Creative Education, 2015, 6, 2433-2437
Published Online December 2015 in SciRes. http://www.scirp.org/journal/ce
http://dx.doi.org/10.4236/ce.2015.622250

Physical Education Teacher's Training in Swimming under the Joint Didactic Action

Donia Sghaier[1], Souha Elandoulsi[2], Mohamed Mami[1], Anissa Bouassida[1,3]

[1]Higher Institute of Sports and Physical Education, University of Jendouba, Kef, Tunisia
[2]Higher Institute of Sports and Physical Education, University of Manouba, Ksar Said, Tunisia
[3]Research Unit of Sportive Performance and Physical Rehabilitation: Higher Institute of Sports and Physical Education, Kef, Tunisia
Email: doniasghaier@ymail.com

Received 10 November 2015; accepted 26 December 2015; published 29 December 2015

Abstract

This article is interesting in describing and analyzing the joint didactic activity of two teacher's with their students in swimming in Tunisia. Its objective is to determine the influence of the teacher's training and their experience in staging and in the regulation of the didactic situations. To clarify better the complexity of the observed reality, this study uses "ordinary didactics" (Schubauer-Leoni & Leuteneger, 2002) as a method of observation and it relies on the triplet of "the genesis of knowledge" (Sensevy, 2007) like an instrument of analysis. This qualitative research tries to analyze the didactic system with questioning the effect of proficiency degree in swimming. Results put in evidence in the conjugated effects of teacher's training and their professional experience on their practice improvement.

Keywords

Joint Didactic Action, PE Teachers, Proficiency, Swimming

1. Introduction

Teacher's academic formation and professional experience impact on their practice improvement or development which can diverge depending on whether one is a novice teacher (beginner) or "experienced" (Tochon, 1993). Proficiency as well as experience have an important impact in terms of the disposition of the didactic environment, the exploitation of variable situations, uncertainty management related to didactic contract linked with student's action (Schubauer-Leoni, 2008). Since then we think that proficiency of the physical and sportive activity (PSA) trainer as well as professional experience can influence didactic processes *in situ*, during the joint

How to cite this paper: Sghaier, D., Elandoulsi, S., Mami, M., & Bouassida, A. (2015). Physical Education Teacher's Training in Swimming under the Joint Didactic Action. *Creative Education, 6,* 2433-2437.
http://dx.doi.org/10.4236/ce.2015.622250

didactic action teacher-student.

Starting from an observation, a finding the teacher's is seen different by the students found being in an aquatic environment. It is unusual which influences their apprenticeship. The difficulty of the teacher to interact with his students has seen as that they have view that they have intentions, distinct capacities and responsibilities. Consequently, it is to adjust and to interact with his students. During the PSA, swimming consists of an absolute problematic.

This finding on the swimming is not studied yet, at least in a Tunisian university environment. To be in this problematic, we question if factors of experience and proficiency of the trained PSA influence didactic processes during the joint didactic action teacher-student. However, to teach knowledge named arm in crawl movement.

This article is trying to answer the following questions:

What are the proposed work devices by each trainer to operationalize his intentions?

What are the tackled contents during the arm in crawl movement teaching as well as its regulations? And what are the consequences in the didactic relationship evolution?

There by, our objective is to extricate, starting from an empiric research and performing in Tunisian environment, the effect of trainers proficiency on didactic activity related to the taught knowledge, while drawing inspiration (Develay, 1992) from whom. That highlights whether the taught knowledge is the result of a craft that relies on a sum of heterogeneous parameters: proficiency, experience and conceptions of the trainer.

2. Method

We started from the following hypothesis: training and proficiency factors can influence the joint didactic action. To deal with our hypothesis, we performed a study in the case in 2013, nearby two trainers recruited by the Higher Institute of Sports and Physical Education of el Kef (Issep of el Kef) in Tunisia.

2.1. Subjects

The essay was performed at Jendouba University in February 2013 to test our protocol. A group of thirty first year students inscribed at the Issep of el Kef has been retained. This group has been subdivided in two sub groups according to two levels (swimmers and non swimmers). Each group of level has been supervised by two specialized trainers in swimming; that their proficiency degree is different. We called the first expert teacher T1, and the novice one T2.

2.2. Experience

We observed two sessions to each trainer with the two level groups (swimmers and non swimmers) relying on the arm movement in crawl. The first observation took place with the novice trainer however the second one took place with the expert one. The duration of each session is of 1H30, including a shower before and after in the swimming pool of the Issep el Kef.

2.3. Data Collection

We were adopted a qualitative methodology which rests on two studies in the case trainers of swimming. The device relies on data issues of the observation and interview, built on the ordinary principles of the didactic observation (Schubauer-Leoni & Leutenegger, 2003). Didactic situations have been described, according to audio and video recording of each session and to semi-directive interview of data (*ante* cycle, *ante* session, *post* session and *post* cycle), see **Figure 1**.

The observation took place at the swimming pool in the Issep of el Kef. We registered a meeting session to each teacher in the small pool with the non-swimmers and a meeting session at the big swimming pool with swimmers. We used a fixed camera-video that helps collecting the interactive behaviors of the teacher within the class and a mobile one focusing on the teacher himself .In addition to that we have used little microphones to register the Trainer's interventions.

Interviews stand as the objective of sound recording, which will be analyzed in a written form. These interviews have enregistered with the help of a Dictaphone. Each interview was elaborated in a room where you find only the teacher and the researcher. These interviews lead to the access to the teacher knowledge with the help

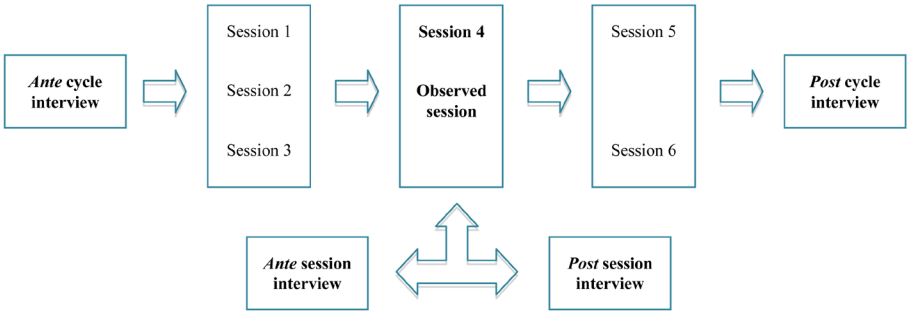

Figure 1. Summary of data collection stages of the observations and conduced interview during swimming cycle.

of *ante* and *post* cycle, in the other hand it helps in too access to his didactic activity supported by *ante* and *post* session.

3. Results

The obtained results of each study of the case are exposed in three tables below according to three genesis of knowledge (Sensevy, 2007): Meso-genesis, Topo-genesis, Chrono-genesis.

4. Discussion

Through the main results of tables, a certain difference between the two teachers appears at the level of the three didactic descriptors.

The focused results on **Table 1** (Meso-genesis) show that the novice trainer tested some difficulties to identify the challenge of knowledge of the coordination task; arm/breathing (which is essential in the apprenticeship of arm movement). This leads to give it not a great importance during the training process. We also registered few individual regulations "by flash" (Gal-Petitfaux, 2000), that are fast and not targeted. These behaviors and conducts in which the trainer does not regulate and he seems" discharging from his responsibility on the device" (Amade-Escot, 1991) and these regulations which are not targeted testify clearly his non mastery during the challenges of knowledge in swimming.

By contrary to this trainer, the expert one masters and valorizes the challenges of knowledge while adding related tasks to the session objective. He regulates whether "by stop" or "by follow" (Gal-Petitfaux, 2000). In addition to that we could observe a lot of individual regulations since she multiplies and varies around the same set point while insisting on distance, rhythm and breathing. This insistence and accuracy of his part during the introduction of knowledge objects make clear his professional experience. Moreover, among the enregistered regulations at T1, she has a lot of demonstrations and gestures which raise tactile domain. She often valorizes relevant features through her body to associate the gesture to the verbal. So that we cannot interpret this except though her proficiency in swimming (14 years).

Results of **Table 2** (Topo-genesis) show that T1 devolving students in her way; observe their behaviors and find time to question them about their provided work to analyze their own action. In addition, she does not hesitate in listening to student intentions and deliver them a certain pace to participate in building their knowledge. So that it leads to the construction of a didactic relationship. Mean while that the particular player (the professor) does not win, only if the other player (the student) wins, means that he learns (Sensevy, Maurice, Clanet, & Murillo, 2008). However, we observed that T2 is discharging from teaching responsibility by entrusting the proposed tasks to his students (Brousseau, 1996). Elsewhere, he has a little didactic interaction with his students, because he does not regulate and accepts student answers as valid (Amade-Escot, 1991).

Finally, at the level of **Table 3** (Chrono-genesis), knowledge advances compared to time indeed with the expert trainer, since she introduced new tasks that lead students to surpass their difficulties. She often associated the gesture to the verbal helping students to well apprehend and make the task successfully. By contrary, the learning process does not advance in the novice session. First, because he introduced tasks of initiations which are not related to the objective. Moreover these regulations are fast and not oriented. Thenceforth, his carelessness about fundamental tasks during the arm movement apprenticeship means that he cannot master

Table 1. Dispositions and modifications of didactic environments and regulations.

Meso-genesis	
T1: Expert	**T2: Novice**
—Modify the didactic environment while adding new tasks related to the session objective during the 6th and 7th situation. —Regulates "by stop" and "by follow" (Gal-Petitfaux, 2000). —Varied didactic regulations. —Collective, verbal and tactile, they are targeted precisely and related to the objective of the session. —She accurates and insists on the distance, the rhythm and the breathing. —She valorizes following pertinent traits through her body to associate the gesture to the verbal. —This insistence and accuracy of her part in the introduction of objects of knowledge testify her professional experience in swimming.	—Introduce initiation and apprenticeship tasks during the 1st, the 2nd and the 3rd situation, which are not targeted. —Regulates "by flash" (Gal-Petitfaux, 2000). —Few didactic regulations: collective or individual, they are fast and superficial. —These individual regulations are relied on tasks of initiations and do not rely never on the fundamental tasks. —During the 5th, the 6th and the 7th situation, he does not regulate and accepts student answers as valid (Amade-Escot, 1991). —These regulations are not targeted which testify his non mastery in knowledge of challenges.

Table 2. Responsibility repartition between actors.

Topo-genesis	
T1: Expert	**T2: Novice**
—She responsabilizes her students progressively: proposes them open tasks, observes their behaviors and questions them on their work to analyze their own action. —She listens to their intentions and delivers them a certain liberty to construct their knowledge. —This delivered liberty towards her students and her listening to their intentions reveal the didactic relationship evolution.	—He deliberates himself from training responsibility by entrusting to tasks that he proposed to his students (Brousseau, 1996). —He cannot master the different issues of knowledge of some tasks. So that he bears all the teaching apprenticeship process. —He has a little didactic interaction with his students, since he does not regulate and he accepts student answers as valid.

Table 3. Responsibility repartition between actors.

Chrono-genesis	
T1 : Expert	**T2: Novice**
—She introduces new tasks allowing students to depass their difficulties which evolve the knowledge compared to time. —She takes time to observe their actions and intervene to sustain their activity (Marsenach & Mérand, 1987). —She replaces the pull boy by the board helping non swimmers to better float and propel in water. —The expert teacher will have a lot of easiness to modify variables of a task during a session (complexify-simplify) in function of the success or the failure of her students compared to a novice teacher (Tochon, 1993).	—He introduces tasks of initiations which are not related to the objective which itself slowed knowledge progress compared to time. —He finds difficulty in identifying the challenge of learning respiration task and of the coordination task arm/breathing. —He finishes with accepting student motor answers even are not valid in order to advance didactic time. —A teacher with an academic formation more advanced or more oriented to pedagogy, will have more easiness to see the problem setting up a task that does not function better than a novice teacher (Tochon, 1993).

knowledge of tasks.

Consequently, the result has shown that both observed teacher's action in the joint didactic action concept depends on their professional experience and their proficiency.

However, a direction for a novice education teacher and specially swimming teacher in Tunisia is to modifying their didactic context and to varying their regulations by associating the gesture to the verbal. This direction will be a study for the future, because the combination between interventions types which lead allows to orient and to guide apprenticeship students. The extent of this research is not focusing in the teacher subject in his intervention and it did not show the effect of interventions types on student apprenticeship.

5. Conclusion

Through the triplet of the "Genesis of the knowledge" (Sensevy, 2007), results are put in evidence that profi-

ciency and the professional experience leads to better managing Meso-genetic, Chrono-genetic and Topo-genetic dimensions under the joint professor-student action. Thenceforth, proficiency in a taught PSA (swimming) influences on staging and on didactic situations regulation. For that, (Tochon, 1993) points out that academic formation of teachers and the professional experience impact on their practice development, which itself can diverge according to whether he is an "experienced teacher" or a "novice".

References

Amade-Escot, C. (1991). *Characterization of the Initial Didactic Formation of the Physical Education Teachers and Assessment of His Repercussions on the Professional Competence.* Non-Published STAPS Thesis of Doctorat, Toulouse University III, France.

Brousseau, G. (1996). Foundations and Methods in Maths Didactics. *Research in Maths Didactics, 7,* 50-51.

Develay, M. (1992). *From Apprenticeship to Teaching.* Paris: ESF

Gal-Petitfaux, N. (2000). *Typicality in the Signification and the Organization of Physical Education Teachers Intervention during the Teaching of Swimming Situation: The Case of "Indien File".* Non-Published STAPS Thesis of Doctorat, Montpellier University, Montpellier.

Marsenach, J., & Mérand, R. (1987). *The Formative Evaluation in Physical Education in Colleges.* Paris: INRP.

Schubauer-Leoni, & Leutenegger, F. (2002). Explain and Understand in a Clinic-Experimental Approach in Ordinary Didactics. In F. Leutenegger, & M. Saada-Robert (Eds.), *Explaining and Understanding in Science Education* (pp. 227-251). Bruxelles: De Boeck.

Schubauer-Leoni, & Leutenegger, F. (2003). Survey of the Didactic Interactions in Math Class: A Methodological Prototype. *Bulletin of Psychology, 56,* 559-571.

Schubauer-Leoni, M. L. (2008). The Reference Construction in Joint Action Teacher-Student Professor-Pupil. In N. Wallian, M. P. Poggi, & M. Loiterer (Eds.), *To Co-Construct Some Knowledges: The Intervention Professions by the APSA* (pp. 67-86). Besançon: PUFC.

Sensevy, G. (2007). Categories to Describe and to Understand the Joint Action. In G. Sensevy, & Mercie, (Eds.), *To Act Together, the Joint Didactic Action Teacher-Student* (pp. 13-49). Rennes: Academic Press of Rennes.

Sensevy, G., Maurice, J.-J., Clanet, J., & Murillo, T. O. (2008). The Passive Didactic Differentiation: A Test of Definition and Illustration. *The Files of the Sciences of Education, 20,* 105-122.

Tochon, F. V. (1993). *The Experienced Teacher.* Paris: Nathan pedagogy.