

# REGULATION, AN EDUCATIONAL ACTION AT THE CROSSROADS OF KNOWLEDGE CONSTRUCTION: CASE OF PHYSICAL EDUCATION

<sup>1</sup> ATOUN Carlos Eméry Hyacinthe, <sup>2</sup>AGBODJOGBÉ Basile D., <sup>3</sup>OGUEBOULE Bachar, <sup>4</sup>YENOU Richard et <sup>5</sup>ATTIKLEME Kossivi

<sup>1</sup>Auxiliary Master Professor of CAMES Universities, Discipline teaching laboratory (LDD) of National Institute of Youth, Sports and Physical Education (INJEPS), University of Abomey-Calavi, Porto-Novo, Bénin

<sup>2</sup> Master Professor of CAMES Universities, Discipline teaching laboratory (LDD) of National Institute of Youth, Sports and Physical Education (INJEPS), University of Abomey-Calavi, Porto-Novo, Bénin

<sup>3</sup> Assistant Professor of CAMES Universities, Discipline teaching laboratory (LDD) of National Institute of Youth, Sports and Physical Education (INJEPS), University of Abomey-Calavi, Porto-Novo, Bénin

<sup>4</sup> Assistant Professor of CAMES Universities, Discipline teaching laboratory (LDD) of National Institute of Youth, Sports and Physical Education (INJEPS), University of Abomey-Calavi, Porto-Novo, Bénin

<sup>4</sup> Full Professor of CAMES Universities, Discipline teaching laboratory (LDD) of National Institute of Youth, Sports and Physical Education (INJEPS), University of Abomey-Calavi, Porto-Novo, Bénin

Email - adolphe.ahonnon@gmail.com

## **Abstract:**

As part of this study, the objective is to show the importance of regulation in the process of constructing knowledge in PE (Physical Education). To achieve this objective, we conducted a survey targeting PE teachers and students. The essential results from our investigations revealed that regulation is an essential didactic action for the construction of knowledge in PE. This is what Chevallard (2018) confirms when he shows that regulations are “gestures of aid to the study”. Thus, we can remember that regulation is a didactic action which further promotes the construction of knowledge in PE.

In this perspective, the data from the filmed sessions, pre-session and post-session interviews with teachers and students were interpreted and analyzed using the concepts mobilized by Sensevy's theory of joint action (2007).

**Key Words:** Regulation, didactic action, construction of knowledge and PE

## **1. INTRODUCTION :**

Since the institutionalization of the school, Physical Education (PE) has always been an integral part of the Beninese education system. Thus, it has become a compulsory subject to be taught in the same way as other disciplines. More generally, it is always distinguished, involuntarily, from other school disciplines, because of its teaching content. Furthermore, regarding students' initial representations, the discipline is not perceived as French or Mathematics; they thus identify it negatively or positively, as an independent discipline which provides specific knowledge. However, PE is a discipline in its own right, which can allow students to reveal themselves and develop abilities, skills and attitudes linking motor skills and thinking to succeed (Duruiseaux, 2017). It also allows the acquisition of knowledge and the construction of knowledge allowing the organization and management of physical life at all ages as well as access to the field of culture which constitutes sporting practices. The official recommendations governing this teaching in Benin specify, in terms of training content, Physical and Sports Activities (PSA) which are objects and means of training in middle and high schools (Oguéboulé, Agbodjogbé, Attikléme, Kouété, 2016). To facilitate good learning of these PSA for students during teaching, the teacher uses certain didactic actions including regulation.

Furthermore, Devalay (2007) shows that the term “regulation” is used in many fields such as science and technology (temperature regulation), biology (homeostasis), economics (market regulation), etc. The notion of regulation is also widely used to define certain aspects of Teaching/Learning processes. According to (Laveault, 2007), it designates cognitive and metacognitive processes characterizing the learning process; as well as certain actions and

interventions by the teacher (Allal, 2007). Subsequently, Bourbarddu and Robindu (2012) define didactic regulations as all the verbal communications and gestures of the teacher of a didactic nature, addressed to one or more students engaged in a given task, following a observation phase. Didactic regulations also concern students' learning strategies. For example, a teacher can ask a student to repeat more, to mentally represent an action, or help them manage the frustration caused by repeated failures. Didactic regulations are attempts to influence students' cognitive and metacognitive intentions. They do not necessarily aim to reduce the gap to a standard, but to reorient action towards more promising paths, as Vial (2001) points out. They are “gestures of aid to the study” (Chevallard, 2018). We consider, with Amade-Escot (2003), that an essential role of the teacher is to keep students in touch with technical knowledge.

Finally, the term “regulation” (or “regulate”), even if it is used in sometimes diverse meanings, is now omnipresent in the field of educational sciences and more particularly in didactics. This eminently professional gesture, at the heart of the didactic relationship, is not carried out smoothly in authentic teaching-learning situations in PE. Regulating in PE means evaluating students, encouraging them to think about their actions, to question their representations and their motor skills. The helping relationship must be built and requires the establishment of trust in the teacher, a climate conducive to learning but also authority. In order to better find the didactic action which can help the teacher to quickly find solutions to the learners' problems in the teaching/learning process, our study wished to show the importance of regulation during the PE teaching. This is what pushed us to organize our thoughts around the weight or importance of regulation in the teaching/learning process.

This study aims to show the determining role of regulation during the construction of knowledge in the teaching/learning process.

Specifically, these are:

- identify the regulations which contribute the most to the construction of new knowledge in PE;
- identify the power or importance of regulation in the construction of knowledge in PE.

### 1.1. Theoretical framework

Sensevy's theory of joint didactic action (TACD) (2007)

It constitutes the theoretical framework organizing this study. The choice of this theoretical model is justified by the fact that the triadic didactic relationship is formed by “knowledge, the teacher and the students”. This relationship shows that didactic action presupposes joint action, based on long-term communication between the teacher and the students and therefore a relationship which actualizes the action and which is updated in return by it. As a result, the didactic relationship reflects a new observable, the joint action of the teacher and students (Sensevy and Mercier, 2007), characterized by two particular dimensions: “teaching and learning” (Sensevy, 2007, p. 17). Didactic action is then what happens when people interact so that one teaches something to the other who learns. This is also what individuals do in places (institutions) where we teach and learn.

It is a model which immediately establishes the need to think together, as a couple, the action of the teacher and the students in didactic terms. According to Schubauer-Léoni, Leutenegger and Forget (2007, p.52), this model is described using “a double of concepts (didactic contract and environment) and a quadruplet of concepts (definition, devolution, regulation and institutionalization) » the didactic actions of the teacher in a classroom situation.

In this study, it is regulation that interests us. So by regulating, we mean influencing the production of winning strategies by students (Amade-Escot et al., 2007). This research will allow us to see the different regulations operated by teachers in a real classroom situation that can help students build new knowledge in PE.

### 2. State of the problem :

Two are the dimensions on which research that has explored teaching and learning situations, as well as the effectiveness of teaching in physical education, has mainly focused. On the one hand, we have the activity and knowledge of teachers, and on the other hand, the ecological, temporal, didactic, cognitive and social conditions accompanying the activity, learning and development of students' academic performance (by Keukelaere, Guérin and Saury, 2008). This research focuses on this second dimension. It aims to show the importance of regulation in the teaching/learning process.

Sensevy's (2007) theory of joint didactic action was used in the context of this work, because it offers a set of concepts that can help understand the actions of teachers in a real classroom situation. This theory describes the actions using “a double of concepts (didactic contract and environment), a quadruplet of concepts (definition, devolution, regulation and institutionalization)” (Schubauer-Léonie, Leutenegger and Forget, 2007). teacher's didactics.

Specifically, in highlighting the institutional weight of didactic transactions (didactic interactions), the quadruplet of concepts (define, devolve, regulate and institutionalize) Sensevy (2007) will serve as a focal point to describe the teacher's didactic actions. during the teaching/learning process. We will be particularly interested in the

regulations put into play by the teacher in order to allow students to acquire knowledge in PE. To do this, we asked ourselves a research question to which we provided a provisional answer.

**Research question :** what is the importance of regulation in the teaching learning assessment process in PE?

### **Assumption**

Regulation would facilitate learning for learners when teaching PE. It could be the determining element favorable to the construction of knowledge in PE.

### **3. Methodology :**

With reference to the problem, the present study aims to show the weight of regulation in the teaching/learning process. It led to observing in a real classroom situation three different PE teachers with different personal and professional experience, one of whom works at CEG Vèdoko, the other at CEG Dassa and the third at CEG1 Natitingou. To carry out this study, the methodology is structured around four main points: the subjects of the study, the investigation techniques and tools, the investigation procedures, the analysis methods.

#### **3.1 The survey population or study subjects**

To show the weight of regulation during the construction of knowledge in PE, we have chosen to select teachers with different and proven practical and professional experiences, capable of facilitating the effective construction of knowledge in the sense of Loizon and Carnus (2014), Atoun et al (2018) through their different regulations. In order to diversify the data to be collected for a good comparative analysis, we varied the contexts (geographical areas) of study by choosing three different departments, namely the Littoral in the south, the Collines in the center and the Atacora. North. We opted for a reasoned choice whose selection (inclusion) criteria are as follows:

- be a certified PE teacher;
- have more than 05 years of professional experience;
- be a teacher in a first cycle class having regularly taught PE lessons in previous classes;
- be a regular teacher at the various educational activities in the area (APZ);
- have received at least two visits from the inspection body in the last two years.

Teachers who do not meet the criteria defined above (exclusion criteria) do not belong to our sample.

The teachers (E1) and (E2) work in the 4th grade classes, with respective numbers of 50 and 54 students; and respective colleges CEG Vèdoko (4th ML1) and CEG Dassa (4th MLA). As for the teacher (E3), he works in a 3rd grade class of 44 students at CEG1 Natitingou. Indeed, all these teachers have more than five (05) years of professional experience. The requirements of official documents oblige teachers (E1) and (E2) having 4th grade classes within their reach, to carry out activities such as: floor gymnastics and high jump. The teacher (E3), having a 3rd grade class, performed the triple jump and gymnastics. These official prescriptions also allow teachers to put one activity in initiation and the other in self-learning per session. Thus, the teacher (E1) had the high jump as an initiation and the floor gymnastics as self-learning but for the teacher (E2) it is the opposite. The teacher (E3) performed the triple jump in initiation and the floor gymnastics in self-learning.

#### **3.2 Data collection techniques**

Only one technique was used: instrumented observation which includes the pre-session interview, the film of the session, that is to say the observation of the session itself and the post-session interview.

##### **3.2.1 Interviews**

Granted exclusively to teachers, they are of two types per session:

- the pre-session interview with teachers is carried out at the start of each session. It aims to clarify: the didactic intentions of the subjects, the tasks to be proposed to students and the strategies to use to solve this task;
- the post-session interview is carried out at the end of each session. It allows us to know if the students were able to construct new knowledge thanks to the regulations implemented by the teacher. Furthermore, it helped to identify the different forms of regulations that promote and facilitate the construction of knowledge in a classroom situation.

##### **3.2.2 Observation of sessions**

This is an instrumented observation. It is carried out with a single camera which was used to record the entire session. It allowed us to film the didactic actions and the teacher's interventions in order to see how these actions, especially the regulations, helped the students to construct new knowledge. This same camera made it possible to carry out pre- and post-session interviews with teachers.

### 3-3 The investigation tool

This is a camera which made it possible to film the didactic actions and the different regulations of the teacher. It was also used for the audiovisual recording of pre- and post-session interviews.

### 3-4 The investigation procedure

It consisted of:

- take an interest in PE teachers working in 4th and 3rd grade classes available to be study subjects;
- have the schedule of these teachers in order to know the days and times of classes;
- develop and validate interview guides;
- film the entire learning session for each of the three (03) study subjects and carry out interviews, two of which are at each session (ante and post-session);
- record their interventions using the camera.

### 3-5 Data processing

The content analysis of the data collected by observations and interviews was carried out by transcribing the filmed sessions and the audio of the interviews carried out. Condensed synopses were produced from the transcriptions made. These synopses allowed us to highlight the situations proposed, the actions carried out by the teachers falling under the regulations (errors detected during the formative assessment and tips proposed for the correct realization of the expected motor gesture). These data were compared with the interviews to assess the conformity or listening between the didactic interactions and the observed facts. The frequent use of the theoretical framework allowed us to characterize the actions relating or not to the correct implementation of feedback.

The alignment of these elements allowed us to infer the relevance of regulation in a classroom situation.

## 4. Results :

This part is devoted on the one hand to the presentation of the results from field investigations and on the other hand to their analysis. The results of this analysis will be presented in the form of tables followed by an analysis of the data. This presentation will be structured around the following main points:

- the presentation of the contents of the previous session and of the day with the learning activities proposed by the teacher;
- analysis of the regulations made by teachers for each task.

### 4.1 Contents of the previous session and of the day

The results obtained during our various session observations will be presented in the form of tables followed by comments. The following table will allow us to present the different APS as well as the content of the previous session and the day with the learning activities planned by these teachers.

Table n°1: summary of APS, content to be taught and learning activities planned by teachers

Teachers	PSA	Content of the previous session	Content of today's session	Learning activity of the day
Teacher (E1)	High jump	<b>OA:</b> Perform a sequence composed of at least one element per family in 70s for boys and 90s for girls within regulatory standards	<b>OA :</b> Jump 1m20 for boys and 1m05 for girls in belly roll style with particular emphasis on the climb	-Learn to spot the lead foot -Learn to locate the take-off zone after a progressively accelerated run -Learn to ride
Teacher (E2)	High jump	<b>OA :</b> Sequence of mini N°1 by making the five elements that compose it	<b>OA :</b> Continue with mini N°2 to go through all the elements on the program	-Make the elements of the MINI 2 -Chain the MINI 2
Teacher (E3)	Triple jump	<b>OA :</b> Implementation of the starting situation and diagnostic evaluation in the triple jump	<b>OA :</b> Completion of the overall form of the triple jump (the “hop”, “step”, “jump”)	- Learn how to do the crooked jump and the bounding stride - Learn to perform the overall form of the triple jump

Analysis of this table reveals that each of these teachers taught different APS such as high jump, gymnastics and triple jump. From this table, it appears that all the teachers reminded us during the pre-session interview of the content of their previous session and they also specified the content of today's session with the learning activities that they planned to teach. . We notice that these activities that they planned to teach fit well with the content that is planned

and demonstrate normal educational progression with the previous session. Which already provides information on their practical epistemology and indicates an evolution of knowledge (chronogenesis) in the sense of Sensevy (2007).

#### 4.2 Analysis of the regulations operated by the teacher for each task

A brief presentation of the didactic actions carried out for each task is highlighted followed by the forms of regulation implemented by these teachers.

##### 4.2.1 Analysis of the regulations operated by the E1 teacher

For us, it is a question of highlighting the types of tasks proposed by the teacher and of identifying the forms of regulation used by the latter in teaching practice. The table below presents the tasks and the specific objective for each of them.

Table n°2: tasks studied throughout the sequence by (E1)

N°	Sequence of tasks	Goals
1	Locating the lead foot	Allow students to identify their leading foot
2	Find the take-off zone after strides	Allow students to become aware of the area in which the call for a vertical impulse must be taken
3	Performing the climb using the belly roll style	Teaching learners to ride with belly roll foreplay

##### Task n°1: locating the lead foot

Concerning this task, the teacher aims to enable students to identify their take-off feet after a free run. To this end, the teacher and the students started from the steps of the high jump to achieve this task. The teacher therefore allowed the students to pass at least twice each to identify their starting foot, that is to say the foot on which each person feels comfortable to take momentum. Analysis of the regulations operated by teacher E1 during task no. 1

- So first there is a run-up and then there is the take-off foot that we place to gain momentum.
- We said that after the run-up, we put the lead foot down to gain momentum and then we jump and come back facing the rope.
- When you jump and come back facing the rope, this is what we call the belly roll. NOW ! For the stages, we first have the run-up, then we take a stand on one foot and return to the pit facing the run-up.
- The lead foot is the foot you place before jumping.

The extract below demonstrates didactic actions linked to regulation which have promoted the advancement of knowledge.

All these regulations would have made it possible to install a motor scheme at the student level. The presentation of the teacher's interventions and didactic actions during the second task can help confirm our hypothesis.

##### Task n°2: performing the climb using the belly roll jump style

The teacher's objective for this task is to allow learners to perform the jump in the front roll style (coming back facing the momentum after the jump). Then, the teacher gives some explanations to the students which are linked to the motor operations favorable to the realization of this type of jump before launching them into the activity.

Analysis of the regulations made by the E1 teacher during the performance of the belly roll jump (task no. 2)

- When you jump with the right foot, you return to the left foot in the pit
- No ! No ! For the second foot, the knee is sent behind and not in front
- It is the leg on which you feel comfortable that you will use
- When the first leg passes over the rope, we must see if the knee of the supporting leg (takeoff) passes behind
- No ! No ! Come back here ! Start walking again, now place the lead foot and bring the knee behind

The extract below demonstrates didactic actions linked to regulation which promoted the construction of knowledge.

All these regulations would have made it possible to install a motor scheme at the student level. The presentation of the teacher's interventions and didactic actions during this task could help confirm our hypothesis.

At the start of the session, approached by interview before the session, E1 tells us that he wants to get the students to jump 1m20 for the boys and 1m05 for the girls using the style of the belly roll with a particular emphasis on the climb for the objective of his session. And therefore he plans to ensure the construction of knowledge for his students through three tasks with specific objectives. Indeed, after the first task which is the location of the take-off foot, he had planned to do as a second task the recognition of the take-off zone after the run-up and finish on the last task which is the completion of the jump adopting the style of the belly roll. But in the implementation phase, it is noted that the teacher has not proposed a learning activity (AA) aimed at carrying out this second task. We can perhaps say that when carrying out the first task the teacher realized that the students already have perfect knowledge of this task.

#### 4.2.2 Analysis of the regulations carried out for each task by the teacher E2

The types of tasks proposed by the E2 teacher are presented with an identification of the forms of regulation used by the latter during his teaching practice. The table below presents the tasks and the specific objective for each of them.

Table n°3: tasks studied throughout the sequence (E2)

N°	Sequence of tasks	Goals
1	Work in workshops for each of the gymnastic elements	Teach students how to perform the gymnastic elements of mini sequence 2

Approached by pre-session interview at the start of the session, E2 tells us that the objective of his session is: “to teach the students the gymnastic elements of mini-sequence 2”. It is therefore through a single task with specific objectives that he plans to ensure the appropriation of knowledge to his students.

Task n°1: work in workshops for each of the gymnastic elements

The teacher's objective for this task is to teach the students how to perform the gymnastic elements that make up mini sequence 2. These elements will be used to compose a mini sequence. To this end, the teacher placed signs in the workshops to allow students to use them to learn the elements.

Analysis of the regulations operated by the E2 teacher

The extract below demonstrates didactic actions linked to regulation which have promoted the advancement of knowledge.

- To succeed in the crowns, you place both hands on the ground in front and as you pass your leg in front, you jump.
- I said here that to succeed on the tripod, the two hands and the head must form a triangle. This is so that you have balance. Without it, you will fall. After that, there is the extension of both legs and then the segmental alignment.
- Crowned now, place both hands on the ground then straighten the crowning leg then swing it and raise your hands. Don't try to be faster. Go slowly first!
- For the sequence, we said here that you need at least one element per family.

All these regulations would have made it possible to install a motor scheme at the student level. The presentation of the teacher's interventions and didactic actions during the second task to help confirm our hypothesis.

#### 4.2.3 Analysis of the regulations carried out during each task of the teacher E3

The table below presents the specific objectives targeted by the E3 teacher through each of the proposed tasks. Didactic actions of a regulatory nature are identified through teaching practice.

Table n°4: tasks studied throughout the sequence (E3)

N°	Sequence of tasks	Goals
1	Performing the bell jump	Teach students to do the hopping hop
2	Performing the leaping stride	Teaching students to do the leaping stride
3	Achieving Overall Triple Jump Form	Teach learners to run, do the three leaps and jump into the pit

At the start of the session, E3, approached by interview before the session, tells us that the objective of his session is “to teach students the concept of rebounding and the overall form of the triple jump”. It is therefore through three tasks with specific objectives that he plans to ensure the appropriation of knowledge to his students.

Task n°1: performing the hopping jump

For this task, the teacher aims to get the students to do the hopping. During this phase, the teacher first asked the learners to say what they know about hopping. To this end, some of these students tried to explain and then, if

necessary, demonstrate the technical gesture of this jump. A phase of correction of the students' production followed. Each time the teacher intervenes to correct the students as they complete their work. Analysis of the regulations made by the E3 teacher when hopping (task no. 1)

The extract below demonstrates didactic actions linked to regulation which have promoted the advancement of knowledge.

- Hopping is when you jump on one foot and come back on the same foot.
- Yes I jump on the foot, I come back on the same foot
- You are looking to do well and jump to go further.
- I'm looking to go a little further
- To be able to jump well, we are going to accompany this in a way that we want to fly
- I get carried away with my arms and my feet.
- By raising your arms to be able to go far.
- So you are going to do it again now by lifting your arms, taking off, that is to say it is you yourself who is working. It's not the feet alone. It's not a matter of feet, it's you who wants to jump; It's you who wants to go wrong.
- You have to get it in your head that it's the whole body that wants to work, it's the whole body that you want to lift. So if we want to lift the whole body, all the members must participate.

All these regulations would have made it possible to install a motor scheme at the student level. The presentation of the teacher's interventions and didactic actions during the second task to help confirm our hypothesis.

Task n°2: performing the leaping stride

The teacher's objective for this task is to enable students to know how to perform the leaping stride. During this phase, the teacher asked the students to show what they know about the leaping stride. But following the passage of a few students, he realized that they did not master this stride. To do this, the teacher himself explained to the students how to proceed to carry out this task.

Analysis of the regulations made by the E3 teacher during the leaping stride (task no. 2)

The extract below demonstrates didactic actions linked to regulation which have promoted the evolution of knowledge.

- The leaping stride is the second jump of the triple jump or is it?
- We had hopped up, we were like that, right?
- That foot was in the air like that, no. It is this foot that you send far away. You jump on your foot
- Here we go ; send your foot there
- Nadiath has badly tilted her bust (rear); However, we want to take a leap forward. The bust must go towards the front
- I'm going to give you a guideline to succeed in the bounding stride. The benchmark is that when we do the bell hop, this foot there, you bring it up and it's below the knee. The foot is not like that, it's below the knee and now you jump on the foot like that but the foot didn't go straight like that. Do you understand me ? The foot is below the knee. It leaves and goes straight like that. The foot is below the knee and you jump. You know what we call jumping, right? You jump, you don't place it like that. You have to jump and look to send this far. It must have a shape like that and no... it's not a race. It's a stride, as we say, a bounding stride (All this with demonstration). Can be OK ?

All these regulations would have made it possible to install a motor scheme at the student level. The presentation of the teacher's interventions and didactic actions during the third task to help confirm our hypothesis.

Task #3: Achieving Overall Triple Jump Form

The teacher's objective for this task is to enable students to perform the overall form of the triple jump, that is to say the hopping jump, the bounding stride and the long jump to go into the pit. As with the previous tasks, the teacher took time to always explain to the students how they will proceed with this task.

Analysis of the regulations made by the E3 teacher during the realization of the overall form of the triple jump (task no. 3)

The extract below demonstrates didactic actions linked to regulation which have promoted the advancement of knowledge.

- I do a hopping hop, a bounding stride and I jump on both feet. It goes left, left, right and I come on both feet  
- You follow me ? You stay at the level of the plots. Look at me in front. At the level of the blocks there you will go left-left-right and I fall on both feet. You follow me ? You stay at the level of the plots. Look at me in front. At the level of the blocks there you will go left-left-right and I fall on both feet. Follow me well eh. I do left - left - right - 2 feet (he demonstrates)  
- Look ! I am like that and I do left-left-right with only two feet (he demonstrates again)  
- It's on the spot, don't try to make any more jumps and you land on the left, put yourself straight and you come on both feet, you come here the same thing  
-The first foot there, it can be left or it can be right on the line there I come back on the left foot I change and I come back on both feet. If it's the right foot I do the same thing. Do you understand ? It's not necessarily the left foot eh. It can be straight. Like left but the foot that wants to hop with its feet there must come back twice  
-I call on one foot, I return on the same foot, I send the other foot and I return on both feet. Either left foot or right foot, I take a call on the foot there, I come back on the same one, we said that jumping with bell feet I jump on one foot and I come back on the same foot right? I send the other foot and both. If it's any foot, I put the foot here I come back on the same foot the other foot and both

From the analysis of the observation of these three teachers, we see that among all the teachers, before they launch the students into an activity, they take time to explain to the students the task to be carried out. This allows students to become fully aware of the nature of the learning exercises to be carried out to achieve the desired objective. They also intervene during exercises to make corrections and help students who are experiencing difficulties. These interventions and assistance provided to students during learning, which constitute the different forms of regulation, thus promote the construction of knowledge. Therefore, regulation is important in the teaching/learning process.

## 5. Discussion :

From the comparison of the various results, it emerges that the teachers unanimously used regulation to ensure the construction of knowledge for learners. They recognized the importance of regulation during teaching and learning. According to Amade Escot (2003), these regulations promote awareness among students of how to resolve the problem based on questioning while maintaining the initial conditions of the environment. From the analysis of the data collected, all teachers in the classroom situation used the regulations. The implicit use of certain forms of regulation was noted. Indeed, when their learners experience difficulties in carrying out the proposed tasks, the majority of PE teachers act on the system put in place to help students succeed during learning. Indeed, the analysis of the observation of the teaching practices of E1 and E2 shows that having acted on the regulation system, they corrected the errors of their students more while E3 used the demonstration to correct the errors of his own. This allowed E1 and E2 to quickly and successfully achieve the objectives set during the session. It therefore follows those teachers make more use of didactic regulations in the construction of new knowledge. Likewise, the use of didactic regulations makes it possible to achieve the objectives set for the PE session. These results reveal the extent to which didactic regulations are essential in PE. They confirm the work of Assoclé (2019) which reveals that in the context of motor skills, didactic regulations are more essential. They allow teachers to question students' representations and motor skills. This way of evaluating students, encouraging them to think about their actions, to question their representations and their motor skills.

Furthermore, almost all of the subjects admit to encountering difficulties in the implementation of didactic regulations. These difficulties may thus come from their relationship to the characteristics of didactic regulations. However, for the correct implementation of didactic regulations, it appears that these teachers have an unfavorable institutional and personal relationship with the characteristics of didactic regulations. Which probably creates enormous difficulties in the implementation of educational regulations. These difficulties are inherent to the lack of teaching materials to carry out the implementation of the devices, the management of the class group, the correct management of environmental variables and the confusion in the type of regulation to be implemented.

## 6. CONCLUSION :

The present study, which focuses on "regulation, a didactic action at the crossroads of the construction of knowledge: the case of PE" aims to show the weight or importance of regulation during the construction of knowledge in PE. Our investigations took place in three colleges: CEG Vèdoko, CEG Dassa and CEG1 Natitingou and respectively the 4th ML, 4th ML A and 3rd MC 2 classes which were the focal points of this study. Sensevy's theory of joint action (2007) was used to achieve this objective. It allowed us to analyze the interactions between teachers and students, in particular to highlight the forms of regulation that promote learning at the student level in a classroom situation. The methodological approach used to achieve this objective is based on instrumented observation. The sessions, transcribed



and condensed in the form of a synopsis, made it possible to analyze the practices observed, particularly during the production phase.

Indeed, from the analysis of the results, it appears that these three teachers implemented didactic actions during their teaching, including regulation to promote the construction of knowledge. Furthermore, these three teachers intervene each time during the students' learning in order to correct their errors and also to help them find solutions to those who are experiencing difficulties. The implicit use of certain forms of regulation was noted. Indeed, when their learners experience difficulties in carrying out the proposed tasks, the majority of PE teachers act on the system put in place to help students succeed during learning. It therefore follows that teachers make more use of didactic regulations in the construction of new knowledge. Likewise, the use of didactic regulations makes it possible to achieve the objectives set for the PE session. These results reveal the extent to which didactic regulations are essential in PE. These results reveal the extent to which regulation is a didactic action which is essential for the construction of knowledge in PE. This is what Chevallard (2018) confirms when he shows that regulations are “gestures of aid to the study”. Hence the need for PE teachers to make good use of regulation when constructing knowledge. Thus, following the results, the hypothesis initially expressed is verified.

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