascar

Conditions for the creation of a private school: A private school is both a business and a living organism, confronted with an environment whose various components the manager identifies in order to be able to adapt his behavior and strategy. From a political and legal point of view, the creator of any private school enterprise must respect the texts and laws governing its constitution. These texts and laws require that teachers must be licensed to teach. The establishment of the school is granted by the commune. The School District gives its minutes for the opening of a private school. As for the Director, he/she is obliged to have a teaching authorization. The Regional Directorate of National Education is the competent authority for the authorization of the opening of a private educational institution. In a room, a student has three cubic meters of air. Obtaining an authorization is essential for the opening. The membership of a school with the National Directorate of Free Schools of Madagascar or the National Directorate of Private Schools of Madagascar is also necessary to have common interests such as information on the change of the program, the communication of the number of students.

According to the officials of the Regional Directorate of National Education of Analamanga, the National Office of Private General Education: "Decree number 98-433 of June 15, 1998 describes the status of private education. This decree dictates the necessary documents and the steps to follow for the creation of a private school. In addition to this decree number 98-433 of June 15, 1998, there is also the application order number 6743-98 concerning the reorganization of private education in Madagascar.

Profile required of a school director: There are five requirements for a principal. In Madagascar, it is very common for the owner to appoint a Nominal Director. The nominee is in charge of all the required files, namely the application on plain paper that he/she sends to the Minister of National Education, under cover of the Director of the National Office of Private Education for the creation of the school. The Nominal Director must have a teaching license of at least three years. His/her residence certificate is required. His appointment by the owner is made in writing and filed with the ministry along with his file. The certified photocopy of his or her national identity card is filed with his or her file. If these are the documents needed to create a private school, what type of leaders run these institutions?

Types of leaders: The study shows that faith-based private schools are the most experienced in the education sector. The vast majority (92.3%) of these schools were either created by religious associations, apply the managerial style, and are currently led by nominal directors (teacher or third party) with a religious background.

On the other hand, the majority (55.2%) of non-denominational educational enterprises are headed by owners, family members, and slightly less than one out of two non-denominational schools (44.8%) use this managerial system, which are also managed by the same quality of person, specifically a teacher inside or outside the organization, who has fulfilled the requirements to be at the helm, and are paid monthly by the institution. This study also notes that these leaders (nominal directors or owners) are in the great majority men (82.5%), and have almost the same experience in the occupation of the position, age, and seniority in the institution and in the field of teaching. They have completed university studies (93.8%), and obtained the degrees (bachelor's or master's) required for school management.

Institutions and their experiences: The educational experience of the institution plays an important role in educational outcomes. The schools surveyed are composed of denominational and non-denominational institutions. The first type of institution represents 16.3% of the private schools surveyed, and has an average of 55 years of experience in education. The non-denominational ones dominate the educational market, despite their 20 years of experience. They occupy 83.8% of the educational sector of level III. The majority of these private high schools, 91.3%, offer other levels of education, with slightly less than half (47.9%) offering the three basic levels of education (primary, secondary and high school). These establishments sometimes combine training with level II or tertiary (about 16%) but simultaneous education in the industrial and civil engineering sector is of interest to less than 7% of these private schools. In short, this information shows that the denominational private schools in the capital have more experience in the general education sector, level III. As for the non-denominational schools, they are run either by an owner or by a third party (a teacher paid monthly). Men take on more responsibility in the management of these schools.

The disciplines and pedagogical strategies of private schools: Disciplines are part of a school's strengths and also promote and improve its academic performance.

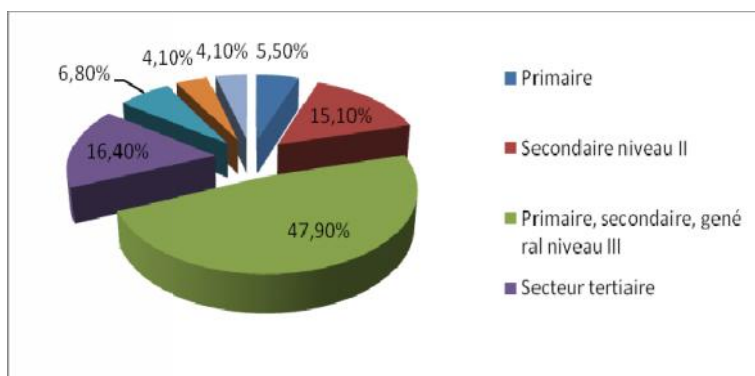
Teaching strategies: Transferring is a phenomenon in a student's educational career. There are several reasons for transferring. This study shows that private religious schools rarely accept transfers and value the average obtained from the previous school.⁴ Slightly more than one in twenty of the faith-based schools (23.10%) never accept a student's transfer to their school. These schools only accept transfer students in conditions where places are still available after voluntary departure, successful completion of the examination, or handing over to the family of a certain number of students. Their admission requirements are respectively the average obtained from the former institution or its success in the test. It should be noted that slightly less than one in four schools (23.10%) and slightly more than the majority of religious schools (53.90%) use these pedagogical methods as a condition for accepting a transfer. On the other hand, non-denominational schools always accept the transfer of a student. However, 58.20% of them formally conduct a test before admitting the student. Regardless of test scores or GPAs, the availability of open seats is a condition for accepting a transfer

⁴Cf annexe 5

Table 1. The profile of the leaders of private institutions

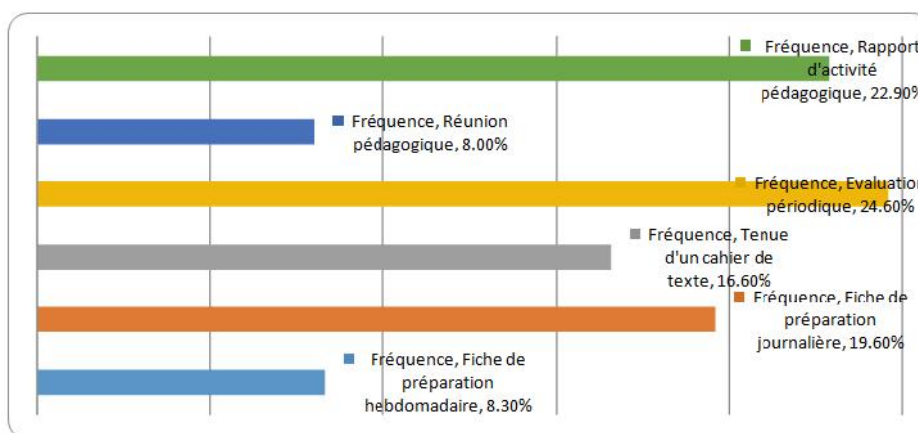
Gender	Age	Level of education	Function	Length of time in position	Seniority in the institution	Seniority in teaching	Parallelactivities
Male (82.5%)	m = 42,06 e = 11,71	Bachelor's degree (45.5%) Master's degree (55.5%)	Nominal Director (53,0%) Owner (47,0%)	m = 12,05 e = 8,42	m = 11,97 e = 8,55	m = 16,71 e = 11,09	Yes (42,4%) No (57,6%)
Female (17.5%)	m = 42,07 e = 11,17	Bachelor's degree (50.0%) Master's degree (43.8%) Bachelor's degree (6.2%)	Owner (50,0%) Nominal Director (42,9%) Supervisor (17,1%)	m = 11,29 e = 8,92	m = 11,57 e = 9,47	m = 10,64 e = 7,96	Yes (42,9%) No (57,1%)
Overall (100%)	m = 42,06 e = 11,55	Bachelor's degree (46.3%) Master's degree (47.5%) Bachelor's degree (6.2%)	Nominal Director (52,2%) Owner (47,8)	m = 11,91 e = 8,46	m = 11,90 e = 8,66	m = 15,65 e = 10,82	Yes (42,5%) No (57,5%)

Source: Author.



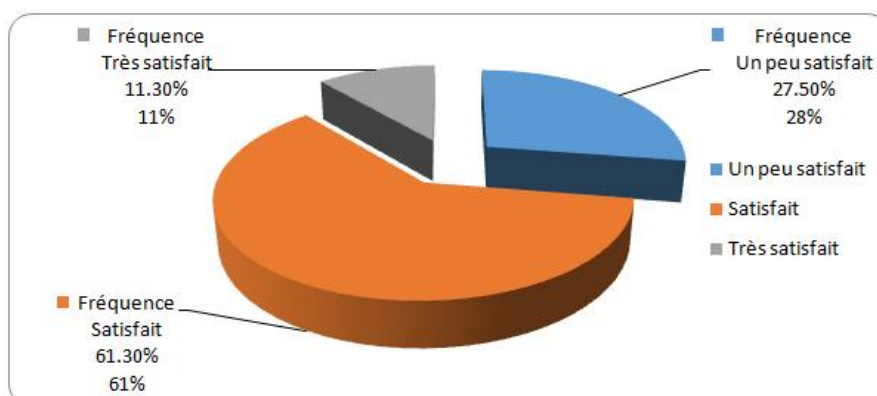
Source: Author.

Figure 2: Distribution of educational levels in private institutions



Source: Author.

Figure 3. Distribution of teachers' professional obligations



Source: Author

Figure 4. The majority of school leaders are satisfied with their teachers

Table 3. The condition for accepting a transfer as a factor in settlement success

Transfer School results	Never	Successful completion of the test	Have acquired the average
Not satisfactory	5,0%	12,4%	15,7%
Somewhatsatisfactory	6,0%	47,0%	45,7%
Satisfactory	89%	40,6%	38,6%

Source: Author.

Table 4. Pass Mark as a Success Factor for Private Institutions

Schoolresults	Passage
Not satisfactory	9,67
Somewhatsatisfactory	9,95
Satisfactory	10,07
TOTAL	10,03

Source: Author.

Table 5. La périodicité du contrôle, un élément moteur de la réussite

Evaluation period Academic performance	Quarterly	Punctual	Punctual and quarterly
Not satisfactory	33,3%	2 3,0%	2,7%
Somewhatsatisfactory	33,3%	17,0%	27,4%
Satisfactory	33,3%	60,0%	69,9%

Table 6. Satisfaction aux résultats scolaires par rapport à la taille moyenne des classes

Schoolresults	Average class size
Not satisfactory	37,67
Somewhatsatisfactory	36,84
Satisfactory	36,02
TOTAL	36,27

Source: Author

Table 7. Distribution of teacher recruitment sources in relation to satisfaction with academic performance

Source of recruitment Academic achievement	University	Teachers	Resume Bank	Other establishment(s)
Not satisfactory	3,3%	16,9%	22,3%	17,5%
Somewhatsatisfactory	13,7%	15,6%	26,8%	33,6%
Satisfactory	83,0%	67,5%	50,9%	48,9%
TOTAL	100%	100%	100%	100%

Source: Author

Tableau 8. La satisfaction aux résultats scolaires par rapport aux critères de recrutement d'enseignants

Recruitment Criteria Academicresults	Age	Gender	Experiences	Diplomas	Authorization to teach	Salary claim
Not satisfactory	11,3%	16,7%	1,6%	4,1%	4,2%	7,7%
Somewhatsatisfactory	25,0%	20,7%	19,2%	6,7%	41,8%	27,0%
Satisfactory	63,7%	62,8%	79,2%	89,2%	54,0%	65,3%
TOTAL	100%	100%	100%	100%	100%	100%

Source: Author

Table 9. Satisfaction with results in relation to motivational criteria

Main motivation Academic results	Compensation	Pedagogical training	Pedagogicalequipment
Not satisfactory	3,8%	6,1%	4,2%
Somewhatsatisfactory	16,9%	28,6%	27,1%
Satisfactory	79,2%	65,3%	68,8%
TOTAL	100%	100%	100%

Tableau 10. La satisfaction aux résultats par rapport à la considération des propositions d'enseignants

Consideration of teacher proposals Academic performance	No	Yes
Not satisfactory	15,2%	11,3%
Somewhatsatisfactory	41,8%	23,2%
Satisfactory	43%	65,5%
TOTAL	100%	100%

Source: Author

to a non-denominational school. The Chi - Two test result also indicates a significant dependence between transfer acceptance criteria and the nature of the school.⁵ The results of the passing and repeating grades can be used to make various decisions in the management of the schools. Private schools set different passing grades, which generally range from 9 to 10 out of 20. This pedagogical criterion is somewhat more flexible in non-denominational schools. As for repeating a grade, the schools have very diverse pedagogical strategies, with the vast majority (81.3%) setting a grade of 9 out of 20 for repeating a student. A little more than one in ten of these schools (12.5%) set a grade of 8 out of 20 and few (1.6%) go as low as 6 out of 20 to repeat a grade. This is only the case in non-denominational private schools where there are students in difficulty. Faith-based schools are very strict in the quality of academic performance, a fact confirmed by the Fisher test results. There is a significant difference between the average repetition scores of these schools.

Class size could be considered one of the variables that determines the educational success of students (Bressoux⁶, Hanushek⁷, Duru-Bellat⁸). In private schools, it is very common to hear from the management that the number of students is limited⁹. The results¹⁰ demonstrate the existence of an ideal class size of less than 30 students at a few schools (7.6%) compared to the vast majority of these schools (92.4%) which have more than 30 students per class. In most cases, discipline in a school revolves around attendance, smoking, and payment of school fees and results in either a warning or expulsion.¹¹ Regarding attendance, a 15-minute delay results in non-attendance in class. 12.5% of these schools consider and apply this rule in order not to disrupt the class. Students who are late are not allowed to attend class until after one hour.

The ban on smoking is an integral part of high school discipline. Failure to comply with this rule is also punishable by non-attendance in class. Late payment of school fees is the most frequent case of a ban on attendance, and therefore an administrative discipline. The application of the latter follows the sending of a letter of formal notice. Half of the private high schools prohibit the attendance of students who are not in good standing until they pay. However, during the interviews, some schools still proceed to summon the parents in order to avoid any pedagogical prejudice. As for final expulsion, schools have different ways of tolerating the expulsion of a student. Three criteria are used in this study. 76.3% of private high schools expel their students who have an average of less than 5 out of 20 at the end of the school year¹². 16.3% return to their

families the children who have obtained an annual average below 7 out of 20. A small proportion of 7.5% of private high schools in the capital practice the system of cancellation with an annual average between 7 and 9 out of 20. This strategy is applied by denominational schools.

The pedagogical obligations of teachers

Coleman *et al.*¹³ noted in their report that the school itself can counterbalance the weight of students' socioeconomic background. In addition, the work of Grahay¹⁴, reports that regardless of the student's ethnic group, good teachers have a greater influence on achievement. In this regard, they were able to show that the teacher variable has a stronger effect on student achievement. The fulfillment of obligations by teachers is thus one of the conditions for the success of the organization on the one hand and for the educational success of the students on the other. We want to know the content of these obligations in order to make judgments and proposals for the management of a private school. In the case of the schools surveyed, the first daily pedagogical obligations are based on keeping a textbook and teaching. In addition, the management of private schools or pedagogical managers in the capital require teachers to keep daily preparation sheets, which constitute their main obligations (36.2%).

Second is periodic evaluation, where teachers assign grades that reward certain behaviors, habits, and attitudes in order to encourage learning. To do this, they use grades, and it should be noted that few institutions share the same grading system; in fact, sometimes these grading systems vary among these educational organizations. Different types of evaluations are operational and constitute one of the most important tasks of teachers (24.6%). It should be noted that a large majority (91.3%) of the schools, more specifically, the non-denominational schools, adopt the punctual and quarterly evaluation system. In this case, the teachers must carry out at least three punctual evaluations in a term. In addition to these periodic grades, students are required to take a quarterly exam. We also noted from this study that one out of twenty of the schools surveyed in the non-denominational private schools carried out only one-off assessments, the arrangement of which was left to the teachers. At the end of a term, the average of these evaluations will allow the work of each student to be evaluated. For the passage of students to the next grade, other schools, in this case non-denominational schools, stated during the interviews that they had scheduled a single, compulsory quarterly exam. Less than one in twenty of the schools surveyed (3.8%) adopt this method of evaluation. The third obligation of teachers is the periodic activity report, which represents 22.9% of their professional obligations. Before the announcement of school results, the school management meets with the teachers and holds a class council. The teachers raise the situation of their classes, of each student during a period which is generally a

⁵Cf annexe 5

⁶Bressoux, P., « *Les effets du contexte scolaire sur les acquisitions des élèves : effet-école et effets classes en lecture* ». Revue française de sociologie, n° 2, 1995.

⁷Hanushek, E., « *The trade-off between child quantity and quality* ». Journal of Political Economy, 1992.

⁸Duru-Bellat, M., « *Quel est le ciment de l'entreprise moderne ?* ». Editions d'Organisation, Paris, 2003.

⁹Selon le témoignage d'une mère de famille interviewée

¹⁰Cfannexe 5

¹¹Cfannexe 5

¹²Cf, annexe 1.

¹³ Coleman *et al.*, « *Equality of educational opportunity* ». Washington, DC: US Office of Education, 1966.

¹⁴Grahay, M., « *L'école peut-elle être juste et efficace ? De l'égalité de chance à l'égalité des acquis* ». Belgique De Boeck University, 2000.

quarter. The handwritten transcription of grades into report cards is part of this commitment.

Resource management

Material and didactic means: Materials are very important means to achieve the objectives of an educational organization. We want to know the results related to these resources in order to know their contribution to education and to be able to give solutions to the management of an institution. The results of the survey mention as necessary materials the buildings, books, a library room, computers, and an internet connection. These results showed us that not all schools with less than ten years of experience in education invest in computer equipment in their educational mission, except for those institutions that work in the tertiary field. In most cases, the connection is reserved for the administrative staff for the management of the institution.

Management of the institution's human resources: Sont apportés dans cette partie les cinq résultats relatifs à la gestion des ressources humaines à savoir : les différentes façons dont les écoles privées recrutent leurs enseignants, les principales motivations que les dirigeants jugeraient importantes, leurs motifs de procéder au licenciement d'un enseignant ou leur évaluation. Ceux qui concernent les obligations sociales et fiscales viennent toute suite après ces résultats. Les tests de Chi-deux d'uniformité démontrent des différences significatives entre les pourcentages obtenus des différentes modalités des variables d'études et nous permettent de dégager les tendances des faits.

The recruitment of teachers: Recruitment is an essential element of human resources management and also conditions the efficiency of the organization. Several criteria are considered such as the job description, the source, the training, the social valorisation of the employees, the joint relationship, the social climate:

¹⁵In the majority of cases, and with a percentage of 37.7%, the private schools surveyed recruit teachers in case of an urgent need such as the death or unavoidable departure of a teacher. The reason for adding teaching staff is the voluntary departure (following negotiations) of a teacher. This case represents 30.5% of all reasons. The most serious case that forces a school to recruit is the flight of teachers. 18% of the recruitments in private schools are justified by this reason. The replacement of a dismissed teacher is one of the rarest scenarios in recruitment, representing only 13.8% of the schools surveyed. In addition, some schools never recruit teachers in a school year because of the almost non-existent problems with their teaching staff. 1.3% of schools are affected by this situation. One school out of two, however, recruits once a year. On the other hand, 45% of the schools recruit twice a year¹⁶ and only 2.5% do so three times. These latter cases are for schools that have experienced teacher leakage.

¹⁵Cf annexe 3.

¹⁶Cf annexe 3.

¹⁷With regard to the recruitment policy for teachers in private educational organizations, we have noted that three criteria are highlighted: in first place, the diploma, judged by 27% of the schools as the main element triggering the recruitment process; in second place, the authorization to teach, where 26.3% of the schools require it; and in third place, adopted by 24.10% of the schools surveyed, professional experience. In addition to the main recruitment criteria, salary benefits (13.7%) were also requested. It should be noted, however, that the gender criterion has little influence on the process. ¹⁸As for the sources of recruitment, our study showed that they are multiple. Some schools rely on word-of-mouth or referral strategies to find their new colleagues. Slightly less than half (42.3%) of the schools use this method. 30.8% have a bank of resumes and use them when appropriate. Some schools (2.7%) entrust their recruitment to higher institutes or to the various university faculties. It should be noted that cooperation between private high schools is used to strengthen the teaching staff. 24.2% of the schools surveyed use this source. - ¹⁹Subsequently, this study will try to give results related to the professional obligations of the employer and the teachers. These results are necessary for judging compliance with the employment contract. The majority of the schools surveyed, i.e. 90% of the schools, require their staff to sign an employment contract (permanent or fixed-term contract) during the recruitment process. The Chi-square test shows a significant difference between the distribution of educational organizations in terms of compliance with this obligation²⁰. In addition, 63.8% of the schools visited and surveyed also request this signature from temporary teachers²¹. Faith-based schools and institutions that have been approved for French education are the most demanding and order their new recruits (teachers) to this process. Two French school officials confirm these results during interviews.

Motivation and remuneration: Motivation is an element of the company's development. It plays an important role in the effectiveness of the staff. The main question that emerges about what the teacher feels in his or her daily practice is that of involvement, which has to do primarily with the teacher's own person. Two motivations are clearly dominant: the need to develop one's personality and the need for affection. The evaluation of these motivations makes it possible to understand why some teachers, after years in the profession, still enjoy teaching and want to continue teaching. - The reasons for choosing teaching are multiple and involve material factors (job security, protection, vacation, the important thing is to avoid unemployment...) ²². With respect to this "motivations" variable, results²³ are given in this thesis in order to provide elements of solutions to the various problems related to the management of private schools. The Chi-square test shows

¹⁷Cf annexe 3

¹⁸Cf annexe 3

¹⁹Cf annexe 3

²⁰ La différence avec la répartition de référence est très significative. $\chi^2 = 51,20$, ddl = 1, 1-p = >99,99%.

²¹Cf annexe 3.

²²<http://www.inrp.fr/biennale/5biennale/Contrib/27.html>, « Motivations, Désir initial, Vie des enseignants », novembre, 2012.

²³Cf annexe 4

that there is a significant difference in the distribution of the main motivations according to the school leaders. The latter conceive that remuneration is the main motivation required. 45.3% of them confirm the importance of salary. Unfortunately, equipment, teaching materials and pedagogical training are only considered by a small proportion of our target group, i.e. 27.1% and 27.6% respectively, as a source of motivation. Our results²⁴ also show that 96.3% of schools conduct an annual salary review at the initiative of managers and owners (with an opinion percentage of 75% of respondents), then at the request of teachers²⁵. 83.8% of them claim that there is a salary policy (salary setting) in their establishment²⁶. The teacher's level of education and experience are the most considered criteria or variables. Nevertheless, compliance with the law is in this case of the second order. In the majority of cases, the level of salary increase depends on the financial situation of the school. 93.8% of the managers surveyed consider that the level of salary revision depends on the financial possibilities of the school.

The teachers' request is only considered if the cash flow will allow the realization of this new decision. The period of revision carried out by the leaders of private schools is usually at the beginning of the school year, 87.5% of the general education high schools choose this period. Other leaders prefer to make this decision but only confirm it to the teachers at the end of the school year. The objective in this case is to encourage and retain teachers. It should be noted that 3.8 percent of schools nevertheless revised the salaries of some teachers during the school year for technical or strategic reasons. As for the renewal of a teacher, this is generally done by means of an evaluation, with 72.5% of leaders adopting this strategy. The tacit renewal of a teacher concerns only a quarter of the schools surveyed, more precisely the private general education schools which require the signature of a new work contract. Other managers consult the students and seek their opinion on the renewal of a teacher, a very rare situation that represents only 1.3% of the respondents²⁷. In the same situation, a large majority of the general education high schools proceed by way of information note, at the end of the school year, in parallel with the different renewal strategies, to the consultation of the teachers' opinions for their own renewal, that is to say 88.8% of the schools²⁸.

The dismissal of a teacher is a very rare occurrence. A school will only thank a teacher in extreme cases such as flirting with a student, repeated unjustified absences, or frequent lateness²⁹. The participatory management style tends to dominate the leadership style of educational organizations. Indeed, consulting teachers about their experiences during the school year has become almost a culture for school leaders³⁰. Only 6.3% of the managers surveyed never ask teachers for their services and deliberately ignore them in the management and

development strategy of the school. On the other hand, more than two-thirds of the people in charge of management, i.e. 77.5% of the respondents, were in the habit of consulting teachers and often attached importance to their opinion. The subject of the interviews generally concerns the educational aspect, such as the difficulties of the students, the lack of equipment, teaching supplies or other current affairs³¹.

Level of satisfaction of leaders with teachers: The opinion poll on leaders' satisfaction with teachers' roles confirms their confidence. Only 27.5% of them expressed little satisfaction with teachers. The vast majority, made up of religious schools overall, are satisfied, i.e. 61.3% of respondents. In addition, 11.3% of the managers and owners of the high schools mention a very high satisfaction with their teachers. The overall evaluation on teacher roles provided satisfaction scores ranging from six to nine out of ten, with an average of 7.27 out of 10, and confirmed the trust and leadership style³². These results show that the recruitment policy of school managers is based mainly on the diploma and their willingness to comply with administrative requirements, particularly the signing of an employment contract. The renewal of teachers is done either by tacit agreement or by consultation at the end of the school year. Salary is the primary motivation and its revision depends mainly on the financial situation of the school. The dismissal of teachers is a very rare occurrence and is justified by the confidence of the majority of private school leaders in the roles of teachers. School discipline ensures the educational success of students and the pedagogical, organizational and financial performance of a school. The purpose of education is to produce a being capable of governing himself, not a being capable of being governed by others (Guilhem M.³³). To achieve this, it is one of the duties of the school, through the principals in charge, to design pedagogical and social models applicable to all students and teachers.

Impact of a school's management strategy on its performance: The notion of performance is explained by the durability and notoriety that can only be obtained through the trust of parents. It should be noted that the sustainability of the organization, presented as one of the components of the company's performance by Morin, Savoie et Beaudin³⁴ is "a kind of organizational meta-result". Indeed, they state that: "Sustainability becomes the ultimate definition of business success. Just as trust is derived from the quality of the academic outcome, which in turn is a logical function of the discipline and human resource management of an institution. To this end, the validation of the second hypothesis is based on the dependence between this academic result and the different variables of the pedagogical discipline and human resources, which we demonstrate through statistical tests.

²⁴Cf annexe 4

²⁵Cf annexe 1

²⁶Cf annexe 1

²⁷Cf annexe 1

²⁸Cf annexe 1

²⁹Cf annexe 1.

³⁰Cf annexe 4

³¹Cf annexe 1.

³²Cf annexe 1.

³³ Guilhem M. (1966)

³⁴ Morin E., Savoie A., Beaudin G., « L'efficacité de l'organisation : théories, représentations et mesures ». Éditions Gaëtan Morin, Montréal, 1994.

Influence of discipline on academic performance: Our study assessed school discipline through the condition for accepting a transfer, the grade for promotion, the periodicity of testing or evaluation, class size, the number of grades, and the role of an information and resource center. Thus, the analysis of the impacts of discipline on academic performance focuses on these different variables. Our results showed the need for high schools to monitor students from the second grade onwards in order to establish positive pedagogical effects on exams. The results of the Chi-square test of independence between academic performance and the different conditions for accepting a new student into the school express a significant dependence³⁵ between these variables. Indeed, 95% of the schools that rarely accept transfers are generally satisfied with the results, while those that receive students from other schools in their junior or senior year by way of testing or grade consultation are less successful. On the other hand, the criterion of promotion by grades is also considered as one of the success factors of secondary schools. The result of the Fisher test³⁶ on academic outcomes versus student grades shows that the higher the passing grades the more successful the outcomes. Our analyses also confirm the importance of a pedagogical strategy of evaluation adopted by a school to the academic success of students. It is essential to evaluate what one does, repeated exercises without knowledge of results are hardly accompanied by improvement in performance (Lallez R.³⁷). Based on our analysis, the dependence of the results on the evaluation period is significant. The quarterly evaluation process is not relevant. Positive results are often the result of immediate or ad hoc and quarterly assessments.

The data in the table show that 97.3% of school principals are satisfied or fairly satisfied with school results following the system of spot and quarterly assessments, compared with 77% of those who use only spot checks. In fact, spot checks or both spot and quarterly checks are more effective and have a positive impact on results. Par ailleurs, selon les résultats du test de Fisher³⁸, nous avons remarqué que l'effectif des classes influe moyennement sur les résultats scolaires. Les résultats du tableau ci-dessous montrent que plus est l'effectif moyen des classes, moins est la satisfaction aux résultats des élèves. This situation in the capital's private high schools calls for in-depth analysis. Indeed, most pedagogical theories suggest that small class sizes are successful. Thus, the multiple regression analysis established that the class size and the grade of passage to the next class explain 73.2% (multiple correlation coefficient: $R = 0.18$) of the school results on the one hand. On the other hand, the analysis of the significance or the partial contribution of the explanatory variables, the pass mark and the class size, to the school results, with the respective standard deviations of 0.13 and 0.06, confirms

the fact that the class size does not constitute a block to the success of the students.

The model of educational outcomes resulting from this analysis is defined by:

Regression equation:

$$\text{Academic achievement} = +0.31 * \text{Passage} - 0.16 * \text{Class size} + 2.304$$

Significance of the parameters:

'Passage': coefficient = 0.31, standard deviation = 0.13 (influential).

The continuity of a student's education with the same institution promotes both academic success and the educational performance of the organization. The existence of a number of educational levels is the primary factor in the educational success of that institution. Schools that have only two levels of education³⁹ are satisfied with their academic performance (75%). Our analysis results show that as the school has more levels of education, its satisfaction rates with academic performance increase. The results of the Chi-squared test confirm a significant dependence between academic achievement and the number of educational levels.

According to Chinapah *et al.*⁴⁰, Most of the African countries that participated in the MLA project suffer from a lack of basic materials necessary and reasonable for education for all. The results of our analyses show the importance of a documentation and information center in a school. The investment in this type of educational material improves the quality of the educational service offered and leads to good academic results. The results of the Chi-squared test express the existence of a significant dependence⁴¹ between the layout of a research center and the academic outcome.

Influence of human resource management on student achievement:

In this approach, the analysis of the dependence on academic performance is based on the different variables that characterize the management of human resources, notably the source, the criterion of recruitment, the motivation of teachers, and the valuation of their proposals by school leaders.

First, our analyses show that private high schools entrust the recruitment of trainers to both internal and external sources (Shimon L., et Randall S.)⁴². External sources are represented by educational institutions such as universities, which are qualified as good partners in this mission of human resource management. In fact, 96.7% of the

³⁵ La dépendance entre le résultat et l'acceptation du transfert est significative. $\chi^2 = 6,49$, ddl = 2, 1-p = 96,09%.

³⁶ Résultats du test de Fisher : Passage : $V_{\text{inter}} = 0,31$, $V_{\text{intra}} = 0,23$, $F = 1,36$, 1-p = 73,77%.

³⁷ Lallez R., « *Aspect psychologique de la motivation* ». Conférences des grandes Ecoles, 1994.

³⁸ ($V_{\text{inter}} = 7,89$, $V_{\text{intra}} = 33,09$, $F = 0,24$, 1-p = 90,95%).

³⁹ Ces écoles se spécialisent uniquement dans les niveaux primaires et lycée.

⁴⁰ Chinapah, *et al.*, « *Handbook on Monitoring Learning Achievement* ». Towards capacity building, Paris: UNESCO/UNICEF, 2000.

⁴¹ La dépendance est significative. $\chi^2 = 6,89$, ddl = 2, 1-p = 95,73%.

⁴² Shimon, L., et Randall, S., « *Gestion des ressources Humaines au seuil de l'an 2000* ». 2ème édition, Edition du Renouveau Pédagogique Inc, Québec., 1995.

educational institutions that hire teachers from faculties⁴³ are generally satisfied with the quality of the students' academic performance. The word-of-mouth strategy of recruiting through teachers is quite effective, with just under 70% of schools achieving satisfactory academic results. The results of the Chi-square test indicate a significant dependence between academic performance and the source of recruitment in a private high school in the capital.

In a second step, the criteria for recruiting teachers are also judged⁴⁴ relevant to leaders' satisfaction with educational outcomes. A majority of leaders have adopted the quality of the candidate as a criterion for evaluating recruitment effectiveness, with the objective of having the right people in the right place at the right time⁴⁵. Our analysis results confirm the value of the teachers' curriculum. Indeed, the first criteria resulting from a strategy of school leaders are based on diplomas and experiences. Nearly 80% of the schools that use these criteria are satisfied with the pedagogical results in the accomplishment of their educational mission. Compensation is not just a barometer of human resource management (Citeau, J. 2003)⁴⁶, it is another important criterion for obtaining good teachers, and 92.3% of the private high schools that used this strategy were globally satisfied with the academic result. The results of this research also justify that gender and age constitute a final criterion for the selection of trainers and produce the same effect on satisfaction with the result. Our analyses also confirm that the existence of the "personnel" function within an organization is no longer contested. It is still sometimes subject to and useful to critics who accuse its importance in an essentially productive perspective. A better mastery of the strategic aims of HRM contributes to the performance of the company and the creation of value. The ever-increasing consideration given to Man within organizations over time in the search for organizational performance makes the objective of teacher satisfaction unavoidable. The latter is the result of the evaluation of their job or their work experience, in its different facets (the task, the work, the relations with superiors and colleagues, promotions, remuneration, etc.) according to Bernard M. et Daniel C.⁴⁷ Our analyses confirmed the impact of motivation on productivity. The results of the Chi-squared test justify the existence of a significant dependence⁴⁸ between the different motivations given to teachers, the main one being compensation. Indeed, educational organizations that value motivation in cash and reward its teachers more find good people. They are mostly satisfied with their school's academic performance. It should be emphasized that, apart from equipment, the pedagogical system plays an essential

role in the fulfillment of teachers' obligations on the one hand and in the school's academic performance on the other. The provision of these materials and training to the teachers has a positive impact on the result, about 65% of the private high schools that give more importance to these motivational criteria are satisfied with their effect on the pedagogical objective.

Moreover, as people are the company's main strategic resource, the responsibility of managers in this area is essential: firstly, to define and implement a genuine health policy, by reconsidering management, organization and work life methods, and secondly, to involve all the company's players. The involvement of the social partners, through the representative bodies, must be reinforced in the search for performance. It is under this condition that the mobilization of teachers in educational success is established by valuing their contribution to the achievement of objectives. In fact, the dependence between the two study variables is significant⁴⁹, and the valuing of results is justified by a high percentage of satisfaction (65%) of schools that considered the contributions of teachers compared to those that did not. These results, which establish the dependencies between the different disciplines on the one hand, and the management of human resources in private high schools on the other hand, in relation to academic results, confirm the validation of the second hypothesis of this work.⁵⁰ The majority of teachers recruited by private schools are temporary employees and mainly literary women. Men represent only 32%. They are young, competent and generally have an average of 13 years of experience in education.⁵¹ Some of them come from the civil service and represent 12.5% of the educational staff of private schools. With their experience, these two categories of human resources promote the development of private schools (ILO, Geneva). The main criteria for recruiting these teachers were the diploma and the teaching license, respectively. The majority, 59.5% of the teaching staff, had a master's degree, but only 54.5% had a teaching license and 64.9% had signed an employment contract when they were hired. The comparison of these results with the requirements of the educational profession reflects the ephemeral status of teachers in private schools. The prudence of some managers forces some of their staff to comply with Article 6 of the Labor Code applicable in Madagascar⁵² to avoid any form of prejudice.

In carrying out their tasks, our results confirm that managers primarily favor internal promotion and rehiring (Dolan S., et Harbottle J.)⁵³. Women and men are given equal opportunities in recruitment. It should be noted, however, that most of the teaching staff has other activities, the main one being teaching in other schools. This case

⁴³ Le recrutement externe est employé lorsque l'entreprise désire embaucher des individus qui ne travaillent pas dans l'organisation. Cette méthode apporte plusieurs avantages, tels l'accès à un réseau de candidats plus diversifié que l'on ne trouve pas toujours à l'intérieur de l'entreprise.

⁴⁴ Les résultats du test de Chi-deux confirment une dépendance significative entre ces variables. $\chi^2 = 87,20$, $ddl = 10$, $1-p = 94,38\%$.

⁴⁵ Anne, T. et al., « L'évaluation de la performance de la fonction RH : de la théorie à la pratique des DG ». Université Paris DAUPHINE, 2010.

⁴⁶ Citeau, J., « Gestion des Ressources Humaines : principes généraux et cas pratiques ». 2ème édition Armand COLIN, 2003.

⁴⁷ Bernard, M. ; Daniel, C., « Gestion des Ressources Humaines, pilotage social et performances ». Dunod. Paris, 2002.

⁴⁸ La dépendance est significative. $\chi^2 = 5,47$, $ddl = 4$, $1-p = 95,38\%$.

⁴⁹ La dépendance est significative. $\chi^2 = 6,99$, $ddl = 2$, $1-p = 93,62\%$.

⁵⁰ Voir annexe 6

⁵¹ Résultats du test de Fisher : Expériences dans l'enseignement : $V_{inter} = 498,34$, $V_{intra} = 81,68$, $F = 6,10$, $1-p = 98,63\%$.

⁵² À l'embauche, Un contrat doit être constaté par écrit en malgache ou en français, précisant au moins la fonction. Il est établi en double exemplaire : le premier étant tenu par l'employeur et le second doit être remis immédiatement au travailleur après signature des deux parties.

⁵³ Dolan, S. ; Harbottle, J., Résultats of a Survey Amongst Senior HR Managers. Document présenté au Congrès annuel de l'association des professionnels en ressources humaines du Québec, 1989.

creates a pseudo organization for these teachers in which they develop a certain sociability and solidarity. To this effect, the majority of the trainers of the private high schools enter in the exercise of the multigrade function, a situation that makes difficult the management of their human resources. Indeed, according to our results, faced with a motivating proposal, teachers are ready to leave the institution at any time during the school year. However, this multi-grade function of teachers optimizes their skills and know-how by comparing the various services, disciplines and obligations of the different schools in which they work, which justifies the existence of networked, mercenary, fragmented and community organizations (Coffee R., et Garerh J.)⁵⁴.

It should be noted that optimal student development occurs in a positive classroom climate that shows interest, respects and supports each student, and values the achievement of personal goals. The results of our observations of the teachers confirmed that the majority of them listen to the students who are working in small groups (Perrenoud, 1999)⁵⁵. In fact, the results obtained from students and administrators attest to the satisfaction and competence of teachers' work. Moreover, the discussions on the roles of teachers and the management of human resources in private schools allow us to reiterate that the quality of services provided is the main advantage of the sector and has an impact on the choice and confidence of parents, which characterizes their satisfaction with the results.

CONCLUSION

Education will always remain a strategic issue in the development of a country's economy. Malagasy education has always been under the control and financing of international organizations such as the World Bank. The economic incapacity justifies the financial dependence of the Malagasy education system on international organizations. In parallel to this dependence, globalization in the economic system is leading to an opening up of the business sector, particularly the development of the Malagasy private education sector. As private establishments hold a large part of the education system in which they have set as their main missions education and the search for profits; they have an interest in adopting an effective pedagogical strategy and management system. Discipline, culture, academic achievement, and the quality of educational services offered emerged from our findings and discussions as precepts materializing the effectiveness of a private educational institution. At the same time, the experience of private schools in resource management, their organizational cultures, and the satisfaction of their teachers, justify their performance.

With these results, not only do we prove that the success of the educational system is not the product of chance, but we can also provide the necessary information to improve the efficiency rate of a school.

BIBLIOGRAPHY

- Anne, T., *et al*, 2010. « *L'évaluation de la performance de la fonction RH : de la théorie à la pratique des DG* ». Université Paris DAUPHINE.
- Bernard, M. ; Daniel, C., (2002), « *Gestion des Ressources Humaines, pilotage social et performances* ». Dunod. Paris.
- Bressoux, P.,1995. « *Les effets du contexte scolaire sur les acquisitions des élèves : effet-école et effets classes en lecture* ». Revue française de sociologie, n° 2.
- Chinapah; *et al.*, 2000. "Handbook on Monitoring Learning Achievement". Towards capacity building, Paris: UNESCO/UNICEF.
- Citeau, J., 2003. « *Gestion des Ressources Humaines : principes généraux et cas pratiques* ». 2^{ème} édition Armand COLIN.
- Coleman *et al.*, 1966. "Equality of educational opportunity". Washington, DC: US Office of Education.
- Dolan S., Harbottle J., 1989. "Résultats of a Survey Amongst Senior HR Managers". Paper presented at the Annual Conference of the Quebec Association of Human Resources Professionals.
- Duru-Bellat, M., 2003. « *Les apprentissages des élèves dans leur contexte: les effets de la composition de l'environnement scolaire* », Carrefours de l'éducation.
- Goffee R., Garerh J., 2000. « *Quel est le ciment de l'entreprise moderne ?* ». Editions d'Organisation, Paris.
- Grahay, M., 2000. « *L'école peut-elle être juste et efficace ? De l'égalité de chance à l'égalité des acquis* ». Belgique De Boeck University.
- Guilhem, M., 1966. "Éduquer.....enseigner". France.
- Hanushek, E., 1992. "The trade-off between child quantity and quality". Journal of Political Economy.
- Lallez, R.1994. « *Aspect psychologique de la motivation* ». Conférences des grandes Ecoles.
- Morin, E., Savoie, A. ; Beaudin G., 1994. « *L'efficacité de l'organisation : théories, représentations et mesures* ». éditions Gaëtan Morin, Montréal.
- Perrenoud, 1999. « *Dix nouvelles compétences pour enseigner* ». Paris: ESF.
- Rocheleau J., 1998. « *Une approche de gestion pour l'école informatisée* ». LICEF, Montréal (Québec).
- Scheerens, "Improving schooleffectiveness", Institut international de planification de l'éducation, UNESCO, Paris 2000.
- Shimon, L. ; Randall, S., 1995, « *Gestion des ressources Humaines au seuil de l'an 2000* ». 2^{ème} édition, Edition du Renouveau Pédagogique Inc, Québec.

⁵⁴Goffee R.; Garerh J., « *Quel est le ciment de l'entreprise moderne ?* ». Editions d'Organisation, Paris, 2000.

⁵⁵ Perrenoud, « *Dix nouvelles compétences pour enseigner* ». Paris: ESF, 1999.

ANNEXES

ANNEXE 1. RESULTS OBTAINED WITH THE LEADERS

The dominance of non-denominational in

Nature of the school	Frequency
Privatedenominational	16,30%
Private non-denominational	83,80%
TOTAL	100%

Education Source: Author⁵⁶.

Faith-based schools are the most experienced.

years of experience	Frequency
Lessthan 20 years	41,30%
From 20 to 40	48,80%
From 40 to 60	6,30%
From 80 to 100	2,50%
120 and more	1,30%
TOTAL	100%

Source : Author

Reasons for a private school warning

Warning	Frequency
Recurrent cases of discipline	75,0%
Seriousness of the subject of the discipline	25,0%
TOTAL	100%

Source : Author⁵⁷.

Distribution of private school referral scores

Cross Reference: Write-off Note	Frequency
Moins de 5	76,3%
De 5 à 7	16,3%
De 7 à 9	7,5%
TOTAL	100%

Source : Author⁵⁸.

The majority of private schools use a salary setting criteria

Setting the rate	Frequency
Yes	83,80%
No	16,30%
TOTAL	100%

Source: Author⁵⁹.

Salary increase depends on management initiative

Justification	Frequency
Teachers' request	25%
Your initiative	75%
Exceptional circumstance: obligation/social	-

Source: Author.

Results of the survey on the reason for dismissal of a teacher

Pattern	Frequency	Frequency	Frequency	Frequency	Frequency	Frequency
Toomanydelays	11,3%	17,8%	38,7%	27,8%	0,0%	19,3%
Toomany absences	21,3%	48,9%	19,4%	0,0%	0,0%	25,6%
Parent request	1,3%	28,9%	25,8%	11,1%	0,0%	13,6%
Student request	12,5%	4,4%	16,1%	55,6%	0,0%	15,3%
Other	5,0%	0,0%	0,0%	0,0%	50,0%	2,8%
Seriousmistakes	45,0%	0,0%	0,0%	5,6%	50,0%	21,6%
Never	3,8%	0,0%	0,0%	0,0%	0,0%	1,7%

Source : Author⁶⁰.

⁵⁶ La différence avec la répartition de référence est très significative. $\chi^2 = 36,45$, ddl = 1, 1-p = >99,99%.

⁵⁷ La différence avec la répartition de référence est très significative. $\chi^2 = 20,00$, ddl = 1, 1-p = >99,99%.

⁵⁸ La différence avec la répartition de référence est très significative. $\chi^2 = 67,22$, ddl = 2, 1-p = >99,99%.

⁵⁹ La différence avec la répartition de référence est très significative. $\chi^2 = 36,45$, ddl = 1, 1-p = >99,99%.

Results of the survey on teacher consultation for renewal

Consultation	Frequency
Yes	88,8%
No	11,3%
TOTAL	100%

Source : Author⁶¹.**Result of the survey on the consultation of the teachers for the management of the school**

Experiences	Frequency
Never	6,3%
Rarely	16,3%
Often	77,5%
TOTAL	100%

Source : Author⁶².**Satisfaction ratings for the role of teachers**

Grade in relation to teachers	Frequency
val = 5	1,3%
val = 6	18,8%
val = 7	40,0%
val = 8	31,3%
val = 9	8,8%
TOTAL	100%

Source : Author⁶³.**ANNEXE 2 : MATERIAL RESOURCES****Non-denominational schools' neglect of the resource center**

Existence of a library (CDI) Nature of the school	Yes	No	TOTAL
Privatedenominational	92,3%	7,7%	100%
Private non-denominational	64,2%	35,8%	100%

Source : Author⁶⁴.**The importance of a computer center in experienced schools**

Existence of permanent contracts	Average number of of years of experience (in years)	Average number of of computers
Yes	36,31	10,17
No	16,09	2,93
TOTAL	25,19	6,19

Source : Author⁶⁵.**Valuation of materials through experience**

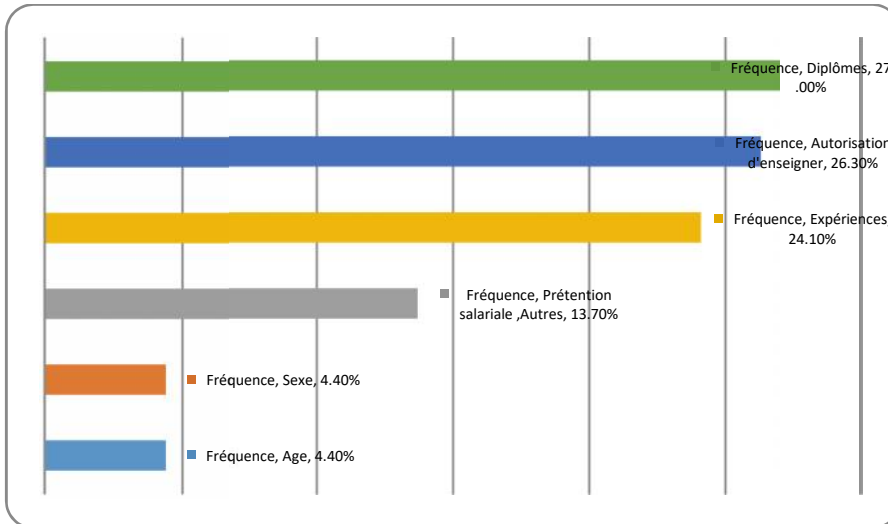
Existence of an Internet connection	Frequency	Average number of of years of experience	Averagenumber of computers
Oui	15%	37,58	10,58
Non	85%	23,00	5,41
TOTAL	100%	25,19	6,19

Source : Author⁶⁶.**ANNEXE 3: TEACHER RECRUITMENT**⁶⁰ La différence avec la répartition de référence est très significative. $\chi^2 = 61,20$, $ddl = 7$, $1-p = >99,99\%$.⁶¹ La différence avec la répartition de référence est très significative. $\chi^2 = 48,05$, $ddl = 1$, $1-p = >99,99\%$.⁶² La différence avec la répartition de référence est très significative. $\chi^2 = 71,42$, $ddl = 2$, $1-p = >99,99\%$.⁶³ Minimum = 5, Maximum = 9

Moyenne = 7,27

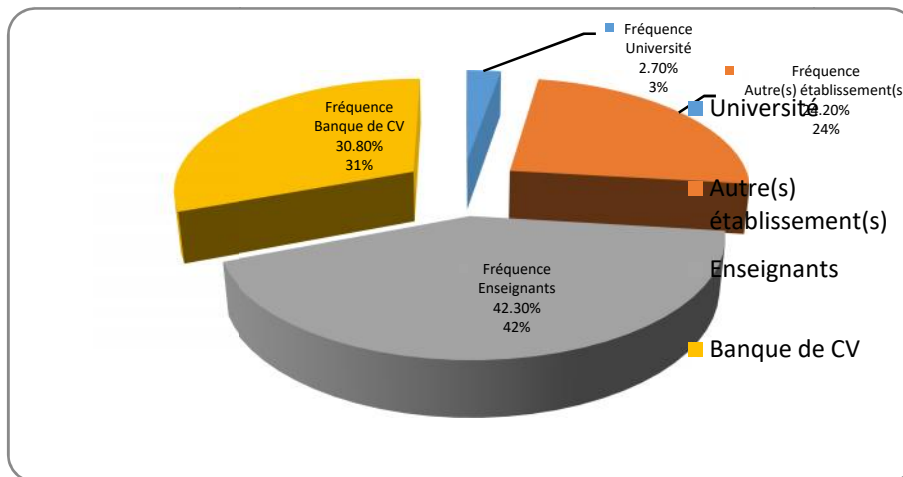
La différence avec la répartition de référence est très significative. $\chi^2 = 40,25$, $ddl = 4$, $1-p = >99,99\%$.⁶⁴ La dépendance est très significative. $\chi^2 = 14,04$, $ddl = 1$, $1-p = 99,98\%$.⁶⁵ Résultats du test de Fisher :Nombre moyen d'années d'expériences : $V_{inter} = 4959,00$, $V_{intra} = 99,65$, $F = 49,77$, $1-p = > 99,99\%$,Nombre moyen d'Ordinateurs : $V_{inter} = 1036,39$, $V_{intra} = 27,61$, $F = 37,53$, $1-p = > 99,99\%$.⁶⁶ Résultats du test de Fisher :Nombre moyen d'années d'expériences : $V_{inter} = 837,94$, $V_{intra} = 152,48$, $F = 5,50$, $1-p = 97,95\%$.Nombre moyen d'Ordinateurs : $V_{inter} = 272,80$, $V_{intra} = 37,40$, $F = 7,29$, $1-p = 99,17\%$.

The distribution of teacher recruitment criteria



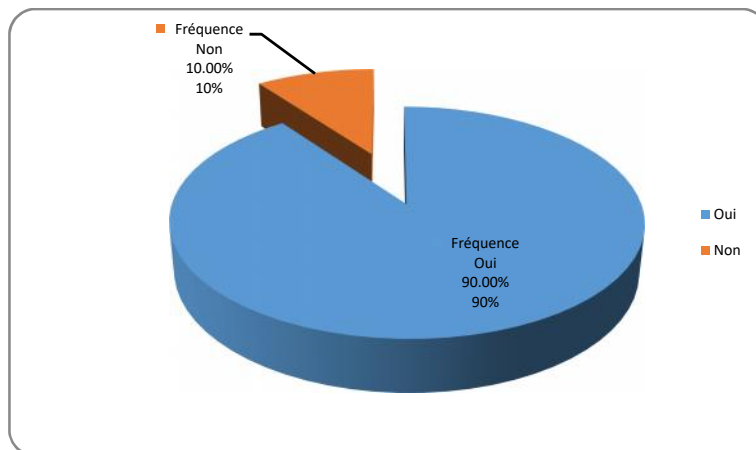
Source: Author

Teachers, the main source of recruitment



Source : Author⁶⁷.

The obligation to sign an employment contract

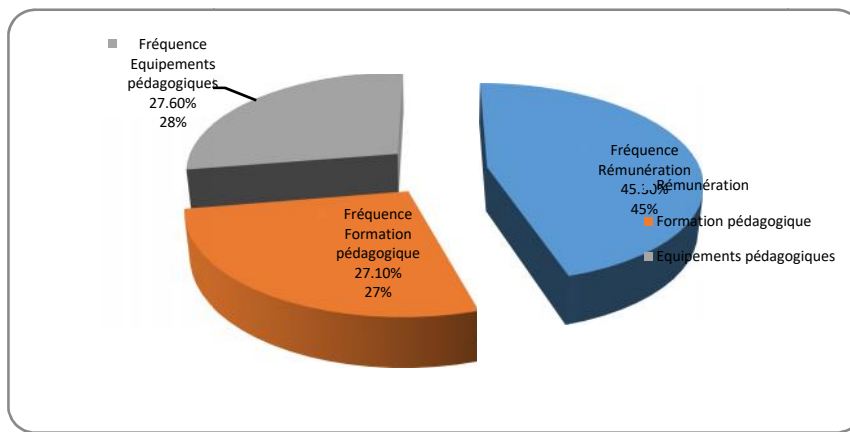


Source: Author

ANNEXE 4: MOTIVATION AND REMUNERATION OF TEACHER

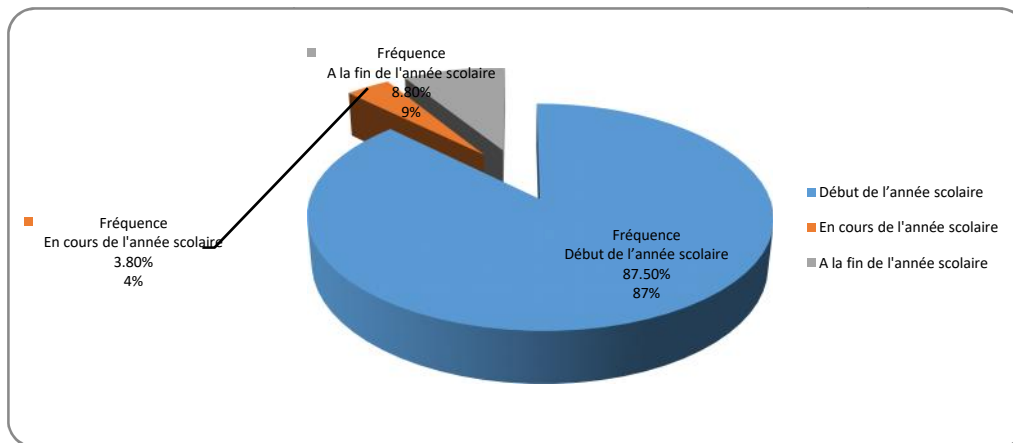
L'importance de la rémunération dans le métier éducatif

⁶⁷ La différence avec la répartition de référence est très significative. $\chi^2 = 60,33$, ddl = 4, $1-p = > 99,99\%$.



Source : Author.

The salary increase is announced at the beginning of each school year

Source: Author⁶⁸.

The importance of teacher consultation

Consideration of teacher objections Consultation with teachers	No	Yes	TOTAL
	No	86,70%	7,70%
Yes	13,30%	92,30%	77,50%
TOTAL	100%	100%	100%

Source: Author⁶⁹.

ANNEXE 5: SYSTEM PEDAGOGIQUE

The average and the test of the inevitable conditions of the transfer

Acceptance of Transfer Nature of the school	Never	Successful completion of the test	Have acquired the average	TOTAL
Privatedenominational	23,1%	23,1%	53,8%	100%
Private non-denominational	0,0%	58,2%	41,8%	100%
TOTAL	3,8%	52,5%	43,7%	100%

Source : Author⁷⁰.

The distribution of passing and repeating grades for private schools

Notes Nature of the school	Passage	Duplication
Privatedenominational	10,46	8,77
Private non-denominational	9,94	8,73
TOTAL	10,03	8,74

Source : Author⁷¹.

Distribution of students by class

⁶⁸ La différence avec la répartition de référence est très significative. $\chi^2 = 105,93$, $ddl = 2$, $1-p = > 99,99\%$.

⁶⁹ La dépendance est très significative. $\chi^2 = 43,59$, $ddl = 1$, $1-p = > 99,99\%$.

⁷⁰ La dépendance est très significative. $\chi^2 = 18,38$, $ddl = 2$, $1-p = 99,99\%$.

⁷¹ Résultats du test de Fisher :

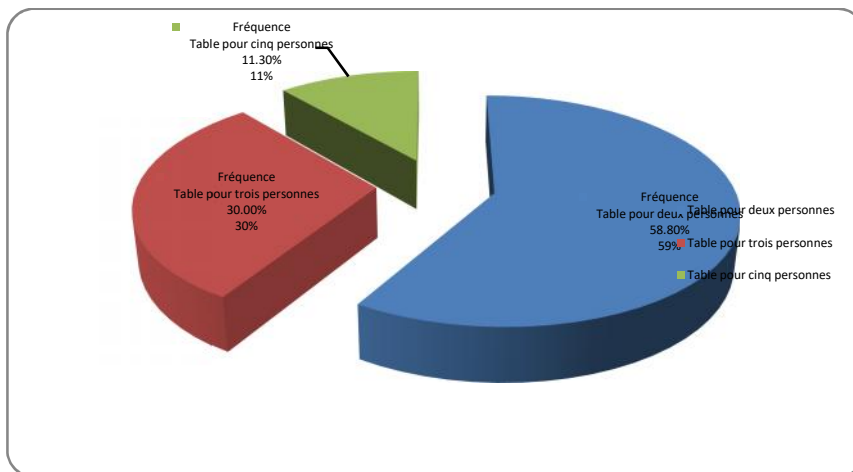
Passage : $V_inter = 2,96$, $V_intra = 0,19$, $F = 15,39$, $1-p = 99,97\%$.

Redoublement : $V_inter = 0,02$, $V_intra = 0,38$, $F = 0,04$, $1-p = 17,94\%$.

Number of students per class	Frequency
Lessthan 15,00	1,3%
15,00 à 30,00	6,3%
30,00 à ,45	26,8%
45,00 and more	65,6%
TOTAL	100%

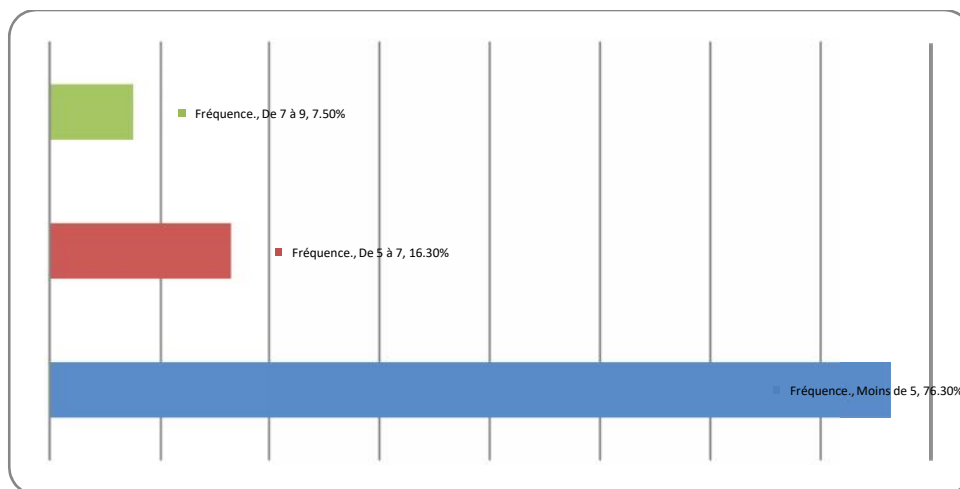
Source : Author⁷².

The distribution of bench tables in private schools



Source: Author

Distribution of private school referral scores



Source: Author

ANNEXE 6: TEACHER PROFILE

The maturity of the educational and female-dominated population

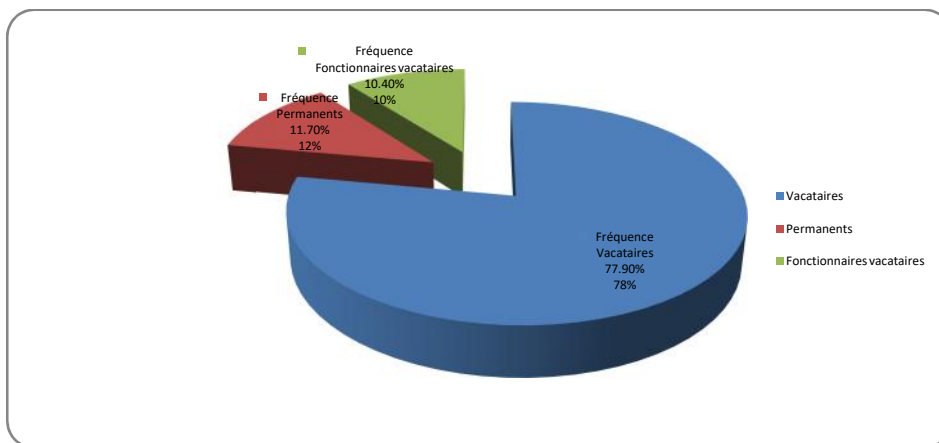
gender	Frequency	Age
Woman	67,6%	37,16
Male	32,4%	41,39
TOTAL	100%	38,53

Source : Author⁷³.

The dominance of temporary workers in the private education profession

⁷²Minimum = 15, Maximum = 45, Moyenne = 36,27 Ecart-type = 5,70, La différence avec la répartition de référence est très significative. chi2 = 126,32, ddl = 2, 1-p = >99,99%.

⁷³Résultats du test de Fisher : Age : V_inter = 870,01, V_intra = 98,22, F = 8,86, 1-p = 99,66%.



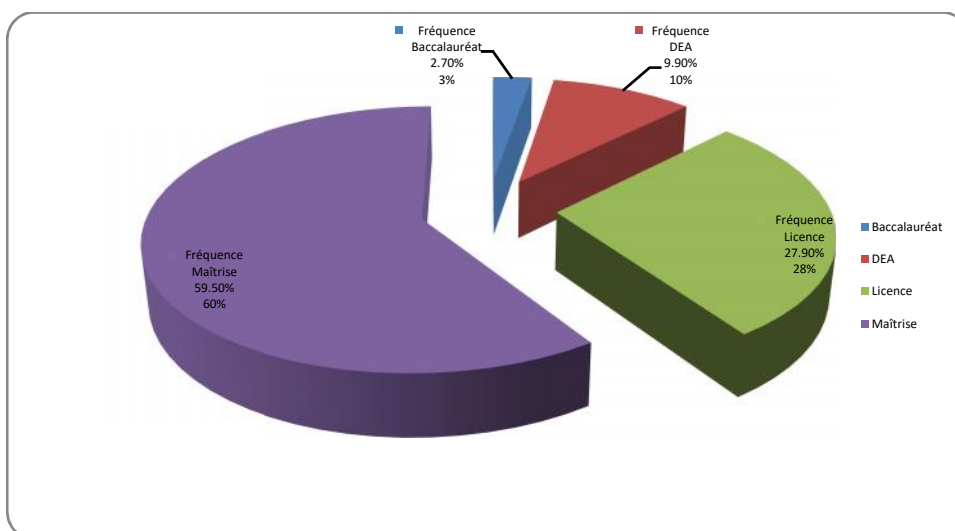
Source: Author⁷⁴.

The dominance of women in the literary education sector

Discipline Sexe	Littéraire	Scientifique	TOTAL
Femme	64,0%	36,0%	100%
Homme	37,5%	62,5%	100%
TOTAL	55,4%	44,6%	100%

Source: Author⁷⁵.

The dominance of the master's level in private education



Source : Author⁷⁶.

⁷⁴ La différence avec la répartition de référence est très significative. $\chi^2 = 198,73$, ddl = 2, 1-p = > 99,99%.

⁷⁵ La dépendance est très significative. $\chi^2 = 13,83$, ddl = 1, 1-p = 99,98%.

⁷⁶ La différence avec la répartition de référence est très significative. $\chi^2 = 170,58$, ddl = 3, 1-p = > 99,99%.