



## Attributed competence and retributed competence: Two characteristics observed in physical education and sport among congolese beginners and experienced teachers

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### Abstract

The purpose of this study is to observe how beginner teachers and teachers with recognized seniority in the profession teach physical education and sports (PES), in order to gather evidence of their didactic skills. Since the observation of the teacher's verbal and non-verbal behaviour in interaction with his or her pupils is a privileged means of gathering factual information on teaching practices, Chevallard's theory of the anthropology of didactics (1998) was used. It allowed us to get an idea of the didactic competence of the different teachers. To collect the data we used the methodology developed by Clot (1999) on the analysis of teaching practices. The results obtained show that the beginning teachers experience the paradox in PES at the end of their initial training. The competence attributed to them stems from the inconsistency between the institutional certification (diploma) they received and the many difficulties they experience in the field despite their initial training, which is supposed to enable them to possess the necessary skills to intervene in PES. As for the experienced teachers, they have a repertoire of contents that they teach every year. This thesis is supported by Thuriot (1996) who points out that for some teachers, teaching is only routine. In reality, teaching should not be a routine because when the programme is done once, it must evolve later.

**Keywords:** teaching practice, attributed competence, paid competence, initial training, beginner teacher, experienced teacher

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### Introduction

Teaching practice is based on initial training, the purpose of which is to provide teachers with rigorous scientific and methodological knowledge, tools for reflection and for deepening their knowledge so that they can construct their own lessons. Nowadays, the training of PES teachers is made up of two complementary paths: the acquisition of a scholarly culture in a university training centre on the one hand and the acquisition of a culture in action during various teaching experiences on the other (Gal-Petitfaux and Ria, 2002) <sup>[19]</sup>. According to Vergnaud (2006) <sup>[30]</sup>, teaching practice is a situated professional activity, oriented by ends, goals and norms, translating the knowledge, processes and skills into action of a person in a professional situation. As for Assude *et al.* (2007) <sup>[2]</sup>, teaching practice involves a teacher and a group of students in the context of a pedagogical situation. This practice over time leads to experience which, according to Berliner (1986) <sup>[4]</sup>, is a practice that allows one to acquire over time (duration) a skill or knowledge in a given field of life through the exercise of a trade. Whereas expertise represents the totality of skills and knowledge acquired in a particular field. In the same vein, Tardif and Lessard (2005) <sup>[25]</sup> point out that work experience is a place where the teacher applies knowledge: "it is even the knowledge of working on knowledge". It implies reflexivity, retention of what one knows how to do in order to contribute to the development of one's own professional practice. Establishing a typology of teachers, Barbier (1996) <sup>[3]</sup> reports that there are novice, beginner, competent, experienced and expert teachers. According to this author:

- The novice uses decontextualised rules, without considering interactions;
- The beginner starts to construct images of experience, but without prioritising them;
- The competent makes choices and decides according to the context;
- The experienced person has a predictive power, in which the accumulation of personal histories allows him/her to find equivalences from even divergent events;
- The expert has a perception of the situation which is immediately translated into operational interpenetration, he or she has a thought in action.

Congolese primary school teachers are assigned to primary schools after their initial training, where they teach all subjects, including PES. However, there has been a massive reduction in the amount of time set aside for PES, or even its abandonment by both new and experienced teachers.

In order to assess the impact of initial training in PES and the effect of seniority in the teaching profession, we observed beginners and experienced teachers during their PES lessons. Thus, what is the contribution of initial training and seniority in the teaching practice of PES among teachers?

### **1 - Theoretical framework: Anthropological approach to didactics by Chevallard (1998).**

Teaching practice is a system of relationships to knowledge. Thus, the level of the teacher's relationship to knowledge is a determining factor in interactions with students. The use of Chevallard's (1998) anthropological approach to didactics is justified in this respect. It allows us to study and understand the content taught in class. It is a question of questioning how the cognitive universe of an individual is constituted and how it changes (Chevallard, 2002) <sup>[11]</sup>. For this author, there is a link between society and the knowledge taught in PE. The territory of didactics exceeds that of school teaching. It is not the exclusive domain of teachers. The institutions determine objects about the field of reality (e.g. PSA) that are specific to it.

Finally Chevallard (2002) <sup>[11]</sup> reports that when an individual becomes a subject of an institution, he is already a person, who submits to the institutional relationship to the object of this institution, he will eventually reshape his personal relationship to the object, because he adds, in each institution, there is an official relationship to the object. The teachers' relationship to knowledge partly influences their recurrent ways of implementing the teaching content during the cycle.

#### **1-1- The concept of relationship to knowledge**

Every individual, in his or her history, is brought into contact with physical and sports activities (PSA) in different institutions (in physical education, in clubs, in leisure, in the family, etc.). According to Chevallard (1989) <sup>[8]</sup>, an "institutional relationship" specific to the knowledge of each of these institutions indicates the ways of acting in these different places. In this diversity of institutional relationships to PSA, the "personal relationship" to knowledge of each individual is shaped. Thus, teachers have consequently constructed a personal relationship to PSA. The physical and sports education that they have to teach will come to life under the constraint of the new "institutional contract" in use in the school didactic system.

Moreover, work in clinical didactics has highlighted the fact that, beyond the institutional subjection that weighs on teachers' choices, more personal, even unconscious dimensions are at play, revisiting the definition of the relationship to knowledge proposed by Chevallard (2002) <sup>[11]</sup>: "our personal relationships are thus the fruit of the history of our past and present institutional subjection".

Moreover, Devos-Prieur (1996) <sup>[14]</sup> maintains that the teacher's personal relationship with the PSA to be taught, even if it is modified through the institutional contract in use in physical education, always remains linked to previous experiences. This work shows how the relationship to the knowledge taught influences the exercise of the teaching profession. As for Jourdan (2005) <sup>[20]</sup>, he showed how the motion of relationship to knowledge reveals the logics of professionalization in students and trainee teachers of PES.

## **Materials and Methods**

### **Setting of the study**

The study was conducted in Brazzaville at Pierre Mayindou primary school (Mfilou) from 6 to 14 November 2020.

### **Population and sample**

The study involved 530 trainee teachers from the ENI in Brazzaville and 24 permanent teachers from the Pierre Mayindou primary school (Mfilou). At the end of the sampling operations, two (2) permanent teachers who had been in the profession for ten (10) years and two (2) trainee teachers were included in the sample.

### **Investigation tools**

- Documentary research;
- Observation of PE lessons taught by teachers;
- Pre-session interview;
- Audio-video recording of the session;
- Self-confrontation interview conducted in post-session;
- Event-based frame of actions;
- Grid of didactic variables.

The teaching practices were observed during different lessons in the middle elementary course (CEM). A total of four (04) sessions were observed, filmed and analysed.

### **Data processing**

The data processing was done in four (04) steps:

The first step consisted of transcribing all the interview data that we had with the teachers. The data from these interviews were analysed in order to access the meaning and significance of the answers;

The second step led to the enumeration of the different answers given in order to identify the prevalence;

The third stage involved the diachronic ethnographic observation of the didactic system (Brousseau, 1978; Leutenegger, 2009) <sup>[22]</sup> in order to observe the custom of the class. At this level, we reduced a large amount of collected data into relevant data (intervention, teacher action profile);

Matrix of condensation of lessons, contents and skills

### Presentation and analysis of results

Analysis of didactic intentions and teaching strategies of beginning and experienced teachers

**Table 1:** Didactic intentions and teaching strategies of teachers

Object	Beginning teachers (IB1, IB2)	Experienced Teachers (IE1, IE2)
Didactic intentions	<p>IB1: Be able to run as fast as possible after the whistle, respecting the lane for 20m on a prepared field at least twice in 3 passes.</p> <p>IB2: Be able to react and run as fast as possible over a 20m one-way distance after the teacher's signal while respecting the lane with at least two or three passes.</p>	<p>IE1: Be able to perform the 20m sprint after a whistle signal in a well-defined lane with three (3) passes.</p> <p>IE2: Be able to run at maximum speed over a distance of 20m after the whistle in a well-defined area over three (3) passages.</p>
Learning activities	<p>IB1</p> <p>*PEM: Wear sportswear, wear headbands, line up students in teams in ascending order of height, state the objective of the session.</p> <p>*MET: Warm up the students through physical exercises: walking, running at various speeds, jumping, stretching, stretching the students' muscles through stretching exercises.</p> <p>*PP: Pupils in teams, the teacher leads them to the starting line. Explains how to stand in front of the start and finish lines. Explains the operational objective and passes two students. Demonstrate. Organisation of the confrontation.</p> <p>*RAC: Walk around the markers and do the calming and relaxation exercises.</p> <p>*REM: Analyse the lesson, check attendance, announce results, return to class.</p>	<p>IE1</p> <p>*PEM: Wear sportswear, headbands, place students in teams according to colour and size order, state the objective.</p> <p>*MET: Carry out physical exercises to warm up the students' bodies: walking, slow trot, alternating knee raises - normal running.</p> <p>*PP: The teams set up. The first of each team takes the start and the others just after. The teacher explains how to start. He gives the signal to start and the pupils run. At the end, he organizes a competition.</p> <p>*RAC: return to normal state through relaxation exercises.</p> <p>*REM: Critique-lesson, attendance control; proclamation - results, return - class.</p>
Learning activities	<p>IB2</p> <p>*PEM: Wear sportswear and armbands according to team colours, lined up according to size, state objective.</p> <p>*MET: Warm up with physical exercises: pin-walking, walking, tiptoeing, running.</p> <p>*PP: Teams placed in quadruped position (2 hands and back leg knee on the ground), at the 2nd ready: move the back leg knee off the ground. 3rd command, run maximum 20m and cross the finish line, return walking off the track.</p> <p>*RAC: Walk, perform the different calming - relaxation exercises.</p> <p>*REM: Analyse the lesson, check attendance and return to class.</p>	<p>IE2</p> <p>*PEM: Wear team sportswear and headbands, line up in ascending order of height, state objective.</p> <p>*MET: Perform physical exercises as part of a warm-up: walking, running, alternating knee raises.</p> <p>*PP: Well formed teams, behind the starting marker. The first of each team in starting position, then run at maximum speed for 20m. After two runs by each student, organise a test competition.</p> <p>*RAC: Walk around the board with circumduction of the arms.</p> <p>*REM: Proclamation of results, attendance check and return to class.</p>
Learning activities Learning activities	<p>IB1</p> <p>*MET: Walk around the poles, at a slow trot, knees up, heels to buttocks, circumduction of the arms.</p> <p>*PP: Run at a rate of two to three passes per student.</p> <p>*RAC: Walk around the poles (1tr) and relaxation exercises.</p> <p>*REM: Pupils sitting/team, announcement of results.</p> <p>IB2</p>	<p>IE1</p> <p>*MET: Slow walk around the board, alternating knee raises, moderate pace run.</p> <p>*PP: Run 20m, two passes per student.</p> <p>*RAC: Walk around the stage (1 turn) with arm movement.</p> <p>*REM: Critique - lesson, publication of results.</p> <p>IE2</p> <p>*MET: Walk at a varied pace, they run and go around the plateau twice.</p>

	<p>*MET: Pupils walk in a hairpin, on tiptoes, jogging.</p> <p>* PP: Students run as part of the competition.</p> <p>*RAC: Physiological relief.</p> <p>*REM: Students sitting in teams - publication of results.</p>	<p>* PP: Organisation of the competition (race-sprint).</p> <p>*RAC: Slow walk with circumduction of the arms.</p> <p>*REM: Results, attendance control, class return.</p>
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PEM, Getting started; MET, Start up; PP, Main part; RAC, Return to calm; REM, Handover

Table 1 refers to the pre-active phase of the lessons conducted by the two beginner teachers (IB1 and IB2) and the two experienced teachers (IE1 and IE2). It presents the didactic intentions, teaching strategies and learning activities. From the table it can be seen that the activity taught by all these teachers was sprinting.

### Observation of the sessions carried out by the different teachers

**Table 2:** Observation data of the lessons carried out by the teachers.

Lessons	Trainee teachers (IB1, IB2)	Teachers with recognised seniority in the profession (IE1, IE2)
PEM	<p>IB1: Pupils not in sportswear, lined up but in order of increasing height. The objective is stated and explained.</p> <p>IB2: Pupils lined up in teams without following the order of increasing height. The objective of the session is not explained.</p>	<p>IE1: Pupils do not wear sportswear, the size order is respected and the purpose explained.</p> <p>IE 2: Students are in school clothes, in ascending order of size. Lesson objective explained.</p>
MET	<p>IB1: Pupils walk 1 turn, short trot and accelerate 2 turns. Alternating knee raises, bent over jumping.</p> <p>IB2: Pupils jostle each other while walking, the teacher puts them back and directs them by holding them permanently. Walk on tiptoes, arms raised.</p>	<p>IE1: Students walk around the board (1 lap), slow trot, acceleration with knees up for 2 laps.</p> <p>IE2: Students walk around the board (1 lap) and run (3 laps) at a varied pace following the teacher's commands.</p>
PP	<p>IB 1: Lined up as a team at the start. The teacher demonstrates the starting position and runs the whole distance to set up the ideal move. Students take turns running with lots of waste. The teacher stops them and corrects and then organises the competition.</p> <p>IB2: Pupils line up in teams at the start. The teacher starts to demonstrate the starting position in an angle where all the pupils cannot see it. She starts and stops without covering the whole distance. Pupils run without respecting the running attitude, no verbal instructions, the teacher gestures with her arm to indicate to the pupils that they have not run well.</p>	<p>IE1: Students placed in teams. The first ones of each team run at their maximum speed for 20m as part of the competition. The teacher interrupts when the start is wrong. At the end of the race, the teacher reminds them of the rules.</p> <p>IE2: Students in teams behind the starting line. At the signal, they run at maximum speed for 20m as part of the competition. The teacher calls out to the pupils who run in disorder (not respecting the lane, chest backwards, looking left and right).</p>
RAC	<p>IB1: Relaxation exercise around the board (slow walk bending the upper limb).</p> <p>IB2: Non-rhythmic walk without exercise.</p>	<p>IE1: Students walk slowly around the stage on tiptoes.</p> <p>IE2: Walk around the stage without circumduction of the arms.</p>
REM	<p>IB1: Announcement of the results, reminder and return to the classroom.</p> <p>IB2: Announcement of results and return to class.</p>	<p>IE1: Students critique each other's lessons and report back.</p> <p>IE2: Captains announce results, return to class.</p>

PEM, Getting started; MET, Start up; PP, Main part; RAC, Return to calm; REM, Handover

Table 2 reports the results of the observation of the sessions conducted by the two beginner teachers (IB1, IB2) and the two experienced teachers (IE1, IE2). From the reading of the latter, it emerges the existence of a gap between what was planned in the pre-active phase and what was achieved in the active phase. The objective of

the lesson was explained, except for the beginner teacher IB2. It can also be seen that not all teachers made the necessary adjustments.

**Table 3a:** Self-confrontation data with teacher IE1

Communication by the teacher during the lesson	Pupils' actions (what they do after instructions from the teacher)	Self-confrontation: The researcher (C) asks the question and the teacher (IE1) answers
<p>*Getting Started - You run every day: at home, with friends. Today it will be here at school. Follow the rules.</p> <p>*Getting into gear - You walk respecting the distances. At my signal, you start to run. Do not jostle each other, stay in your lanes. The teacher insists on the order. Hey you, don't pass the one in front. The race hasn't started yet.</p> <p>*Main part Place yourselves by team. Each team designates who will start, the girls between the girls and the boys between the boys. Respect the instructions (run straight, look forward). Place your hands on the line, kneel on one leg and semi-bend with one knee high. At the signal (on your marks, get set, go) you run. Be careful, be careful, you run like at home. I told you to run straight and not to shout. Those who cross the finish line come back to the outside of the track. The teacher stands at the finish line and guides those who finish the race by holding them.</p>	<p>* Handling - Yes ma'am.</p> <p>*Training - The pupils walk, jostle a little and run at the teacher's signal. They whisper as they walk and pay attention to the teacher.</p> <p>*Main part The pupils are placed in teams. The boys run among themselves and the girls among themselves. Pupils run shouting without respecting the pace of the race (chest backwards, looking in all directions). Students cross the finish line and return to the outside of the track. Officials use the score sheets to keep track of each team's points.</p>	<p>* Handling - (C): Why did you remind them that they were already racing at home? - IE1): It's to prepare them for the sprint and I do it every year. - (C): What is the sprint race? - (IE1): It's running as fast as possible.</p> <p>*Putting on the train - (C): You have foreseen knee lifts but they didn't do it. - (IE1): It's difficult to get them to do everything that's planned. The main thing is that they warm up – (C): Your students were jostling each other at the beginning of the walk and tended to run without waiting for your signal, but you didn't react, why? (IE1): At the beginning it's always like that and after a few seconds, they respect the instructions: I have the experience.</p> <p>*Main part - (C): Your students had difficulties to place themselves in the starting position, why? (IE1): It's true, I wasn't paying attention. - (C): You didn't take any action to correct your students' shortcomings. You were just talking. - (IE1): Oh well, but I think the fact that I pointed out that they weren't running straight, that they were looking the wrong way, that was good - (C): Just talking wasn't enough, you had to demonstrate and intervene as you did to guide them at the end of the race by holding them. - (IE1): In any case, that's what I do. During the next sessions you will see that they will improve - (C): What is your assessment of the competition? - (IE1): The children ran, that was the main thing.</p>

PEM, Getting started; MET, Start up; PP, Main part; RAC, Return to calm; REM, Handover

Table 3a presents the results of the self-confrontation with the teacher (IE1). It emerges that the teacher, in his answers, acknowledged that he did not ensure the physiological awakening of the pupils as expected. In the main part, the didactic regulations were not present because the pupils were abandoned in their learning by the teacher.

**Table 3b:** Self-confrontation data with teacher IE2

Communication from the teacher during the lesson	Pupils' actions (what they do after instructions from the teacher)	Self-confrontation: The researcher (C) asks the question and the teacher (IE2) answers
<p>* Getting Started - We are going to run like great athletes do. I ask you to be disciplined.</p> <p>*Get into gear Hands on shoulders, walk slowly, at my signal, start trotting and run for 3 laps following my instructions. Respect the alignment. Stop, stop, throw away what you have in your mouth. Go a little slower, continue, no noise.</p>	<p>*Getting Started - The students are attentive to the teacher's speech.</p> <p>*Putting into Train - Students walk and jog. Pupils run and vary the pace of the race. Pupils tend to speed up, jostle, shout and talk to each other constantly.</p> <p>*Main part - The students are lined up</p>	<p>*Grip in Hand - (C): What is running like the great athletes? - (IE2): It's running well and going very fast - (C): Your students are not in sports clothes, what obstacle? - (IE2): Yes, an obstacle for the beauty of the course. *(C): Your students are not wearing sports clothes, what is the obstacle? - (C): The teaching set was drawn up in record time. - (IE2): Every year I use it, so I have all the</p>

<p>*Main part</p> <ul style="list-style-type: none"> <li>- Place yourselves by team in front of the starting line.</li> <li>- The first three (3) of each team get into the starting position: hands on the line, kneeling. On my signal, they run at their maximum speed while respecting the rules of the game.</li> <li>- Stop, stop. It's about running like real champions. The group there, you are making too much of a mess. If you continue, I'll kick you out.</li> </ul>	<p>and the first three (3) in the starting position. They have difficulty getting into the starting position.</p> <p>They run each in their own way (not respecting the lanes, closed points, looking in all directions).</p> <ul style="list-style-type: none"> <li>- At the finish line, the pupils stop abruptly and come back by walking on the sides.</li> </ul>	<p>reference points in my head.</p> <ul style="list-style-type: none"> <li>- (C): Why the hands on shoulders?</li> <li>-(IE2): So that they are well aligned.</li> </ul> <p>*Main Part</p> <ul style="list-style-type: none"> <li>-(C): Your students were not in a good starting position and you didn't react. (IE2): Oh yes, I got their attention by asking them to run like real champions. -(IE2): We should be congratulated, the other teachers don't even teach PE because of these demonstrations - (C): In this case, how will the pupils really learn without the teacher's contribution? (IE2): By reminding them what they have to do at each session, they will end up learning well.</li> </ul>
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PEM, Getting started; MET, Start up; PP, Main part; RAC, Return to calm; REM, Handover

Table 3b presents the results of the self-confrontation with the teacher (IE2). From the reading of the latter, we can see that experience played an important role in the material preparation and organisation of the class. However, the teacher did not regulate the pupils' learning through demonstration and localised interventions.

**Table 3C:** Self-confrontation data with teacher IB1.

Communication by the teacher during the lesson	Pupils' actions (what they do after the teacher's instructions)	Self-confrontation: The researcher (C) asks the question and the teacher (IB1) answers
<p>* Getting Started</p> <ul style="list-style-type: none"> <li>- Who's ever done the speedway?</li> <li>- You'll run, turn and come back here.</li> </ul> <p>*Training</p> <ul style="list-style-type: none"> <li>- We're going to walk: walk, walk, don't run.</li> </ul> <p>- Form a circle and sit down</p> <p>- stand, hold each other and turn.</p> <ul style="list-style-type: none"> <li>- Teacher in constant motion to the left and right for correction: Hey, hey hold each other; you there don't look away. While running, respect distances.</li> <li>-Teacher introducing horizontal obstacles in the lanes while students are running.</li> </ul> <p>*Main part</p> <ul style="list-style-type: none"> <li>- You stay in a row in front of the starting line. - Les trois (3) The first team members of each team stand in the starting position.</li> <li>- Place hands on the line, kneel on one leg and semi-bend with one knee high.</li> <li>- On the signal (on your marks get set - go) you run.</li> <li>- Listen, do not leave before the signal.</li> <li>- Stop, stop, you don't understand. You have to follow the instructions.</li> </ul>	<p>* Getting Started</p> <ul style="list-style-type: none"> <li>- Me, me, already</li> </ul> <p>*Getting into Train</p> <ul style="list-style-type: none"> <li>- The students walk at their own pace.</li> <li>- They form a circle and sit down.</li> <li>- The pupils jostle each other and turn each in their own direction, making it impossible to do the rotation requested by the teacher. He stops them and corrects their gestures and movements.</li> </ul> <p>*Main part</p> <ul style="list-style-type: none"> <li>- The students are lined up and the first three (3) in the starting position - the pupils have some difficulties to position themselves for the start.</li> <li>- During the race, they look in different directions.</li> <li>- At the finish line, the pupils stop abruptly and come back walking on the sides.</li> </ul>	<p>* Getting Started</p> <ul style="list-style-type: none"> <li>- (C): What is speed racing?</li> <li>- (IB1): it means going fast and very fast.</li> <li>- (C): isn't the fact that your pupils are not in sportswear an obstacle? (IB1): for the harmony of the class they should be.</li> </ul> <p>*(IB1): for class harmony they had to be.</p> <p>-(C): The teaching set was not well prepared and your students did not warm up properly. What do you think?</p> <p>-(IB1): The school has no sports facilities. I was satisfied with tracing the lanes marked out by the studs. I also used the whistle to make them react to the commands. On the contrary, they warmed up well. I made them do exercises to prepare them for the race.</p> <p>-(C): Where did you learn this? (IB1) at least not at the ENI, but because when I was an athlete (judo and football), we used to warm up before playing.</p> <p>*Main part</p> <ul style="list-style-type: none"> <li>- (C): Your students had difficulty getting into the starting position, why? (IB1): It's because they didn't respect my instructions. Everyone wanted to do as they pleased. After that, I kept pointing out and correcting their mistakes. (C): You say that it's because you had been a judoka and a footballer that you knew how to lead the pupils. But did you learn athletics? (IB1): In football and judo, there is athletics. Apart from that, I use the sports training manual to prepare my sessions.</li> <li>- (C): In spite of your explanations, the students did not place themselves well in the starting position. (IB1): I also noticed this and each time I tried to ask them to respect the instructions.</li> </ul>

PEM, Getting started; MET, Start up; PP, Main part; RAC, Return to calm; REM, Handover

Table 3c presents the results of the self-confrontation with the teacher (IB1). From the reading of the latter, it emerges that the teacher, in his answers, recognised that he worked on a well-prepared pedagogical platform. He gave the pupils tasks and instructions, and when they were in difficulty, the teacher intervened to regulate their learning.

**Table 3d:** Self-confrontation data with teacher IB2

Communication from the teacher during the lesson	Pupils' actions (what they do after the teacher's instructions)	Self-confrontation: The researcher (C) asks the question and the teacher (IF2) answers
<p>*Getting Started</p> <ul style="list-style-type: none"> <li>- Who's ever done the speedway?</li> <li>- You will run, turn and come back here.</li> <li>*Training</li> <li>- Walk without running and without talking.- At my signal, Lift your arms and walk on tiptoe.</li> <li>- Go around again but in order. The teacher stays close to the students and holds them to avoid disorder.</li> <li>-Be careful, the one who doesn't execute well what I ask, will get zero. Haha these children. Walk without jostling each other. Hey you, walk properly.</li> <li>*Main part</li> <li>- Stand in teams in front of the starting line. Hands on the line, then in quadruped position.</li> <li>-The teacher demonstrates the quadruped position from an angle that is difficult for the students to see.</li> <li>- The teacher demonstrates the quadrupedal position at an angle that is difficult for the students to see. -On the signal (on your marks, get set, go) you run.</li> <li>- The teacher hardly speaks if not yell at the pupils: you want to go out. Run normally.</li> <li>- The teacher uses his arm from a distance to guide the pupils.</li> </ul>	<p>* Getting Started</p> <ul style="list-style-type: none"> <li>- Me, me, already</li> <li>*Training</li> <li>- Small pupils walk and try to get in front of it creates a mess. - Pupils leave the rows when it comes to walking on tiptoes. Instead of raising the arms vertically as requested by the teacher, some put their hands on their heads and others make a movement.</li> <li>*Main part</li> <li>- The students are lined up in front of the starting line. They do not understand the quadruped position.</li> <li>After a demonstration by the teacher, they move into the starting position: sometimes kneeling, sometimes with their hands over the starting line.</li> <li>-The pupils run without synchronisation and with their eyes in the sky.</li> <li>- At the finish line, the students tend to jump and come back walking on the sides.</li> </ul>	<p>* Getting Started</p> <ul style="list-style-type: none"> <li>- (C): what is sprinting?</li> <li>- (IB2): it means running faster than the other.</li> <li>- (C): isn't the fact that your students are not in sportswear an obstacle? (IB2): actually it's a failure on the part of the school.</li> <li>*(IB2): actually it is a failure on the part of the school.</li> <li>- (C): The training ground was not well prepared and your students did not warm up properly. What do you think about this?-</li> <li>(IB2): I worked with the flags and tracing the lanes. If they didn't warm up well, it was because they didn't follow my instructions. Each of them wanted to do as they pleased and the others had to follow them. That's why I held them so that they wouldn't get into trouble.</li> <li>- (C): You didn't even ask them to trot when it was the start-up. (IB2): Haha I missed that.</li> <li>*(IB2): Haha, I missed that.</li> <li>- (C): In spite of your explanations, the students didn't place themselves well in the starting position. (IB2): I had also noticed this and each time I tried to ask them to respect the instructions.</li> <li>- (C): Why don't you correct your students' bad starting position, their bad running pace and their eyes? - (IB2): Frankly, I insisted a lot on the start, but for the pace and the look, I didn't pay much attention. I was content to see them run fast and finish the race. -(C): You haven't explained what the quadruped position is, what is it then? (IB2): I demonstrated it. -(C): at one point you asked the students to come back walking on the sides, but they were doing the opposite and you said Haha these children. What does that mean?</li> <li>-(IB2): I admit that it was difficult to control these children. In the first year we didn't do the training courses and we only had two PE sessions all year (relay race). This year we haven't even had a practical PE lesson, we're on a course where each student teacher only teaches once and for thirty minutes. -(C): Each time you gave the start. Why didn't you provide a clapperboard and make the students responsible for this? - (IB2): Soon we will have a clapperboard.</li> </ul>

PEM, Getting started; MET, Start up; PP, Main part; RAC, Return to calm; REM, Handover

Table 3d presents the results of the self-confrontation with the IE2 teacher. It can be seen that the teacher had a lot of trouble managing his class. He was characterised by a casualness that he justified by the weaknesses of his initial training (poor warm-up, poor placement and movement, lack of regulation).

### Presentation and Analysis of Results

The literature on the definition of the concept of experienced teacher did not allow us to objectively qualify our teachers as experienced, since they had been teaching for 10 years. Indeed, according to Tardif and Lessard (2005) [25], experience refers to a body of up-to-date knowledge required in the practice of the profession. It forms a body of knowledge about the work and implies reflexivity, retention of what one knows how to do in order to contribute to the development of one's professional practice. This definition assumes that experience

starts with a certain knowledge base, which is derived from initial training (institutional relationship to knowledge) and personal relationship to knowledge. Thus, reports Entsiro (2018) <sup>[18]</sup>, every teacher has a hidden side of his or her professional career called protohistory, which is constituted by his or her history, socialisation, personality and which plays a determining role in the act of teaching.

On the basis of what has just been developed, we can say that our teachers with a recognised seniority in the profession are experienced teachers but with a limited degree of knowledge. As Tardif and Lessard (2005) <sup>[25]</sup> point out, the way of working is the result of teachers' previous experiences. These experiences serve to orient the teacher's work and define his or her relationship to the task. Thus, analysing the content taught in PES, Devos-Prieur (2011) <sup>[15]</sup> shows that, depending on the teacher, the objects of instruction are more or less numerous and diverse in nature. This variety of knowledge reveals relationships to knowledge that are shaped by the teacher's personal training path. Similarly, the didactic customs and routines that emerge according to a given temporality and the regulations in the teacher's action also depend on the relationship to knowledge, adds Leutenegger (2009) <sup>[22]</sup>.

However, the results obtained in accordance with tables 1, 2, 3a, 3b, 3c, 3d, show that our teachers who have been in the profession for 10 years have some characteristics close to those of teachers whose career is about to begin. This similarity is due to the irregularity of these teachers in teaching PE. In fact, they regularly divert the PE timetable to other subjects. As a result, they create a didactic and pedagogical break with the PES discipline. Under these conditions, the definition of experience given by Tardif and Lessard (2005) <sup>[25]</sup> is problematic. For in the case of the latter, experience no longer forms a body of knowledge of the work and no longer implies reflexivity, retention of what one knows how to do in order to contribute to the development of one's own professional practice because of the "void" created by the break with the discipline. This conceptualisation tends to agree with Thépaut and Léziart (2007), who have shown how teachers' different relationships to knowledge are at the origin of their didactic project. Moreover, in a comparative perspective, these authors also reported how their different subjection to knowledge can explain the specificity and/or genericity of their action. Finally, Thépaut and Léziart (2007) revealed that at the origin of the teachers' classroom customs, there is a subjection of an official relationship to the pedagogical approach, recommended by the training institution or an official relationship to the PES manual used in training.

In order to understand the weaknesses of our teachers with a recognised seniority in the profession, the work of Terrisse (2002) <sup>[26]</sup> showed the limits of experienced teachers in the teaching of a PSA. The latter were confronted with the teaching of a PSA that they did not know enough about and which posed difficulties for them in designing and implementing content.

However, a recent study by Wanlin (2009) <sup>[31]</sup> showed how the effects of professional experience determine the act of teaching. This author established a cause and effect relationship in the results recorded among teachers with recognised seniority in the profession. The conformity of our results to those of this author can be explained by the fact that our teachers, although they have had a total of 10 years in the field, have not had a quality initial training in PES and present a "personal relationship to knowledge that is not very rich". If the way of working is the result of previous experiences, as Tardif and Lessard (2005) <sup>[25]</sup> put it, then the question of what our teachers' previous experiences in PES tell us is of interest to us. Their previous experiences are marked by an absence of PSA practice and application courses during their initial training, on the one hand, and by a notorious irregularity in the teaching of PSA during the entire time they were working in primary school, on the other.

In order to define and contextualise the term 'experienced teacher', we thought it would be useful to present the profile of our teachers whose seniority in the profession is recognised, which we will refer to as 'experienced teachers' in the remainder of this study.

The "somewhat rich" and monotonous vocabulary of experienced teachers is a function of the routine to which they have been subjected for several years in the field. To this end, Barbier (1996) <sup>[3]</sup> emphasises that practice is a process of transformation from one reality to another, requiring the intervention of a human operator. This routine is all the stronger because these teachers find it difficult to differentiate their discourses (practices), even when the contexts differ from one another. For as long as they have been teaching, the programmed physical and sporting activities have remained the same: sprinting. This reinforces their personal relationship to knowledge for this activity (Entsiro, 2018) <sup>[18]</sup>. As Lang (2002) <sup>[21]</sup> has highlighted, the professional identity of trainers is above all marked by the experiential dimension and by the strong relationship with concrete classroom situations.

Thus, the weaknesses of the foundations of initial training, combined with the "poverty of their personal relationship to knowledge", keep experienced teachers in a loop, a serious monotony in terms of gestures, language and concepts. The latter, because of several years (10 years) of fieldwork for a single teaching every year (speed race), have built a solid relationship to this activity which becomes inscribed in their cognitive universe (same discourse at all times) and in their motor programme (same gestures and movements), which sometimes does not fit in with the real situations in the classroom.

This reality reinforces our argument of the "poverty of the personal relationship to knowledge" and the notorious irregularity of these teachers in teaching PES. Indeed, Connelly (2005) <sup>[13]</sup> and Elbaz (1993) <sup>[17]</sup> argue that teachers internalise knowledge, beliefs, skills, etc., forming their personality and their relationships with others, which would be re-actualised and re-used in a non-reflexive manner in the practice of the profession.

In view of the above, the results recorded among experienced teachers can be explained. If it is in the name of experience that they intervene, it was therefore necessary for us to understand this concept well beforehand, in

order to realise the gap that exists between what our results presented in terms of know-how due to experience and what the literature reports as information.

Thus, our experienced teachers, characterised by an initial training full of shortcomings, a lack of continuous training, a lack of personal relationship with knowledge and a notorious irregularity in teaching PES, are close to the IB2 beginner teacher. The teacher's devolving gesture consists in withdrawing from the didactic environment and encouraging the pupils to occupy it in order to explore it. The latter also regulated the learning of his students, thanks to his "rich personal relationship with knowledge".

It is from this perspective that Yildirim (2003) <sup>[32]</sup> found that more experienced teachers are more influenced in their planning by the official curriculum, their educational background and their professional experience, while those with less experience are more influenced by their colleagues. This may, in a way, justify the superiority of the IB1 beginner teacher over other teachers in interactions with pupils. This is because teacher IB1, in order to conduct his lesson well, referred to his experiences in the various sports institutions he had been through. The technical procedures, the discourse and the methods he encountered made him different from the other teachers.

On the other hand, the other beginner (IB2) and experienced (IE1, IE2) teachers, due to a lack of experience that links them to the realities of sports practice, tend to be in search of a model of an equipped teacher. The performance of the latter can be explained in the words of Chevillard (1999) <sup>[10]</sup> who argues that in PSA, the transposition of techniques to students by teachers is a matter of initial training due to the internalization and acquisition of certain routines, making the tasks ordinary and habitual. These routines give rise to phenomena of naturalization, which imply the transparency and oblivion of the mechanisms at the origin of the creation of tasks and techniques. They are in fact the experience of silencing the fundamentals of the profession.

We can understand from these results that the few rare didactic customs and routines that have emerged over time among experienced teachers have constituted a knowledge base from which they draw the necessary means to conduct interactions with students as argued by Leutenegger (2009) <sup>[22]</sup>. As for the beginner teacher IB1, these results can be explained by his subjection to an official relationship to the conduct of sports training sessions during his various visits to sports institutions (judo and football clubs) and to an official relationship to sports textbooks and PE pedagogy.

As the results show, the interventions of the beginner teacher (IB2) did not have didactic interactions, but were much more organisational, in contrast to his beginner colleague IB1 and the experienced teachers (IE1, IE2) whose interventions regulated the pupils' activity.

Indeed, the latter did not limit themselves to giving instructions, but also made localised corrections when the pupils were unable to carry out the required action. Amade-Escot (2003) <sup>[1]</sup> explains these results by arguing that regulation should not be limited to verbal instructions, but should also involve the tactile domain and even the manipulation of pupils during exercises.

However, the experienced teachers (IE1, IE2) and the beginner teacher IB2, with the exception of teacher IB1, are very often in the same situation when it comes to demonstrating the gesture to the pupils. Those who have a recognised length of time in the profession limit themselves to holding the pupils to get them to carry out the ideal gesture, while reminding them of the criteria for success. The beginner IB2 teacher, on the other hand, simply reminds the pupils of the protocol of the movement to be performed. This is in line with the comments of Touboul *et al.* (2009) who report that beginning teachers, due to a lack of available solutions, do not modify the course of events. Only teacher IB1 gave the image of the task by carrying out the movement himself. This fact is attributed to the personal relationship to knowledge (practice). Shulman (1987) <sup>[24]</sup>, moving in the same direction, argues that the knowledge activated by PE teachers during interactions with students is at the heart of their expertise.

These results show that all these teachers, without exception, have a weak institutional relationship to knowledge with regard to the practice of PSA. The beginner IB2, due to his lack of practice in PSA, combined with his lack of experience in the field, was not able to present interactions of a didactic nature with the pupils.

Chevillard (2002) <sup>[11]</sup> explains this by the weaknesses of the training programmes at ENI. This author reports that when an individual becomes a subject of an institution, he or she is already a person, who is subject to the institutional relationship to the object of that institution, he or she will eventually reshape his or her personal relationship to the object, because, he adds, in each institution there is an official relationship to the subject. The teachers' relationship to knowledge partly influences their recurrent ways of implementing teaching content during the cycle.

The teachers with a recognised length of time in the profession, whom we called experienced, by teaching the same things every year and in the same context (sprint race with the same objectives, teaching space delimited by 4 studs, lanes marked out on the ground, a class structured into 3 teams with almost the same number of pupils), manage quite easily in communications and in certain tactile remediations.

Beginner IB1, thanks to his "rich personal relationship with knowledge" (practice of PSA), recorded several didactic episodes with demonstrations on his part. Indeed, he was a football player in a federal club and a judoka. This justifies the fact that, at his level, the regulations were more important than those of the teachers with a recognised length of time in the profession, and even more so than those of his IB2 beginner colleague. These results are supported by Sensevy *et al.* (2007) <sup>[2, 23]</sup> who report that each teacher, because of his or her past membership of institutions, develops unique relationships to knowledge. Referring to the definition of expertise given by Berliner (1986) <sup>[4]</sup>, according to which expertise is the set of skills and knowledge acquired in a particular field, we can qualify the IB1 beginner teacher as an expert.

Analysing the results of expert and experienced teachers, Touboul *et al.* (2008) <sup>[29]</sup> highlighted that the expert and experienced teacher, inversely to the non-expert and non-experienced, favours the didactic action of devolution. However, the difference between expert and experienced teachers is clear. Carnus *et al.* (2009) <sup>[7]</sup> indicate on this subject that experience is linked to seniority in the profession, to the number of years of practice, whereas expertise refers to the mastery of the physical activity being taught.

As can be seen, our results highlight the remarks of Brau-Antony (2003) <sup>[5]</sup>, who emphasises that the teacher's conceptions are at the crossroads of multiple parameters such as initial training, professional experience, sporting experience, etc. These conceptions are reflected in the way the teacher's behaviour is perceived by the students. These conceptions translate into positions taken in the implementation observed in the action. As a result, the categorical refusal of teacher IB2 and teachers with a recognised length of time in the profession (IE1, IE2) to show the real image of the gesture to pupils through their demonstrations is justified. Thus, the present study, in view of the results obtained, has just declined the status of the different speakers:

Novice for teacher IB2, because he was not able to enter into a dynamic of contextualisation - decontextualisation - recontextualisation during the different didactic transactions.

Experienced for the teachers (IE1, IE2), because they have accumulated so many stories through the episodes related to the management of the class, that they ended up developing a certain number of automatisms in the interactions with the pupils;

Expert for the IB1 teacher, because he has always had a thought in action, nourished by the whole of his knowledge acquired in his relations with the various sports institutions to which he belonged.

We have established these different statuses in relation to the results that the teachers presented. This approach allowed us to circumscribe, understand and appreciate the level of action of these different teachers. This led to the concept of "attributed competence" for the beginner teacher IB2 and to that of "paid competence" for the teachers (IE1, IE2).

This conceptualisation, which we propose, is explained respectively by the paradox that teachers experience in the field, just after their initial training in PES, and by the acquisition of a certain capacity for intervention, due to the routine in the field. Indeed, the "attributed competence" derives from the fact that teachers at the end of their initial training, which is supposed to allow them to possess the necessary competences to intervene in PES, receive an institutional certification (diploma), which attests their competence to teach PES.

Unfortunately, in the field, they experience serious difficulties which create in them a feeling of displeasure for PES, thus calling into question the versatility and uniqueness of the primary school teacher. The teachers therefore begin their work without a consistent knowledge base. Versatility as a crucible of teaching competence is undermined. Although the public authorities support the need for versatility as the very essence of the teaching profession in primary schools, the fact that initial training does not provide a basis for the development of teaching skills does not mean that teachers are not trained.

Insofar as initial training does not allow teachers to create a repertoire of tools, which we could still call capacitive inking, enabling them to intervene successfully in the teaching/learning process, the 'attributed competence' cannot be mobilised. It is only a surface competence that the institution (Ministry of Technical and Vocational Education) assigns on paper for a diploma purpose.

Our comments are confirmed by Durand (1996) <sup>[16]</sup> who, in describing the many weaknesses that characterise teachers in conducting PE sessions, states that careful observation of teachers' intervention practices somewhat calls into question their versatility.

Moreover, the "paid competence" is considered here as being the product of several years of work, characterised by a routine on the gestural, linguistic and conceptual level.

Our thesis is supported by E. Thuriot (1996) <sup>[28]</sup> who points out that for some teachers, teaching is only routine "when you have done the programme once, you have done it for ten years". It is enough to have a programme, he continues, to cut it into more or less well-cut slices, and then it is time for the holidays. According to this category of teachers, there is no teaching except in the transmission of knowledge, so nothing must be imagined or invented, but the great classics and their sacred relationships must be transmitted.

## Conclusion

The study sought to assess the effects of initial training and seniority in teaching of Physical Education and sport among teachers. Thus, lessons conducted by beginners and experienced teachers were observed and analysed. The hypothesis was put forward that experienced teachers would regulate pupils' learning better than beginners. The results obtained show that the ability to regulate learning is strongly correlated with the teacher's personal and institutional relationship to knowledge. The use of the concepts of attributed competence in beginner teachers (IB2) and rewarded competence in experienced teachers (IE1, IE2) is justified by the paradox that teachers experience just at the end of their initial training and by the automatisms acquired in the field due to several years of routine.

## References

1. Amade-Escot C. (Ed.). *Didactique de l'éducation physique-Etat des recherches*. Paris: Editions de la revue EPS, 2003.
2. Assude T, Mercier A, Sensevy G. *L'action didactique du professeur dans la dynamique des milieux*. *Recherche en didactique des Mathématiques*, 2007;27:221-252.

3. Barbier J M. Savoirs théoriques et savoirs d'action. Paris: PU, 1996.
4. Berliner DC. In pursuit of the expert pedagogue. Educational Researcher, 1986, 31-513.
5. Brau-Antony S., Grosstephan V. Comment articuler recherches en didactique de l'EPS et formation des maîtres: Un exemple de dispositif de formation pour des professeurs d'EPS stagiaires, 2ème séminaire UQAT/IUFM de Reims, Rouyn-Noranda, 2003.
6. Brousseau G. L'observation des activités didactiques, Revue française de pédagogie, n°45, 1978, 130-139.
7. Carnus M F, Garcia-Debanc C, Terrisse A. Analyse des pratiques des enseignants débutants. Grenoble: La pensée sauvage, 2009.
8. Chevallard Y. Le concept de rapport au savoir, rapport personnel, rapport institutionnel, rapport officiel. Document interne. IREM d'Aix Marseille Faculté des sciences de Luminy, 1989, 211-235.
9. Chevallard Y. L'analyse des pratiques enseignantes en théorie anthropologie Didactique. Recherches en didactique des mathématiques, 1998:19(2):221-226.
10. Chevallard Y. L'analyse des pratiques enseignantes en Théorie Anthropologique Didactique. Recherches en Didactique des Mathématiques, 1999:19(2):22-266.
11. Chevallard Y. Organiser l'étude 1. Structures & fonctions. In J.L Dorier, M., Artaud, M., Artigue, R. Berthelot & Floris (Eds), *Actes de la 11<sup>ème</sup> école d'été de didactique des mathématiques*, 2001, pp.3-22. La pensée sauvage éditions, 2002.
12. Clot Y. La fonction psychologique du travail, Paris, PUF, 1999.
13. Connelly FM. Rhythm in teaching: The narrative study of teachers personal practical knowledge of classrooms. Teaching and teacher Education, 2005:2(4):377-387.
14. Devos-Prieur O. Contribution à l'étude du partenariat à l'école primaire en activités physiques de pleine nature. Mémoire de D.E.A. non publié, Université de Montpellier I, 1996.
15. Devos-Prieur O. Chronogenèse des objets enseignés au basketball par quatre intervenants à l'école primaire ejRIEPS, 2011:24:24:118-143.
16. Durand M. L'enseignement en milieu scolaire. Paris: PUF, 1996.
17. Elbaz F. La recherche sur le savoir des enseignants: l'enseignant expert et l'enseignante ordinaire. In: Gauthier, C., Mellouki, M. & Tardif, M. (dir). Le savoir des enseignants. Que savent-ils? Montréal, Editions Logiques, 1993, 101-114.
18. Entsiro F. Enseignement de l'Education Physique et Sportive dans les lycées du Congo/Brazzaville: Analyse comparée des pratiques professionnelles en fonction du genre. Thèse de doctorat. Université Marien NGOUABI/Chaire UNESCO en Sciences de l'Education. Brazzaville-Congo, 2018.
19. Gal-Petitfaux., Ria L. La formation par l'action des enseignants débutants en éducation physique. Communication orale intégrée au symposium: la formation des enseignants novices-apprentissage des enseignants dans l'action. 2<sup>ème</sup> colloque international de l'ARIS, France: Rennes, 2002.
20. Jourdan I., Terrisse A. Rapport au savoir et professionnalisation en EPS: trois études de cas à l'IUFM Midi-pyrénées. Pratiques psychologiques, 2005:10:153-167.
21. Lang V. Formateurs en IUFM: un mode composite. In Altet, M., Paquay, L. & Perrenoud P. Formateurs d'enseignants. Quelle professionnalisation? Bruxelles, De Boeck, 2002, 91-111.
22. Leutenegger F. Le temps d'instruire, approche clinique et expérimentale dudidactique ordinaire en mathématique. Berne: Peter Lang Editions, 2009.
23. Sensevy G, Mercier A. Agir ensemble. L'action didactique conjointe du professeur et des élèves. Rennes: PUR, 2007.
24. Shulman L. Plans and situated actions. Cambridge: Cambridge University Press, 1987.
25. Tardif M, Lessard C. Le travail enseignant au quotidien. Expérience, interactions humaines et dilemmes professionnels. Laval: Les presses de l'Université Laval, 2005.
26. Terrisse A. Le rapport au savoir et recherche en didactique de l'EPS. Troisièmes journées franco-québécoises des didactiques. La Sorbonne, Paris, 2002.
27. 27-Thépaut A., Leziart Y. De la nécessité de la prise en compte de la notion de « milieu didactique » pour l'étude des phénomènes de transposition et d'appropriation des savoirs. Un exemple à propos de l'apprentissage de la passe en basketball. Science et Motricité, 2007:61:56-71.
28. Thuriot E. Dans cahiers pédagogiques n°349, Faut-il avoir de l'imagination pour enseigner ?, 1996, 49-50.
29. Touboul A, Carnus A, Terrisse A. Le poids de l'expertise et de l'expérience dans les pratiques d'enseignement en éducation physique et sportive. Etude de cas contrastes en savate boxe française. Sciences en Liberté, 2008.
30. 30-Vergnaud G. « Quelques problèmes théoriques de la didactique à partir d'un exemple: les structures additives », In: Joshua, S & Dupin J.-J., Introduction à la didactique des sciences mathématiques, Paris, PUF, 2006.
31. Wanlin P. La pensée des enseignants lors de la planification de leur enseignement. Revue Française de pédagogie, 2009:166:89-128.
32. 32-Yildirim A. Instructional planning in a centralized school system: lessons of a study among primary school teachers in Turkey. International Review of Education, 2003:49(5):525-543.