**Examining Teaching Methods and School Environment Effects on Primary School Learning: A Case Study in Cote d'Ivoire**


## Abstract

The pursuit of effective and quality education leads the Ivorian government to put in place strategies to improve the school context; the initial teaching method, the competency-based approach (APC) has evolved to become the reframed competency-based approach (APCR). Schools, for their part, will benefit from overall sanitation for their rehabilitation and the recruitment of teachers will be more selective. However, it is clear that despite these efforts, the academic level of students does not improve much. The recent evaluation of the CONFEMEN 2019 Education Systems Analysis Program demonstrates the delay accumulated by Ivorian students. This article therefore questions the effect of the teaching method as well as schooling conditions on the acquisition of academic skills among primary school learners. The use of a quantitative research method as well as second source documents made a significant contribution to the study. The analysis of the results indicated that the teaching method and study conditions have a major impact on learner results. In conducting our reflection, we will use a hierarchical linear model which is an extension of classic regression methods offering the possibility of capturing the information integrated in each of the learners' contexts of existence. This article is of capital importance insofar as it allows decision-makers to have a basis with a view to improving study conditions in Cote d'Ivoire.



Keywords: Teaching method, Learners, Reframed Skills-Based Approach, Academic skills, schooling condition.




## 1- Introduction

The Ivorian education system is the social institution that ensures the education and training of younger generations. Which therefore gives it a very important role in the process of economic growth. This role is perceived through the human capital it provides. According to Nafukho and al's (2004) perception of human capital theory, the results of education and training are a form of investment in the company's human resources. Therefore, education is seen as an investment that prepares the workforce and increases the productivity of individuals and organizations, consequently people are seen as a form of capital to be developed. Education is therefore a pillar of the development of a society. Given its importance and its contribution to society, the question of the quality of education must be asked. Education is said to be of quality when it allows students to reach their full potential and to produce coherent reasoning when faced with a scenario. The pursuit of continuous improvement of its education system leads Côte d'Ivoire to opt for an effective and reliable teaching method, thus, the country is part of the adoption of Pedagogy by Objective (PPO) which had already first established itself in the United States in the 1900s.

### 1.1 Concept of Pedagogy in Cote d'Ivoire

PPO is a teaching method aimed at gradually building learners' skills based on activities. This practice has long been applied in Ivorian schools due to its clarity in the precise definition of the know-how and interpersonal skills objectives envisaged for the learner. This teaching method facilitates the adaptation of the learner to the needs and values of society through objectives (Tyler, 1935). However, since the 1990s, the education system has been subject to several reforms in terms of teaching practices.

From the PPO, the teaching method turned to skills-based training, also known as the Skills-based Approach (APC), which had difficulty being adopted by all stakeholders in the field. education. The ineffectiveness of APC in producing the desired results led the Ministry of National Education to reorganize the practice, which thus became the Reframed Competence Approach (APCR). Alongside these reforms in teaching practice, there remains the conditions of schooling for students which have only deteriorated over the years and the school population continues to grow.

### 1.2 Situation of learning environment in Cote d'Ivoire

From 9,242,269 school-age children in 2016, only 5,730,207 children were educated across the entire territory with a capacity of 17,770 primary schools with 90,398 classrooms for 92,154 teachers (MENET-FP, 2016-2017). In 2016, inventories of the Ministry of National Education revealed that 40% of primary schools are in poor condition while 18.9% of primary schools were built with temporary materials such as clay, bamboo (DSPS, 2016). In addition to classrooms, the required well-being conditions such as the presence of electricity, water, latrines or even school canteens are almost non-existent. Nationally, 11,243 schools, or 69%, do not have hand washing facilities for teachers and students. 48% of schools do not have latrines and 57% of schools do not have access to water. The situation is even more alarming in terms of electricity coverage because 70% of schools throughout the territory did not have electricity during the 2016-2017 school year (DSPS, 2017).
Apart from the infrastructure aspect, there is the problem of insufficiency and lack of qualification of teachers. In fact, primary school teachers are recruited by competitive examination with either the Certificate of First Cycle Study (BEPC) level for assistant teachers (IA) or the Baccalaureate level (BAC) for ordinary teachers (IO) and do not benefit from only 3 years of professional training including one year of practical internship within schools.
The effects of precarious learning in the primary cycle were not long in coming. Indeed, the recent report of the CONFEMEN 2019 Education Systems Analysis Program highlighted the shortcomings of Ivorian students. In fact, Ivorian students finish primary school not knowing how to correctly decipher a text, much less count as they should (World Bank, 2017). The academic performance of Ivorian students remains far behind those of students in the sub-region with low scores in mathematics and reading (PASEC, 2014). In addition, the latest results recorded at the end of the 2020-2021 school year reveal a national success rate of 52.51% in the 2021 session of the Certificate of Elementary Primary Studies (CEPE) compared to 95.31% in 2020, i.e. a regression of 42.80% (MEN, 2021).

### 1.3 Research Objective

The purpose of this article is to analyze the effect of the teaching method and the school setting on the academic achievements of learners in the primary cycle in order to find appropriate method for improvement.

### 1.4 Research questions

i. What are the teaching practices adopted in the Ivorian education system?
ii. What are the education quality and measurement?
iii. What are the resolutions to be taken by the Ivorian government in order to improve the results of learners?

## 2. Literature Review

### 2.1 Overview of teaching practices and the Ivorian school environment

The Ivorian education system has seen several teaching practices succeed one another during its history from the colonial era characterized by the teaching of cultural content copied from France to make the workforce operational, to renovated teaching then television and finally sovereignty between 1982 and 2002. The succession of these training programs consisted of improving over the years the teaching method used, thus after evaluating the practice used the authorities experimented with a new one supposedly more effective than the previous one. The school environment has also undergone changes over the last few decades in pursuit of the same objective of efficiency in the learning transmitted.

#### 2.1.1. From Pedagogy by objective(PPO) to the competency-based approach (APC)

Like civilizations and societies, training has undergone several changes with the aim of improving the knowledge taught. Teaching practice being the key element of knowledge dissemination is selected and implemented with great precision. The adoption of pedagogy by objective (PPO) had been perceived as progress for the Ivorian school. This perception facilitates its implementation which was hardly the case for the Competence Approach (APC) which experienced enormous difficulties in its implementation and application despite the positive aspects it presented. We will present in detail the evolution of the most recent teaching practices adopted by the Ivorian education system.

**Pedagogy by objective (PPO)**

The PPO, which has its source in the educational movement focused on Scientific Management, was influenced by the work of Taylor (1911) but took on meaning from 1934. This practice experienced developments first at the level of curricula which underwent a improvement in order to increase the productivity of the method (Hameline, 1979) then, at the level of the taxonomy made by Bloom (1956). Côte d'Ivoire adopted the PPO in 2002 because of its ability to highlight the learner who was considered the main element of learning. Indeed, the small variation in the Gross Enrollment Rate (GER) at primary level, oscillating between 73% and 75% over the period 1990-2000, led the country to turn in 2002 towards a new teaching practice, hence the application of the PPO. Its application was carried out by training teachers on the practice with a view to its perception and mastery before implementation. It was generalized throughout the Ivorian territory during the 2006-2007 school year. The logic of this practice is to organize learning based on the achievement of educational objectives defined in advance (Nnang, 2013). This procedure makes it possible to obtain observable and measurable results but above all to correct imperfections during

learning, thus facilitating the evaluation of student achievement. It should also be noted that the FPO integrates the needs of society into its training program (Hameline, 1979). This method has several general, specific and operational objectives (Demeuse et al, 2006).
It is true that PPO is a practice placing emphasis on the learner who is considered the most important element of learning and that it offers rigorous consideration of training provisions (Nguyen and Blais, 2007), internal and external evaluations carried out on the education system have highlighted its weaknesses. First, in terms of objectives, it is difficult to select the educational objectives to follow given their high number. Indeed, the selection must be made according to the real needs of the learner, which is not always possible when the number of defined objectives is high. Then, it was shown that students who had mastered the educational objective did not always manage to use them in real life situations. However, the goal of schooling is to make students capable of responding effectively to any situation in life. To overcome the weaknesses of the FPO, the Competency Approach (APC) makes it possible to take into account the situation while facilitating the use of skills (Depover, 2006).

**The skills-based approach (APC)**

The transition made in the education system between PPO and APC was due to the improvement of the transmission of knowledge in establishments. The desire to make students aware that they are the main actors in their learning (Lessard, 2000) while offering them more accessible teaching leads the education system to opt for the implementation of APC (Bronckart, 2005). The results of internal and external evaluations of the education system highlighted the imbalance that remained between existing training programs and desired learning objectives (Aska, 2010). Initiated for primary education, it was tested in 2002-2003 then applied as a whole after having proven itself in the following years. It should be noted that the application of a new teaching practice requires a minimum of teacher training. Indeed, teachers, the main actors in transmission, must master the teaching method in order to deliver lessons more effectively. However, the implementation of the APC did not prioritize teacher training and the educational materials were insufficient to cover the entire territory. APC requires prior training for its effective application, but African countries, particularly Ivory Coast, lack training and preparation for the implementation of this practice (Weva, 2003). The schooling context is such that teachers cannot apply APC in its entirety. Firstly, in terms of the composition of classrooms and staff. The student/teacher ratio is estimated at 55 students per teacher (DSPS, 2016). Teachers do not have the necessary time to practice APC, according to Robert (2007) the use of APC by our countries is only utopian because our systems remain incapable of its execution The difficulties of perception of APC and teacher training and insufficient financial resources did not make it possible to achieve the desired objectives.

**2.1.2. Reframed skills approach**

Since the Reframing of the Competency-Based Approach, we continue to see dysfunctions in the teaching provided in public primary schools. It is also clear that the majority of parents with means opt for education in private primary schools (Catholic primary schools, Methodists, etc.).
The complexity of the approach and its terminology, the multiplication of reference documents, the exclusivity of this approach compared to any other approach, reveals that this approach is still not well adopted. Many teachers have difficulty understanding the principles of APCR. The difficulties encountered in the implementation of the APC still persist in the

application of the APCR. Teachers fail to adopt this approach in classrooms. Several difficulties, notably the low level of students, the overload of programs, the high number of students in classes, the lack of training of teachers in the Reframed Competency Approach do not allow the use of APCR in the 'education. This great variability in the implementation of the reframed skills-based educational approach has the corollary of the ineffectiveness of the lessons transmitted and the students do not manage to master basic skills such as reading, calculating and logical reasoning.

## 2.2 **Foundation of human capital**

The theory of human capital is a key foundation in the economics of education, approached within the framework of competence and competitiveness, it has always been at the heart of questions in firms. Already in 1946 Leontief questioned the intensity of American exports which, instead of generating an abundant use of capital, required on the contrary the use of an abundant workforce. According to this author, the importance of exports was explained by the qualification of the workforce. Indeed, the American workforce was very qualified and the products resulting from this workforce were in quantity and quality, which is why they were very popular. The qualification of the American workforce was remarkable during this period because it increased national production by 3.1% in 38 years, between 1919 and 1957. The work of Schultz (1961) was also oriented towards the determination of high labor productivity in short, research on human capital is very profound because the work of the Spanish Melchor taken up by Street (1988) reveals that the notion of human capital is very distant. Indeed, the author is trying to boost Spain's economy by turning to education. The author believed that this was the perfect way to initiate economic recovery. Following this author, several authors have joined research on human capital, among others Smith, Say, Marx. These authors were mainly interested in the effects that the accumulation of human capital can have on individual income and on the national economy. It would be foolish to talk about human capital without talking about one of its pioneers Mincer (1958) whose main research was oriented towards determining the income difference within the population. The author wanted to provide answers to the differences in salaries between employees, between people of different genders or different social affiliations, basically he sought to explain the effect of education on income. These studies precede those of Adam Smith (1776) in the 18th century. The author, in search of answers on relative differences in wages, identifies the increase and quality of employees' skills as a factor of economic progress. The qualification of employees gives them efficiency which improves their production. Based on this observation, the author highlights the advantages that arise from productivity while also highlighting the existence of disadvantages linked to the division of labor. For Smith, the division of labor has the effect of slowing down the exercise of the intellectual faculties of employees, which will have repercussions on other spheres of their lives.

Smith's work supports the importance that training can have on the productivity and therefore the income of individuals. Training allows individuals to develop solid skills and abilities that will contribute to their social and economic well-being. Aware of the importance of individual knowledge and skills, we are witnessing the birth of a theory, namely the theory of human capital. This comes from reflections carried out in the field of education on measures that could make it possible to improve the productivity of agricultural labor as well as income Schultz (1961). However, it was in the early sixties that this theory was systematized by Becker (1964). The author extends his microeconomic analyzes to the social behavior of individuals. This American economist defines human capital in his work entitled Human

Capital in these terms "the set of productive capacities that an individual acquires through the accumulation of general or specific knowledge, know-how, etc. » (Becker, 1964). Human beings are endowed with capacities and aptitudes that are innate for some and acquired following training for others. Training generates investments of various kinds: material expenses, time expenses, expenses in physical and intellectual effort but above all expenses in health and food.

On the empirical level, Mincer (1974) carries out an approach on the theory of human capital in order to estimate the return on an additional year of training, this approach aims to highlight the existence of diminishing returns in education in fact, each additional year spent in training, even if it increases future income, remains less productive than the previous one. Differences in productivity explain differences in wages and the accumulation of human capital is the basis of these differences; the added value of training leads to marginal productivity. Training therefore makes it possible to reduce salary inequalities by providing the same knowledge to all individuals, thus making them all productive. Mincer's model (1974) was formalized with the aim of determining the effect of education on productivity. The author, in his quest to understand the benefits resulting from education, assumes that individuals are remunerated according to their marginal productivity and that an additional year of schooling generates gains in income. To this end, the author formalizes an equation of the form:

$$lnY_S = c + rS + aE + bE^2 + u \quad (1)$$

With

YS: Individual income
S: Number of years of study
E: professional experience which follows a quadratic form with the aim of representing the concavity of the profits generated by schooling after investment (diminishing return on experience).
c: the constant (basic salary without investment in human capital),
u: Stochastic term, takes into account unobserved factors affecting income

For Mincer (1993) education and experience are the main means of explaining the increase in income among individuals, the author maintains that they alone explain a third of wage income.

Training confers a certain knowledge making it possible to increase the marginal productivity of the person who has it, leading to an increase in income. Investing in one's human capital requires an evaluation of the opportunity cost, that is to say, making a trade-off between future investment gains that may arise from the investment and all those that one currently renounces or sacrifices for profit. of training, the expenses generated by the training as well as any abandoned income-generating activities Touabri (2009).

## 3. Methodology

This study used a quantitative methodology, whereby various secondary sources used to collect data. A review of related literature about the study was done through various sources including books, published journals, national, reports, and other related materials to collect data and information.

### 3.1 Use of the analysis method

In conducting our analysis, our methodological choice is oriented towards a method which allows us to take into account the effect of the teaching method on the learners' achievements while also taking into account the effect of the school environment. Taking these elements simultaneously in the same analysis aims to capture not only the influence that teaching exerts on skills but also that of the environment in which the student evolves daily. This will involve opting for a regression linking a response variable to several explanatory variables (Bressoux, 2016). Ordinary least squares (OLS) regression methods do not allow, on the one hand, to capture information that is nested within each other, and on the other hand their fundamental assumptions of independence and absence of autocorrelation. Errors are not possible in the pursuit of our objectives.

First, OLS assumes that the covariance of errors is zero:

Cov (ε_i,ε_j) = 0 for i ≠ j (1)

Which implies that the errors are independent, in other words, the error linked to an individual i in a multiple regression (1) does not make it possible to predict the error linked to another individual i'.

The regression function is of the following form:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \ ... \ + \beta_k X_{ki} + \ \varepsilon_i \qquad (2)$$

Individuals from the same social, cultural and economic group tend to resemble each other, to the extent that they share common characteristics such as teaching, access to educational materials which are linked to their school environment and can even exercise a influence on their performance. However, the OLS hypotheses cannot be applied in this case because they do not take context effects into account. Indeed, the violation of the assumption of independence of errors increases the risk of error of the first type. As for the second hypothesis of OLS which is the absence of homoscedasticity of the errors, that is to say the lack of constancy in the variance, it is presented as follows:

$$V(\varepsilon_i) = \mathrm{E}\left((\ \varepsilon_i - E(\varepsilon_i))^2\ , soit\ V(\varepsilon_i) = \ \sigma_\omega^2 \right. \qquad (3)$$

In addition to these two hypotheses is added that of fixed effects in the OLS analysis. Using the OLS regression method assumes that each accepts the previous hypotheses, which will only bias our results. It is therefore obvious that models based on Ordinary Least Squares are unsuitable in our case to the extent that they compromise the validity of the estimation of the coefficients (Bressoux et al, 1997).

Linear hierarchical models prove to be the most appropriate because they have less rigid assumptions. Given that students i are nested in schools j = 1, …, jk, we will have two levels.

### 3.2 The theoretical model

The specification of the multilevel model is carried out by defining the different levels selected in the continuation of our analysis. The two levels in our case are: students and schools.

Level 1 is as follows:

$$Y_{ij} = \beta_{0j} + \beta_{1j} X_{ij} + e_{ij} \qquad (4)$$

With:

i: individuals

j: environments.

X_ij: vector of variables

e_ij: error term

As the coefficients $\beta_{0j}, \beta_{1j}$ can vary from one level to another, we introduce the error terms to$\mu_{oj}, \mu_{1j}$, make them random,

At level 2:

$$\beta_{0j} = \gamma_{00} + \mu_{0j} \quad (5)$$

$$\beta_{1j} = \gamma_{10} + \mu_{1j} \quad (6)$$

The variance-covariance matrix of the two error terms $\mu_{0j}$ and $\mu_{1j}$ associated with $\beta_{0j}, \beta_{1j}$ is written as follows:

$$\begin{pmatrix} \mu_{0j} \\ \mu_{1j} \end{pmatrix} \rightarrow N\left[\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} \sigma_{\mu 0}^2 & \sigma_{\mu 01} \\ \sigma_{\mu 10} & \sigma_{\mu 1}^2 \end{pmatrix}\right] (7)$$

When we introduce the values of $\beta_{0j}$ and $\beta_{1j}$ into the level 2 equations, we obtain the final equation of the model which is in the following form:

$$Y_{ij} = \gamma_{00} + \gamma_{10} X_{ij} + \mu_{0j} + \mu_{1j} X_{ij} + e_{ij} \quad (8)$$

With:

$\gamma_{00}$ : general average of Y;

$\gamma_{10}$ : average regression slope of the groups

$\mu_{0j}$ : Random term

$\mu_{1j}$ : difference between j and Y,

$e_{ij}$ : error term

The final model equation consists of two parts, a fixed part and a stochastic or random part. The fixed or deterministic part of the model is represented by γ_00+ γ_10 X_ij and the stochastic part is represented by $\mu_{0j}, \mu_{1j}, e_{ij}$, where $e_{ij}$ represents the level 1 random term and $\mu_{0j} + \mu_{1j} X_{ij}$ sont les termes aléatoires.

3.2 Data presentation

In our analysis, we will use data from the CONFEMEN Educational Systems Analysis Program (PASEC) survey. PASEC, which was initiated in 1991 to improve educational policies based on country evaluations, carries out more or less frequent evaluations (every 4

years) to report on the evolution of the education systems of member countries. Data collection is carried out in two phases, first at the start of the year the students are subjected to tests in mathematics and French in order to capture their initial level then at the end of the year they are subjected to tests again. tests to assess the added value of the past years. Apart from the tests, students are also subject to questionnaires which provide information on the extra-curricular context. Teachers and school principals take part in the questionnaires in order to provide information relating to the school context.$\mu_{0j} + \mu_{1j} X_{ij}$ are the random terms.

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### 3.4Description of study variables

Table1:Variable presentation

| Variable Name | Variable description |
|---|---|
| Student_age | Continuous variable and coded as a qualitative variable, the values taken are 0 if the age does not correspond to the required age and 1 if it corresponds |
| Student_gender | Qualitative variable which takes the value 1 if the student is a woman and 0 otherwise |
| Nursery_school | Qualitative variable which takes the value 1 if the student attended preschool and 0 otherwise |
| Grade repeating | Qualitative variable which takes the |
| Teacher_gender | value 1 if the student has repeated a |
| Degree_teacher | class and 0 otherwise<br>Qualitative variable which accounts for the diploma |

| | |
|---|---|
| Approch_by_situat | Qualitative variable which takes the value 1 if the pedagogy is APS and 0 otherwise |
| Pedagogy_difference | Qualitative variable which takes the value 1 if the teaching is differentiated and 0 otherwise |
| School_ Insecurity _ Situation | Qualitative variable which takes the value 1 if the school is secure and 0 otherwise |
| Material_constr_class | Qualitative variable which accounts for the construction material of the class |
| Teacher_training | Qualitative variable which takes the value 1 if the class is electrified and 0 otherwise |
| Apc | Qualitative variable which makes teacher training |
| | Qualitative variable which takes the value 1 if the pedagogy is APC and 0 otherwise |

**Source:Authors based on PASEC 2014 data**

### 3.5 Presentation of results and discussions

The results of the estimation will be presented in this part and grade 6 (CM2) being the end of the primary cycle was selected. Student achievement is represented by the scores obtained in the different tests.

Table 2: Presentation of the results obtained

| variables | Coef |
|---|---|
| Student _age | **-9.535**** |
| Student_gender | **-9.911***** |
| Nursery_school | **-17.964***** |
| Grade repeating | **40.624**** |
| Degree _teacher | **-10.916***** |
| Approch_by_situat | **15.330*** |
| Pedagogy_difference | **60.799***** |
| School_ Insecurity _Situation | **-47.205**** |
| Class_Constr_Material_ | **23.391**** |
| School_Electrification | **-46.626***** |
| Teachert_training | **-19.012**** |
| APCR | **-14.393*** |
| _cons | **65998.7***** |

Notes: *** p< 0.01, ** p<0.05, * p<0.1

The table presents the results obtained in conducting our analysis. Contrary to all expectations, the results reveal the significance of elements of the school context such as the professional training of the teacher, his professional diploma, elements relating to the individual characteristics of the student but above all the pedagogical practice used in teaching.
The teaching method has a significant influence on the acquisition of skills among students. Individual characteristics (age, gender) negatively influence academic performance with respective significances of 5 and 1%. Educational background exerts differentiated influences, attendance at a nursery school negatively influences the average score of students while repeating a year has a positive effect on academic performance. In terms of teaching practice, it turns out that the most effective methods in Ivory Coast are differentiated pedagogy and the situation-based approach. These two methods positively and significantly affect academic results at 1% and 10% respectively. Contrary to all expectations, the application of the reframed APC does not contribute effectively to improving the academic performance of students because our results show that it negatively influences the average scores of grades 6 (CM2) students.

**Results and Discussions**

As we have just seen above, gender has an influence on results in the disciplines studied in class and boys perform better than girls at the end of school, which is justified by the significance of the variable at the level of scores.
Repetition has a positive effect on scores in the last year of primary school. Contrary to the work of Belot and Vandenberghe (2014), repeating a year proves beneficial because it improves the academic results of CM2 students. This result can be explained by the fact that repeating a class allows the revision and mastery of skills and knowledge poorly understood by the student, who develops better skills because he visualizes the courses and lessons he has already seen. The children are able to better understand the tasks taught, which leads them to success. Additionally, teachers should place emphasis on homework. Indeed, homework assignments are effective ways to involve parents and students in the educational task, provided that they are designed with knowledge of the facts. As a result, the learner does not need to wait to repeat a year to properly assimilate the lessons, he can do it even after class and under the supervision of his teacher who will be able to make corrections and see the gaps in the material. student.
Our results reveal the significance of the professional diploma on the average scores. This result can be explained by the simple reason that professional training confers solid skills to teachers which help them in the effective accomplishment of their function.
In Côte d'Ivoire the examination for primary school teachers is open to any individual having either the certificate of first cycle (BEPC) or the high school diploma (BAC), the vast majority of those admitted have no knowledge and skills in teaching and professional training sheds light on the methods and procedures necessary for harmonious learning. Thus, teachers with a professional diploma prove to be more capable of leading students to better academic results. Especially since the application of APC requires mastery of training procedures. The results obtained in our study are consistent with those of Owolabi and Adedayo (2012) who revealed that students taught by teachers with higher qualifications performed better than those taught by less qualified teachers. According to them, students obtained better results in physics when taught by professional teachers. It should also be noted that Darren's (2011) studies have shown that teachers who successfully complete the certification process have a

positive impact on their student's results. The importance of teacher qualifications on student results is also demonstrated in the work of Boots et al (2007), according to these authors, student results, particularly those in scientific subjects, were positively impacted by teachers holding higher diplomas.
Although it is true that the diploma affects the scores, some authors argue the opposite. For them, the academic results of the students are in no way influenced by the diploma of their teacher, among these authors we have the work of Sawchuk (2009) which allows him to affirm that the diploma of the teachers has no effect on the results of the students. students. In the same vein Bonney et al (2015) maintain that the academic and professional qualifications of teachers did not affect student performance. Several studies have highlighted the role of the student's gender on academic results and for the most part men recorded excellent performance in science subjects unlike girls who tended to study literature. We can cite the work of Hadjar et al (2014) which allows us to conclude that the child's gender determines their results in science and literature. Thus, depending on gender, we can predict the results Grenet (2010).
From these different observations, we can illustrate without risk of being mistaken that the teacher plays a preponderant role in the learning process of the students, it would be important that a look is focused on their training which is essential for the quality Education.



**Conclusion**

In order to have a quality and competitive education system, Côte d'Ivoire has only continued teaching methods in the quest for a more effective method. Thus, from the colonial teaching practice and pedagogy by objective, the Ivorian school saw itself adopt the approach by competence (APC) then the approach by reframed competence (APCR) as a teaching practice in primary establishments public. However, the implementation of these methods was difficult due to its complexity
Indeed, the adoption of such a practice presupposes intense training of teachers in order to allow a good perception of the method and optimal use, however, the country does not have sufficient technicians who can guarantee training for all stakeholders in the field. sector.

Therefore, the Ivorian state should invest in teacher training which will improve the quality of learner results.

The application of the APCR was a beautiful illusion because it is not really used in primary establishments. Our analysis allows us to highlight the ineffectiveness of teaching practice. Our data made it possible to show the negative influence that teaching practice exerts on academic results. Alongside teaching practice, another aspect has an even more important influence on performance: the school context. Our analysis reveals that students learn more easily when learning takes place in an appropriate environment.
The lack of educational infrastructure is therefore an obstacle to student learning. The state of Cote d'Ivoire as well as all national education stakeholders should look into the case of school infrastructure. According to Team Varthana (2023), Infrastructure is recognized as one of the key factors influencing academic performance in the field of education. Creating a safe and healthy school environment is crucial for the physical and emotional development of students, and educational infrastructure plays a vital role in ensuring the learning process functions optimally, leading to successful learning outcomes. Teachers are also hampered in their teaching process because they do not have the necessary means available.

Based on our analysis and the various results obtained, it would be important for decision-makers to adapt the APRC according to the real needs of our education system. Also, there is a need to rehabilitate public primary establishments in Cote d'Ivoire .
Furthermore, we are led to believe that a systematic change in method would not be the appropriate solution for the Ivorian education system. Instead, emphasis should be placed on the process of recruiting teachers and reviewing their training so that it is adapted to the real needs of Cote d'Ivoire in terms of education. The state should also look into the case of educational infrastructure. Indeed, without infrastructure, we cannot talk about learning.



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