



# **Contribution to the Development of a Tool for Deciphering the Message Conveyed by Marks for Better Support of Learners in Competance Based Approach: Case Study of Cameroon**

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## **Author's contribution**

*The sole author designed, analysed, interpreted and prepared the manuscript.*

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## **ABSTRACT**

The present study aims to provide a tool capable to ease the deciphering of the message bore in watermark by marks. Its achievement was facilitated by investigations from the field. General knowledge and their mobilization constitute the major focus of evaluations in Cameroon. They are separately marked over 10, for a final mark over 20. The vague perception of the message conveyed by marks considerably shuffles the student's assistance. The matrix of FOPOUSSI TUEBUE appears then as a major contribution because of its capability to orientate the choice of actions to be carried out in response to particular difficulties faced by learners.

*Keywords: Education; evaluation; deciphering; matrix; success.*

## 1. INTRODUCTION

Pedagogy is the means by which knowledge is imparted [1]. This is a constantly changing concept [2]; in this vein, many nuances are perceptible not only in the major global educational trends, but also locally between teachers within the same structure [3] (Lamontagne, 1995). As a result of global changes, the desire has arisen in the human mind to possess teaching techniques always in the light of the expectations of the hour. It was therefore responding to this call that the work of many researchers led, around the middle of the twentieth century, to the establishment of pedagogy by objectives instead of that by content [1]. Its experimentation very quickly revealed many advantages [4]. As results, this new way of doing things was not only welcomed [5,6], but above all conveyed across the planet by the contributions of many researchers, including Dessaint [7], Harden [8], and Towns [9]. It was indeed noted at this time of the evolution of teaching techniques, the ability of this approach to recommend, among other things, the construction of programming and progression around the activity of the learner, specific preparation and detailed activities by the teacher, providing a rational basis for formative assessment and development of self-study, setting up the basis of a system that improves itself by constant feedback, the development of communication in a spirit of frank collaboration between the different actors of education (teachers, students, parents, administration, etc.), and this coupled with a bilateral training contract that the final evaluation of learning will verify and establish the bases of individualized learning [10]. Coupled with this, Gingras [5] shows that communicating objectives to students has positive effects on performance when evaluating learning; in the same vein, Landry [6] notes that the presence of objectives plays a positive role on the motivation and emotional state of students. This approach has for decades helped to train highly educated people. But as the euphoria passed, the facts revealed one disturbing detail; these are limitations that have gone unnoticed until now. Indeed, it was observed a little later that left to their own devices, the products resulting from the objective-based approach showed numerous shortcomings with regard to the increasingly innovative and complex requirements of the living world. To remedy this situation, the whole approach has been coldly revisited [11]. We were thus able to identify numerous shortcomings.

Indeed, it ignores learning whose results are unpredictable (creativity, expression, discovery), it introduces a fragmentation that harms the meaning of the learning to be done, it adds great complexity to the planning of teaching. These shortcomings were then the starting point for the search for a new approach, capable of correcting the shortcomings identified in the objective-based approach [12]. At the end of the work, the proposals made favored a clear reconfiguration of the teaching techniques [13], with the innovative element being the strict definition and the addition of behavioral objectives: the competency-based approach [14,15] was thus born. According to Perrenoud [16], "a skill is a capacity for effective action in the face of a family of situations, which one manages to master because one has both the necessary knowledge and the ability to mobilize them wisely, in a timely manner, to identify and resolve real problems". Such dynamism logically has the consequence of keeping the teacher in perpetual quest to acquire and then personalize constantly improved teaching inputs [17,18]. This is the key to successfully turning twenty-first century learners into true development actors. In this sense, Gagné [19] insists on the nine steps to be followed during learning that the trainer must master in order to succeed in his mission. In this adventure, the permanent and continuous verification of the achievement of the final cognitive and behavioral objectives is highly recommended. It is dependent on evaluations [6]. These are the tools that allow the teacher not only to try to get an idea of the difficulties of the learners, but also to self-assess. Overall, these evaluations are sanctioned by the attribution of ratings or comments [20]. In the case of ratings, it is generally global, on a scale established beforehand [21]. Regarding the specific case of Cameroon highlighted in the context of this study, it becomes crucial to raise the consideration given to the grade mark. This is due to the fact that it determines the judgment intended for each learner after a job. From there should logically come the type of support that would be most useful to him. We are therefore entitled to question the assessment system in force, the system of support for learners set up locally by teachers, parents, as well as tutors. These are among the many reasons which justify the setting up of this work. Its main goal is to identify the evaluation system in Cameroon as well as to collect the observations of parents, tutors, as well as teachers regarding their methods of supporting learners, then to help deal with the problem a little more effectively

difficulties of each learner by a means of meticulous decyphering of the message hidden by their respective marks at the end of a work done.

## 2. MATERIALS AND METHODS

### 2.1 Equipment

The grade mark was targeted as a basic tool for this study. This is because schoolwork relies on assessment systems, usually sanctioned by the awarding of marks (Loye, 2009). It is either in the form of a number, or in the form of a letter, or finally in the form of a comment [21]. The numerical presentation of the score is based on a scale that varies from one country to another. In this sense, it is done on a scale of 20 in France, 6 in Switzerland, 100 in America among others. Regarding the literal representation, it is done on a scale from A to F in countries such as Canada [21]. In the case of Cameroon, the presentation of the class note combines the numerical representation with a comment; thus, it is commonly followed in the French-speaking subsystem by statements such as "Passable", "Bien", "Très bien", to name a few. In the English-speaking subsystem, these are terms such as fair, good, very good, etc.

According to the work of Merle [20], this tool is at the center of many ambiguities and lively debates. Indeed, a teacher, even armed with better intentions, can quickly be led to appreciate a copy according to relative and not absolute criteria. However, we agree on one fact; the mark remains the basic tool necessary for judging a learner's work [22]. This is the reason why, at the end of a work in a classroom, the marks will always be distributed according to the profile of a Gaussian curve, comprising the most general case in the center, and a few rare copies that stand out by their success or failure at both ends. From this observation, changes have emerged. Thus, more and more, we note the tendency to evaluate not by means of overall marks summarizing the results of a copy, but by means of a list of skills brought into play in an evaluation, and of which the level of performance is indicated [20].

### 2.2 Methods

To achieve the objectives set, the work was carried out in the field and in the laboratory. In the field, it was a question of monitoring regularly over three consecutive academic years (2016-

2017 to 2018-2019) the work in classrooms. For this, ten different Secondary High School were selected (one meticulously chosen school per Region). In detail, the work was carried out at the observation sub-cycle level, where two sixth grade classes and two fifth grade classes were regularly taken at random during each of these years. The size of the regularly monitored pupils per school was on average 108 in 6th grade and 109 in 5th grade. Concerning the teachers followed, they were four in number each academic year. The follow-up was done as part of the Science course. This course was selected for this work because of its highly multidisciplinary nature. Regularly, learners and teachers in these classes were interviewed about their work. Also, with the permission of the administration, the meetings between the teaching staff of this establishment and the parents of the students were also followed with great interest. Likewise, the difficulties of parents in supervising children at home under the new approach in force were carefully noted. Further on, parents were interviewed about their impressions of their involvement of tutors in the follow-up of their children. Finally, some of the trainers were approached and interviewed in relation to their work with the learners entrusted to them. At the end of this fieldwork, a lot of valuable information has been collected.

In the laboratory, the rating scales of several countries were analyzed. These are those of Canada, France, the United States of America, the States of West Africa. Then, a reconciliation followed by the establishment of systems of correspondence between these different work ratings of students according to the part of the world considered has been made. It was thus possible to establish intervals that correspond to the objectives targeted in the context of the training of learners. We started on the basis of the assessment of resources out of 10 and the assessment of skills simulations out of 10 also as applied in Cameroon, at least in the first cycle. Thus, in the resource assessment part, two major intervals have been established:

- the one ranging from **0** to less than **5**. Here, the code consists of a number and a letter. The number is **1** and the letter is either **a** or **b**;
- the one going from **5** to **10**. Here, the code has two digits, the first of which is **2**. In addition to these digits, there is a letter which is either **a** or **b**.

For the assessment of the learner's ability to use his knowledge in a situation, four sub-intervals have been established. The rigor with which the intervals were developed aimed at maximizing the quality of the expected result at the end of the labor. The intervals set up are then presented as follows:

- from 0 to less than 4.5;
- from 4.5 to less than 6;
- from 6 to 8;
- and beyond 8.

Regarding the interval where the scores obtained in the context of the assessment of resources are less than 5, two cases have been established:

- the case where the learner has in addition less than 5 in the assessment of his ability to use his knowledge in a situation;
- the case where the learner has, despite the failure in the acquisition of knowledge, more than 5 in the evaluation of his ability to use his knowledge in a situation.

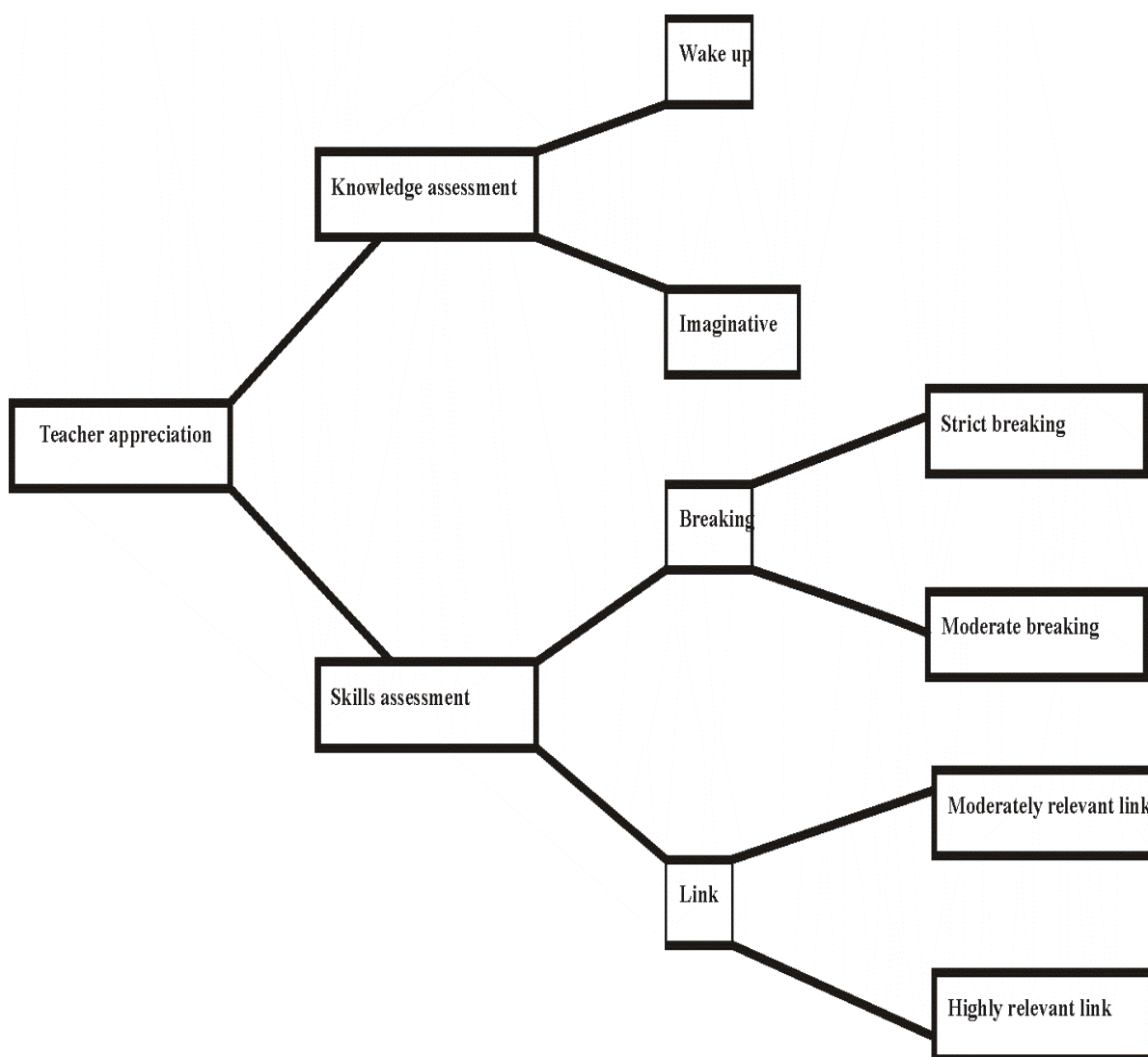


Fig. 1. Tree diagram representing the different levels to be followed up by Teachers during their appreciation of students work

Then, for each interval, alpha numeric codes were established for each of these intervals. These codes are respectively as follows: **1-a, 1-b, 2-1-a, 2-1-b, 2-2-a, 2-2-b**. Each of these codes has been associated with a message designed on the basis of the type of difficulty involved. This message reveals who will have been the learner presenting a given mark in the context of the work that had to be done. In the different cases, illustrations have been made to better understand the personality of the learner characterized by each of the different codes established. At the end, we were able to draw up a matrix capable of efficiently providing information on the personality of the learner facing a given activity. From there, it was proposed to remedy the problem revealed by the message detected in the watermark behind the final score obtained at the end of the evaluation. This matrix was then organized in such a way that it could gradually serve as a header for the events, or even more. However, the following tree diagram (Fig. 1) will make clearer the approach followed by teachers when appreciating the work of students. For the purposes of this work, we have limited ourselves to the first cycle, targeted as a test level with regard to similarity at different levels of application of the approach.

### **3. RESULTS AND DISCUSSION**

#### **3.1 Rating System**

The adoption of the competency-based approach (CBA) in the education system in Cameroon has led to a deep change in the method of evaluation. Today, whatever the discipline, evaluation has two main aspects: the evaluation of knowledge and the evaluation of the integration of said knowledge. Regarding the assessment of knowledge, it is a question of judging the level of acquisition of fundamental knowledge specific to each discipline; it is also a question of judging the know-how, to be, and to say of the learners. Regarding the assessment of the integration of knowledge, it is the assessment of the learner's ability to mobilize this knowledge to simulate the resolution of a contextualized problem or to solve a concrete problem depending on whether the assessment is theoretical or practical. This evaluation system has logically led to a change in the distribution of points provided for this purpose. Thus, each of these parts is scored out of 10. At the end of the work, the overall score is presented on a scale of 20. Here, the learner is declared competent for

the targeted case if he resolves at least two-thirds, or approximately 67% of the tasks to be carried out in the part relating to the integration of knowledge. Such a split in the work to be done in an assessment has many advantages. Indeed, it allows both learners whose strength is memory and those whose strength is creativity to earn points during a test. Even more, for those who have both advantages, this way of doing things is for them an opportunity to demonstrate their ambivalence. Such an organization fits harmoniously into the ranks of learner motivation tools. Indeed, as Lessard et al. [23] developed, motivation in an educational environment has a major impact on the quality of the rendering of learners at the end of a job offered to them.

#### **3.2 Understanding of the Mark's Message by Learners, Parents, Teachers, and Tutors**

The aim here is to shed light on the opinions of the main players in education considered in the context of this study. These are the learner, the teacher, the parent, and the tutor.

##### **3.2.1 Understanding of the message of marks by parents, teachers, and tutors**

Understanding the message of the grade assigned to a learner has also proven to be a major problem to be addressed at various levels. After several interviews with the teachers, it came out that under the New Approach (competence based approach or CBA), many of them still find it difficult to understand that one can say for example to a learner that he has been declared competent in the face of the proposed situation when his overall score on a scale of 20 is below 10. For others, if the learner does not reach 10 out of 20, he will simply have failed his assessment. Further on, none of the teachers interviewed tried to stop and realize, for example, that for a mark of 11 out of 20, the learner could have had 3/10 in the assessment of the integration of knowledge and 8/10 in the evaluation of the acquisition of raw knowledge. When asked whether a score of 09/20 could be better than a score of 11/20, the answers converged into a high contradiction. Concerning the parents interviewed, it emerges that several of them are teachers; others have varying occupations. At the end of numerous interviews with them, it emerged that the child could not be declared competent for a given situation although he obtained at the end of the evaluation a score of less than 10/20. Also, most of the previous

findings have been made. The tutor is that person in Cameroon who earns his living by going from house to house to "resume" with the learner the lessons and activities carried out in a classroom situation. For this category of person too, a child who has passed his assessment must be at least 10/20, and vice versa. From these observations, it emerges that the concept of CBA (competence based approach) is still poorly understood by all stakeholders in the educational community. It would therefore be important to increase the number of training sessions on the issue. It would also be beneficial to extend the training sessions not only to parents, whose role in monitoring learners no longer needs to be dismantled, as Bergonnier-Dupuy and Esparbès-Pistre [24] underline. It would also be beneficial to encourage education assistants such as tutors to approach the authorities in charge of education, in order to equip themselves with the CBA (competence based approach); this is the guarantee of the success of the training of learners following an integrated approach. Such a vision is in agreement with the work of Cros et al. [11] who in their study on curricular reforms through the competency-based approach in Africa, highlight the difficulty of integrating CBA into the customs of actors while remaining positive about the next day.

### **3.2.2 Understanding of the grade message by the learner**

As for the learner, he knows that to pass a subject, he will have to have at least 10 on a scale of 20 points. Today, he is completely stunned to be told that he can for example be rated 12/20 and be left behind. So one of the approaches of the day is to make him realize that he shouldn't just be content with having a head full of knowledge that he usually doesn't understand much about. Indeed, a full head just prepares the subject to be able to do well when the evaluation of the acquisition of knowledge is concerned. There then arises a new problem with the learners. This comes from the need to make them understand that the acquisition of knowledge is in fact the beginning of the long and difficult task of the learner. This is due to the logic according to which the fundamental knowledge imparted to the learner is only a tool to help him achieve the final goal, namely to develop a skill or a series of skills. The fight today in Cameroon comes down to getting them to reconsider the acts they take on a daily basis in response to the legacies from parents, then to

ask them to justify these series of actions that have traveled through the ages until them. The aim of such a labor is to prepare them for innovation and creativity activities, given the increasingly competitive socio-economic environment. Such a vision is the appropriate way to channel them progressively towards deciphering the message of the score assigned to them at the end of each evaluation, a question of knowing then what level of skills, even just simulated, they would have already reached. On this subject, the future is promising because more and more, after the delivery of the copies, we can regularly hear many of them say: "the most important for me is to make a better and better score in the part reserved for the ability to use the knowledge received in class when solving a given situation. ". Further on, we can also hear others say: "by unfolding the reasoning, it sometimes happens to me that the bases for the answers to the questions which escaped me above in the evaluation of the knowledge appear themselves. » Sharing these different experiences which are then conveyed to the other mates make a new dawn to be about to see the light of day. Such observations are undoubtedly the witness of the establishment of more and more accentuated motivations among learners. This perfectly corroborates the observations of Lessard et al [23] who, in the context of their work, very carefully highlight the impact of the motivation of high school students on their ranking in mathematics.

### **3.3 Remediation Method Developed by Teachers, Parents, and Tutors**

For parents, the main remedial method noted has been to call on a tutor or teacher when he is not available or when he does not feel up to the task. For the teacher, the remedial method as reported from the field is one main thing. This involves going over the elements that the learner will have been unable to resolve during the assessment. The interview with the teachers also revealed that in addition to this, the defaulting learner may be offered another situation so that he can repeat the procedure used before. For parents who are available, accompanying the child means going through their lessons, making sure they have done their homework, and then taking them back to the activities offered as part of a given assessment. From the observation made with the instructors, accompanying the learner after a failure comes down to asking him questions about the lessons, followed by the resumption of activities carried out as part of the

assessment. One can note here a strong parallelism in the procedure of support of the learner by the parents, the teachers, and tutors. In the event that the parent is available, he does not always have the key to the mystery that taints his child's work as shown by Bergonnier-Dupuy and Esparbès-Pistre [24] who, by commenting on the family support of the learner, emphasizes the difficulties that can stain the process. For teachers and tutors, although the degree of difficulty is reduced in relation to that of parents on the question, it nevertheless remains present. Seen from above, all of the approaches used to solve the problem seem to remain questionable. Indeed, in such a practice, the risk of developing automatism in the learner involved is very high if the probability of finding himself in the process of solving his real problem is low. This is justified by the fact that he will be able to be convincing just for the same type of problem. However, today it is about instilling in him the ability to adapt to any new eventuality that opposes him. This is the reason why the crux of the problem of each of them should be judiciously highlighted. Thus, by breaking the barrier that separates him from the expected intellectual gymnastics, he will henceforth be able to face situations as different from each other as possible.

### **3.4 Deciphering of the Message Carried by the Learner's Marks: FOPOUSSI TUEBUE Marks Message Decoding Matrix**

The field investigations agree on one point. Indeed, whatever it is, the grade carries with it the seed of the learner's future success. However, this success is conditioned by the ability of the different actors to understand the message written in watermark behind each mark. For this purpose, the matrix below offers an opening on the understanding of the learners' marks. It is presented in three main more or less complete lines, locally broken up by pseudo-columns. Read from top to bottom, the lines deliver in turn information relating to the learner, information relating to the teacher's findings, and finally information relating to the findings of the learner's parent.

In general, the following messages are delivered by the FOPOUSSI TUEBUE matrix (Fig. 2):

- If the student is less than **5/10** in the assessment of knowledge, he is in margin 1 (fundamental knowledge to be reviewed). Two scenarios arise, indexed by the following codes:

**1-a** (invitation to wake up if the grade obtained by the learner at the end of the skills assessment is also less than **5/10**). To illustrate learners of this type, just think of someone who has approximate knowledge all over the place, without it being really real. This type of learner is used to going from rooster to donkey on a daily basis without transition when faced with a situation. This is someone for whom failure is the most compelling possibility;

**1-b** (the learner is imaginative if despite a score of less than **5/10** in the assessment of knowledge, the candidate had more than **5/10** in the assessment of skills). To illustrate learners of this type, just think of a child who visited you. Only, when it is time to go, it starts to rain for quite a long time. As time passes, he decides to go away. Compassionately, you show him a room where he will find something to cover himself with. Arrived in the said room, he sees a lot of things without being able to identify them. Suddenly, he closes the door and walks away without taking anything. Out of the house, he then obtains either a large banana leaf or a large cocoyam leaf which allows him to reach his destination without incident. He is aware by performing this act that he will not get wet because he has knowledge acquired either by having watched it or by having practiced at least once. He is not familiar with scientific knowledge about the characterization of matter such as permeability, impermeability, etc. this type of learner usually has a very fertile imagination. His spirit of creativity is not mentioned anymore;

- If the learner has more than **5/10** in the knowledge assessment, he is in margin 2 (fundamental knowledge acquired). Four scenarios arise:

**2-1-a** (if the score acquired in the skills assessment is less than **4.5 / 10**, this reflects a severe break between the knowledge acquired and the ability to mobilize this knowledge in order to carry out the expected actions for solve the targeted problem). To illustrate learners of this type, consider the case of a learner who is able to name all types of clothing for you, including those that designers have not yet invented. Only one day you find him shivering in the cold while holding a sweater / jacket in his hands, which is simply paradoxical. Basically he is someone very cultured, with enormous book knowledge. However, his main weakness lies in his inability to combine his diverse knowledge to attempt a solution to a problem he may be facing;

Names and surnames of the learner:			Class :		Final mark:  <b>/20</b>  Message code	
<b>Teacher appreciation</b>						
Knowledge assessment : /10			Skills assessment: /10			
FINDINGS  →	a= Wakeup	b= Imaginative	Breaking			Link
			a= Strict breaking	b= Moderate breaking	a= Moderately relevant link	b= Highly relevant link
	Fundamental knowledge to review (if the level of fundamental knowledge is less than 5)  <b>1</b>	between the knowledge acquired and the actions to be simulated to solve the targeted problem  <b>2-1</b>	between the knowledge acquired and the actions to be simulated to solve the targeted problem  <b>2-2</b>			
<b>Parent's report</b>						
Name	Contact	Date	Observation		Signature	

**Fig. 2. FOPOUSSI TUEBUE matrix for deciphering message bore by marks**

**2-1-b** (if the score acquired in the skills assessment is between **4.5 / 10 and 5.5 / 10**, it reflects a moderate break between the knowledge acquired and the ability to mobilize it for carry out the expected actions in order to resolve the targeted problem). To illustrate the learners answering this description, let us take as before a learner who has a good command of the names of the different types of clothing. Only, unlike the one presented in **2-1-a**, he knows that in a cool situation he can put on a sweater / jacket. There is, however, a problem. Indeed, there are pullovers which are made with materials which in contact with the skin, cause either tingling or itching. Without asking himself the question relating to the sensitivity of his skin in contact with the material of which the sweater is made, he just put it on, perhaps without having previously put a slightly thicker garment underneath to limit the contact with his skin. Imagine such a character in public. Compared to the previous character, this is someone who tries to reason when the opportunity arises. Only, he has this particularity of remaining superficial in his approaches. This particularity thus constitutes a brake in its progress;

**2-2-a** (if the score acquired in the skills assessment is between 6/10 and 8/10, it highlights a moderately relevant link between the knowledge acquired and the ability to mobilize this knowledge in order to pose actions expected to solve the targeted problem). To illustrate this type of learner, let's move to a hot zone as is the case in the Far North of Cameroon. It has been commonly taught that under such climatic conditions, the most suitable garment should be of white or to a lesser extent light fabrics. The learner involved here will actually put on a

garment made of this type of fabric. Only, on closer inspection, we can see that on his feet, he has closed shoes made of plastic. The consequences of such an act are no longer to be demonstrated. Here we are in the presence of someone who possesses cognitive and behavioral means that can enable him to solve more than one problem. Moreover, he is capable of making great proposals but, in practice, he usually escapes perfecting his approach;

**2-2-b** (if the score acquired in the skills assessment is greater than **8/10**, this shows a highly relevant link between the knowledge acquired and the ability to mobilize it with a view to carrying out actions expected to resolve the targeted problem). To represent the learner indexed here, let's stay in the aforementioned hot zone. He goes like the previous one to dress in white or at least with a garment made of light fabric. But unlike the one examined in **2-2-a**, he'll have open-toe shoes made from animal hide, a lens hood, and then a fan. In addition, aware that in hot areas the phenomenon of dehydration is permanent, he will also have provided a gourd full of water to rehydrate from time to time. This is the learner it is about training, especially today when young people of all stripes are called upon to meet and compete for the same jobs. This is all the more crucial as in this competition for employment, the recruiter does not differentiate between the origins of the applicants because for him, only the most suitable people and able to bring a plus to his structure are the more likely to be retained. From this moment, in developing countries where logistical means do not always guarantee the possibility of optimal training, it becomes important to train the learner in such a way that he is able to easily adapt to any



environment, to appropriate the new knowledge to offer him, knowledge that he can personalize, melt into his personal mold where his prerequisites are already found, modeled on his origins, in order to bring out completely innovative elements, capable of highly appealing to any examiner charged to evaluate either its recruitment file, or to evaluate it in the context of a job interview, or to evaluate a project assembled from scratch to apply for funding within the framework of self-employment.

With such a reading, we can therefore easily identify the strengths and / or weaknesses of each learner assessed at a given point in the academic year, and therefore prescribe or apply a sufficiently effective type of remediation for him. This is the guarantee of a marked improvement in his condition.

### **3.5 Specificities of the Remediations Proposed According to the Different Messages Delivered by Marks**

From the facts of observation and analysis, it emerges that the CBA (competence based approche) in Cameroon still remains a little ambiguous for the different actors, in particular some teachers, most of the learners, as well as many parents and tutors. As a result, supporting the learner remains a difficult equation to solve. This situation is reinforced by the imprint left by the educational approaches that have prevailed in Cameroon. These are in turn the content-based approach and the objective-based approach. In fact, in their evaluation system, they had the particularity of relying correctly on the judgment of the capacity to reproduce the knowledge received by the pupil on the one hand, and on the other hand, on a comprehensive evaluation of the work of the pupil. To this day, many actors in the support of learners still find it difficult to really get out. If by pure chance, we have noted rare cases of success in the type of support for learners, the reality is quite different. In fact, out of the thousand or so parents interviewed, 984 declared that they had separated from the tutor contacted to support their children after three unsuccessful months. For the latter, the late results were quite simply the fruit of the coach's incompetence. Only, the failure highlighted by the words of these parents was the unconsciousness of the specific difficulty facing the learner to support. Knowledge of this reality would undoubtedly have led the parent to specify to the tutor the work he was supposed to do with

the learner. Further along the same lines, the tutor as much as the parent has unfortunately always had the only means of judging the child's personality against an assessment given the overall score acquired; from there to rush in both cases straight into the wall. This is due to a blind development, thus guaranteeing a slim probability of success as shown by the statements of the parents interviewed. Nowadays, the situation is a little different. Indeed, the evaluation system specific to the CBA highlights two headings [11]. These are therefore poles to be grasped for easy understanding of the message delivered by the induced marks of learners. The logical consequence of this new situation is therefore a specificity of action highly suited to the type of remediation to be used as appropriate in order to provide effective support for learners.

#### **Case of 1-a**

The learner targeted here not only has difficulties in possessing the knowledge made available to him, but also difficulties in using the little of this knowledge acquired to solve a problem.

Concerning the difficulties in having the knowledge put at his disposal, they can have several reasons; they can be because he is lazy, or because he is always distracted during class for many reasons. The first thing to do here is to know who you have in front of you. If this is a lazy learner, the tutor must first take ownership of the lessons of the person concerned. Subsequently, make it available to the latter on a drop-off account, while avoiding putting it under pressure, an act which could rather worsen the initial situation. Then, sessions to check these new achievements should take place at first regularly, then more and more at pronounced time intervals. The delicacy here takes pride of place; indeed, it is important during this process that the guide create by learning the taste of his company. Such a procedure then approaches the nine stages of learning as recommended by Mills Gagné [19]. If this is a distracted learner, it is important to first investigate the cause of the observed distraction, whether permanent or occasional. Once this is done, it will then be necessary to bring together the elements and / or the resource persons necessary for the resolution of the highlighted problem. At the end of the solution of the detected problems, two cases can arise: one can face either a lazy learner, or a dynamic learner. If being obtained after solving the problem is lazy, we proceed as above. If, on the other hand, being obtained after

solving the problem is dynamic, the acquisition of resources will be easy, because it will have a strong feeling of delay, coupled with a real desire to make up this delay again. Here, the involvement of parents, teachers, and further, qualified tutors, is essential. In general, one should only move on to the phase of acquiring previously neglected knowledge when one is sure of having solved the problems responsible for the observed state of distraction.

Regarding the difficulties in mobilizing resources to explain observed facts, justify actions, or else to solve a series of problems, the work will have to start within the family framework. In fact, parents will have to involve the learner more and more in the various tasks to be carried out to ensure the proper functioning of the family. From time to time, parents will have to let him take the lead when making certain decisions. This going, parents, having appropriated their child's lessons, will have to lead them at times to justify their choices, actions and decisions on the basis of increasingly coherent and relevant reasoning. Parents should never forget to bring their child to return in their notes in order to find theoretical elements that can help to ensure a better consistency in the reasoning carried out by their kid. The effort to reconcile lessons and the explanation of acts, decisions, or choices made by the child should always be accompanied. For example: "don't you think that the notion relating to studied in the course of could be useful to you as well?" In this way, the parent accompanies his child by giving him the latitude to be the master of the operation and the conduct of events. Such an approach will have the advantage of either reinforcing the bond and complicity, or of creating it between parents and children, as reflected by Bergonnier-Dupuy and Esparbes Pistre [24] in the context of their work focused on family support education, focusing on the opinion of the father and mother of adolescents. With regard to the motivation that can arise naturally when a parent is deeply involved in the learning process of his child with regard to the work of Bergonnier-Dupuy and Esparbes Pistre [24], good results can be expected at the end of the procedure. Following such a maneuver, the teacher by simulating actions taken from the child's daily life through the ordeals, will then help him in the process of consequences to establish the trust induced in the family.

#### **Case of 1-b**

The learner targeted here is highly imaginative and has a strong ability to start from nothing to

solve a problem. He also seems to have a lot of experience in solving concrete problems. However, he faces a major difficulty. This difficulty lies in the acquisition of fundamental knowledge. To help such a learner, it is first important that the guide highlights the reason for their difficulty in acquiring fundamental knowledge. This done, the guide must tell him that his imaginative peculiarity is an unwavering weapon. Starting from there, he must then explain to him on the basis of examples of the most prominent people how the most successful actions carried out by them started from a good theoretical foundation. After this step, start from the rendering of his work to show him how the acquisition of theoretical knowledge would have further enhanced the brilliance of his rendering. Then, in the days to come, always ask him, in the face of new actions taken in situations, for a justification based on increasingly supported scientific bases. Further, a game for a circumstantial gain modeled on his tastes could be beneficial from time to time to bring him to take a liking to scientific reasoning. Example: "if you explain to me why the chili is so spicy coupled with strong sensations of heat in the mouth, you will have my share of fish". As the game grows, the guide will always have to be surprised when he realizes that the involvement of this fun family approach generates improvements, however small, in the learner's academic performance; in fact, it will be noted that the learner now treats questions relating to fundamental knowledge with a little more ease. Any child who enjoys playing with parents, it is guaranteed that in the end, the desire to always be ready to use a piece of knowledge or a series of pieces of knowledge to justify, explain, and resolve certain facts, can moreover provoke a real desire for the learner to deepen his knowledge on more than one level. From there to campaigning in the ranks of Bergonnier-Dupuy and Esparbes Pistre [24] who conducted convincing reasoning on the involvement of the family in the success of the child.

#### **Case of 2-1-a**

The learner targeted here is the opposite of the previous one. Its strength lies in its ability to memorize and restore the knowledge received. The mobilization of the knowledge received to explain facts, make choices, solve other problems, is its greatest weakness. The beginning of the solution of this gap goes from the family framework if one relies on the approach developed by Bergonnier-Dupuy and

Esparbes Pistre, [24]. Indeed, a parent informed of such a weakness should proceed as follows:

- regularly target parts of his child's lesson and ask him questions about it in order to make sure that these tools are always fresh in his mind;
- invite him to regularly carry out tasks with him that rely on the targeted part of the course;
- ask him at each step of the task to be performed what detail of the targeted course the act performed makes him think. For example, while cooking with him, he can be told to add water to the pot whenever the need arises while tasting the food. Then, when the pot starts to boil again with an emanation of steam, we can ask it while helping it a little if necessary:

- "why did you add water to the pot a little while ago? »
- "Where does the steam coming from under the lid of the pot placed on the fire come from?" What do you call this phenomenon? "
- "What was the state of the water added in the pot? »
- "How many states of water did you just handle to cook with me? »
- "what is the state of the water that has changed to the other since we are in this kitchen? »
- "What caused the change in this state? »
- "Thinking about our meal soon, can you explain to me how the change in the physical state of the water can help our meal be ready soon? »
- shortly after: "tilt the lid of the pot when you open it. What do you see? Can you tell me where this water comes from? What do you call this phenomenon? "
- if you manage to tell me this evening how this phenomenon can make it possible to obtain salt-free water from seawater, I will give you .....

By training it regularly, mechanisms will gradually be put in place. Further on, regular visits to school to learn about the impact of this maneuver on the behavior of children in class are strongly encouraged. If the information coming from the school is favorable, it will have to be taken up a notch by making things a little more complex each time. If, on the other hand, the information is unfavorable, it will first be necessary to try to detect whether the maneuver would not rather be a source of conflict with the child. If this is the case, you will have to do with him just what he likes, from time to time pretending to have understood a notion that bothered you after he has performed a given act, after which you testify to him your gratitude by making him believe in the aforementioned deception. This is not a

completely 100% sure approach; but, it is worth it in some cases because, he can decide for himself from there to see if such an act can be useful to him. If the maneuver is not a source of conflict, then we just have to continue in the same vein because it is an approach that always bears fruit.

### Case of 2-1-b

The learner targeted here differs from the previous one in his appreciably acceptable capacity to be able to attempt the mobilization of acquired knowledge to explain facts, make choices, and solve other problems. Its uniqueness, however, lies in the fact that it is still staggering a bit like a child taking his first steps. He needs to be reassured that he can do it. Indeed, his situation is dependent on a state of mind similar to that of someone who, in his last attempt during the last stage of the qualifiers to overcome the ultimate obstacle before him opening the doors to the final phase of a long-desired global competition, has the impression of walking on a thread that can be broken at any time after taking the last step. There are two steps to improving such a condition:

- the first step is to work on your mind in order to help it develop a winning mind. It is important that he understands that if he has already been able to reach this level that can arouse envy, it is because he has potential that just needs to be developed. To leave a stronger mark on the issue, it is important to come back to the situations that he has handled brilliantly and tell him that this is one of the most complex situations of all those that have been proposed as part of the assessment. In doing so, the latter will gradually gain in confidence, and thus, will be able to evolve with a little more confidence in each situation;

- following the first stage, the second stage is characterized by a densification of the activities, theoretical and practical, to be solved on the basis of logical reasoning. It is important that in the first phase of this step, the situations are truly within the reach of the learner. Each success will then have to be greeted with the greatest enthusiasm, followed by observations like: "You see that you can do it. Put yourself a little more and you will see that even the most difficult situations are within your reach. Well done!! ". Also, the instructor should ensure that the situations progressively offered to the learner always differ from each other, and this coupled

with very progressively increasing levels of complexity. This support must be done in a deep spirit of collaboration between the family and the teaching staff. We find ourselves once again in an approach that gives pride of place to the family environment in supporting the child, as Bergonnier-Dupuy and Esparbes Pistre [24] duly advocated.

### **Case of 2-2-a**

The learner concerned here is already almost independent. Its ability to mobilize its resources to explain facts, make choices, and solve other problems is relevant enough to justify the detour. The accompaniment of such a candidate must be done on the basis of a lot of imagination. It is important each time to be able to fabricate for him situations that require a lot of originality in the approaches developed. His reactions should always be followed by statements like, "You can do better, but apparently you seem to want to settle for the bare minimum." Stop devaluing all that talent that swarms in you ". For him, you have to be very tactful to play on your mistakes with words like: "such mistakes are not acceptable at your level". However, these statements must be made with a little humor to avoid ultimately creating the opposite effect. For example: "when I think you are my favorite candidate for next competition, i wonder if i really made the right choice. Try to ridicule me and i promise to confiscate you. Such ounces of humor are intended to jostle him without creating doubt in him which could be fatal. This caution corroborates the results of the work of Barriaud and Oliveri [25], which focuses on depressive states in normal adolescent development.

### **Case of 2-2-b**

The learner concerned here is already independent, capable of developing high-quality intellectual gymnastics. Its ability to mobilize acquired resources to explain facts, make choices, and solve other problems is not in doubt. For him, it is much more a question of keeping him alert by leading him to produce from time to time the most complex possible and very original situations that he will at times have to expose in front of a college of teachers who, like a jury defense, will ask him questions whose goal will be to get him to always go a little further. But, it should not also be pushed too much. On a completely different level, it will be necessary to encourage him to cultivate a lot of humility. This is indeed a fundamental element which, in view

of the various feats achievable by a third person, allows him to judiciously calibrate his conduct and self-esteem. In detail, the culture of humility, despite the potential that we may have, leads in time and out of season each to a permanent questioning. Further on, it creates a sense of service in man. Such an approach is in perfect agreement with the reflections of Seys [26] who, in the framework of his research, judiciously shed light on the challenges of success by putting winners and losers side by side.

### **3.6 Projection**

Such a matrix also finds a favorable echo in the guidance system of the learner at the end of a cycle. Indeed, a parent who, each academic year in a cycle can do a progressive lateral reading of his child's grades by subject, can already have an idea of the possible orientation of his offspring at the end of the cycle before the final opinion of the guidance counselor. Indeed, the evaluation subjects have the particularity of following each other without, however, resembling each other. Thus, the types of content of the subjects will gradually show the areas in which the learner finds his marks more easily, as we can read between the lines of the rendering of Bélair [27] in the context of his reflection on the act of evaluating learning.

But, the difficulty here for the parent is that quite often learners hide assessment papers where they have performed poorly. This is not without causes. In the case of Cameroon, for example, learners are under a lot of pressure from parents. Thus, they are constantly evolving in situations where they have no right to make mistakes: this is the philosophy of success at all costs. Thus, we will see learners who will bring home marks that do not actually reflect who they are because they will have mastered the art of cheating in all its forms. This fact highlights the conflict that can then permanently punctuate relations between parents and learners, as Esparbès-Pistre and Bergonnier-Dupuy [28] cleverly address in their study on parental educational style and the academic success of adolescents. To overcome this, parents would benefit from understanding and accepting that the learner can make mistakes. In this, then they should always be ready to tell their offspring that failure is not about falling, but rather doing nothing to turn the situation around. They should also get their child to understand that whatever the situation, they are there to support them first, not to condemn them. If this bet is won, the learner and the

parent will then establish a contract based on unwavering trust. Zeroulou [29] studying the academic success of immigrant children demonstrates in this sense that a learner who enjoys parental confidence and support is able to overcome even the most difficult obstacles in order to continue to please his parents.

### 3.7 Application of the Matrix to Few Cases: Valuation of Learners According to their Grades

Here, it will be a question of tracking the scores of four learners, including **A**, **B**, **C**, and **D**. Learners **A** and **B** all had the overall score of **12/20** (shown in the matrix in red for **A** and in blue for **B**). However, **A** had a score of **04/10** in the assessment of knowledge and **08/10** in the assessment of his ability to mobilize his knowledge, that is to say **A (4; 8: 4 + 8 = 12)**; when in **B**, he received a score of **08/10** in the assessment of knowledge and **4/10** in the assessment of his ability to mobilize his knowledge, that is to say **B (8; 4: 4 + 8 = 12)**. Learner **C**, for his part, had an overall mark of **09/20** (shown in yellow in the matrix), organized as follows: **02/10** in the assessment of knowledge and **07/10** in the assessment of his ability to mobilize his knowledge, that is to say **C (2; 7: 2 + 7 = 9)**; regarding learner **D**, he had the mark of **13/20** (in brown in the matrix), organized as follows: **09/10** in the assessment of knowledge and **04/10** in his ability to mobilize his knowledge, i.e. **D (9; 4: 9 + 4 = 13)** (Fig. 3).

At the end of the assessment, learner **A** had message-code **1-b**, learner **B** had message-code **2-1-a**, learner **C** had message-code **1-b**, and learner **D** got the message code **2-1-a**. With reference to the analysis made above, the code-message **2-1-a** reflects a sudden break between the knowledge acquired and the actions to be simulated to solve the targeted problem; as for the message-code **1-b**, it highlights the imaginative character of the learner, but while noting that the fundamental knowledge needs to be reviewed. In view of these observations, it emerges that learners **A** and **C** draw their strength from their fertile imaginations, while learners **B** and **D** draw their strength from their great ability to memorize. According to Landry's [6] investigations, learners **B** and **D** may, if left

unchecked, just be highly educated. As for the approach developed by Perrenoud [16], it allows long-term visualization of **A** and **C** learners as people capable of developing behavioral attitudes that can enable them to overcome many existential problems. However, the weakness of learners **A** and **C** lies in their low rate of acquisition of fundamental knowledge. Investing in the acquisition of basic resources is therefore the way out for them. The technique for making this task easy is given above. Concerning learners **B** and **D**, their weakness lies in the mobilization of acquired resources to solve problems. The ways out of this difficulty are also presented above.

An attempt to classify these four learners can also be made. For this, we will position ourselves first of all within the framework of a life in a company, and secondly, within the framework of the basic desire to acquire points as long advocated by the first educational approaches [11]. Based on business performance, these four learners would be ranked from the best to the worst as follows: **A>C>D>B**. In an approach based solely on the number of points obtained, these four learners would be ranked from the best to the worst as follows: **D>A = B> C**. In the two ranking systems used to value the four learners considered here, we notes that learners **A** and **B** are at two extremes in one case, then at the same level in the other case; this observation is applicable to **C** and **D** learners down to one detail. This simply reveals the strong impact of behavioral attitudes in empowering people in this century deeply rooted in innovation and creativity; such an observation brings us back to the analysis made by Perrenoud [16] concerning competence. Thus, the acquisition of knowledge being the preparation for social success, the best ranking of these four learners is that which is done under the control of the demands of business life. In this sense, in view of the ever-increasing changes in society, it becomes crucial for everyone to be able to manipulate a little more every day the various knowledge acquired during any training, whether they are certifying or not. This is based on the reflections of Martinell [30] who, under the gaze of an apprentice, measured with the greatest dexterity in Burkina Faso the importance of the ability to be able to use one's skills in a community.

Noms et prénoms de l'apprenant :			Classe :		Note finale: <b>12</b> <b>12</b> <b>09</b> <b>13</b> <b>/20</b>
<b>Appréciation de l'enseignant</b>					
Evaluation des savoirs : <b>04 ; 08 ; 02 ; 09</b> /10			Evaluation des compétences : <b>08 ; 04 ; 07 ; 04</b> /10		
CONSTATS  →	a= réveille-toi	b= Imaginatif	Rupture		
	Connaissances fondamentales à revoir (si le niveau des savoirs fondamentaux est inférieur à 5)  <b>1</b>		a= Sévère  b= Modérée	entre les savoirs acquis et les actions à simuler pour résoudre le problème ciblé  <b>2-1</b>	a= Modérément b= Hautement pertinent entre les savoirs acquis et les actions à simuler pour résoudre le problème ciblé  <b>2-2</b>
<b>Constat du parent</b>					Code-message <b>1b</b> <b>21a</b> <b>1b</b> <b>21a</b>
Nom	Contact	Date	Observation	Signature	

**Fig. 3. Application of the FOPOUSSI TUEBUE matrix in the decyphering of the message of the marks of four learners**

#### 4. CONCLUSION

At the end of this work, we can remember that in Cameroon, the evaluation subjects have two main parts: a first part which relates to the evaluation of different knowledge (fundamental, doing, being, saying), and a second part which assesses the ability of learners to mobilize acquired knowledge to solve a duly designed contextual problem. Each of these two parts is rated on a scale of 10, for a final rating assigned on a scale of 20. The message watermarked behind the ratings remains completely unnoticed by the actors. The support of learners is done somewhat blindly, with a low probability of success. The FOPOUSSI TUEBUE matrix offers a clear improvement in the situation. It is presented in three main more or less complete lines, locally broken up by pseudo-columns. Read from top to bottom, the lines deliver in turn information relating to the learner, information relating to the teacher's findings, and finally information relating to the findings of the learner's parent. In her organization, she fits into the CBA (competence based approach) assessment system as a major contribution to deciphering the message watermarked behind the marks obtained by the learner. It thus guides the actions to be taken to support learners. The various players in education will benefit from making this matrix their ally. It can serve in turn as a header for typical CBA exam subjects, as a basis for the establishment of transcripts a little more adapted to the CBA, and further, as an element capable of fixing the bases for a support more adapted to the specificities of the learners. Moreover, this matrix provides elements allowing the actors to gradually get an idea of the possible academic orientations of the learners before the

final conclusion of the guidance counselors at the end of the cycle.

#### 5. RECOMMENDATION

Heads of establishment, parents, tutors, and guidance counselors will benefit from making the FOPOUSSI TUEBUE matrix their ally. Indeed, it can make typical CBA exam papers a little more meaningful by serving as a header; it can contribute to the production of report cards that are a little more adapted to the CBA; it sets the basis for support more suited to the specificities of learners. Moreover, this matrix provides elements allowing the actors to gradually get an idea of the possible academic orientations of the learners before the final conclusion of the guidance counselors at the end of the cycle. Finally, it refines the work of guidance counselors.

#### CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the authors.

#### ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the authors.

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## COMPETING INTERESTS

Author has declared that no competing interests exist.

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