

The role of professional experience on the dimension of reflexivity in teaching: A case study of two secondary school Health and Physical Education teachers

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ABSTRACT

Kpazai G, Attiklemé K. The role of professional experience on the dimension of reflexivity in teaching: A case study of two secondary school Health and Physical Education teachers. *J. Hum. Sport Exerc.* Vol. 7, No. 1, pp. 254-262, 2012. The present study is based on empirical data generated from the rationale behind the pedagogical approach of two Health and Physical Education teachers with varying years of experience (30 years and 5 years respectively). Building on the topology of reflexivity put forward by Van Manen, one aim of the current study is to understand whether professional experience influences the nature of the objects of reflection of these two Health and Physical Education teachers during the teaching-learning process. A second objective is to determine whether a link exists between teachers' level of reflexivity and their level of professional competence. **Key words:** PROFESSIONAL EXPERIENCE, DIMENSIONS OF REFLEXIVITY, IN-SERVICE HEALTH AND PHYSICAL EDUCATION TEACHER.

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INTRODUCTION

Scholars in the field of Health and Physical Education are increasingly sought after to assist with the initial training and continued professional development of novice teachers. Whether they are *institutional experts* or *emerging experts* (Dubois et al., 2005), they are often recognized as possessing the requisite knowledge and skills for problem solving in pedagogical and social arenas. Consequently, these individuals are frequently required to assume the positions of academic counselors or consultants and supervisors in student placements. In other words, they are asked to take on functions that support the development of professional skills in future teachers.

However, if the act of teaching is, on one hand, increasingly presented as a reflexive, interactive, complex, and professional activity whose primary objective is to instruct and foster personal development (Tsangaridou & Siedentop, 1995), on the other hand the instructional process must include, at its heart, the transformation of knowledge into experience (Conseil supérieur de l'éducation, 1991; Legault, 2004). As a result, teachers are no longer regarded as technicians in education², but rather as professionals with expertise in terms of adaptation, autonomy, and reflection (Schön, 1994, 1996). Reflexive practice allows teachers to improve their professional conduct (Legault, 2004; Sebren, 1995; Smyth, 1984).

In the literature, nonetheless reflective practices in teaching can focus on multiple aspects. For example, Kpazai (2005) notes that reflection present in the professional conduct of the teacher can be oriented on either the *how* or the *why* of instructional practices. Tsangaridou and Siedentop (1995) explain that reflection focuses on three elements of the teaching-learning context: 1) the social conditions in which the educational practices take place; 2) democratic and emancipatory conditions; and 3) the development of a social awareness through the establishment of a learning community. On the basis of research put forth by Habermas (1974), Van Manen (1977) proposes three levels of reflexivity among teachers: 1) technical reflexivity, 2) practical reflexivity and 3) critical reflexivity.

Frame of reference

The conceptual framework of the current paper consists of the objects of reflexivity in teaching as proposed by Van Manen (1977). Van Manen's concept of the dimensions of reflexivity has influenced several studies on reflexivity in teaching. In support, Crum (1995) reports that the ideas presented by Van Manen (1977), built on those developed by Habermas (1974) on critical theory, have been adopted by several pedagogical researchers. It has the advantage of giving guidelines on the possible topics of reflection in the teaching of Health and Physical Education. These three levels of reflexivity in teaching are: 1) technical; 2) practical or hermeneutic; and 3) critical. For Van Manen (1977), these levels of reflexivity not only make reference to the concerns of the teacher's thought process, but they are situated on an evolutionary scale of the reflexive capacity of the individual from the technical (level 1), to the critical aspect (level 3), to the practical or hermeneutic aspect leading to rationality (level 2).

With technical reflexivity (level 1), the individual's thought process is centered on questioning limited to the micro-aspects of the teaching-learning process. The method of reflection employed is focused on the implementation of the best instructional strategies for solving a pedagogical problem. Practical or hermeneutic reflection (level 2) leads the teacher to take into consideration factors such as individual and

² We refer to the statements of Paquay (1994), following the ideas of Altet (1991), that describe four types of teachers. There are the magistrate teacher, the teacher technician, the engineer or technologist teacher, and the professional teacher. For this author, the technical teacher who is trained by emulating the practices of an experienced teacher, believes that education consists of formulas, know-how, and technical skills to reproduce.

cultural experiences, perceptions, meanings, prejudices, etc. with the purpose of directing or guiding practical action. At this level, attention is focused on a comprehensive interpretation of both the nature and quality of the educational experience, as well as the decision-making process. The explanation of an event is based on educational principles and also includes contextual factors such as the characteristics of the student and community influences.

Critical reflexivity is regarded as deliberate reflection in the realm of educational practice. Thus, practical reflection implies the presence of a value system that is critical of continuous power, the establishment, and repressive forms of authority. At this level, questioning seeks to combat repressive distortions in both instruction and learning. The explanation of a phenomenon or educational situation reflects their political and ethical aspects. It is at this level of reflexivity that a teacher can become, in the words of Giroux (1988) a “transforming intellectual”, that is to say an individual capable of examining the ways in which schooling in general, and more specifically, his personal pedagogical approach, either promotes or hinders the development of a just and humane society.

Research questions

The present research study sought to provide answers to the following questions: 1) Does professional experience influence the nature of reflexivity in Health and Physical Education Teachers? 2) Is there a relationship between the objects of reflexivity, the level of experience, and the professionalism of teachers?

METHODOLOGY

Research participants

A female teacher named Lucie and a male teacher named Philippe voluntarily participated in this study. At the time when this study was undertaken, both teachers, Lucie and Philippe³ taught Physical Education in two private secondary schools located in the city of Montreal (Quebec, Canada). Lucie had five years of experience teaching in a high school composed entirely of girls. Philippe had thirty years of experience teaching in a gender-mixed high school.

Data collection

Three separate Health and Physical Education lessons for both teachers were observed and filmed in their entirety. For each lesson, the technique of simulated recall was employed to discern the logic supporting specific instructional practices. Six semi-structured interviews of 60 to 90 minutes in length were conducted during the simulated recall sessions. Each interview was video-recorded and transcribed in full in order to be validated by the teachers. Following the authentication of the interview transcriptions, coding and content analysis were conducted to provide answers to the research questions. It must be noted that in order to accurately process the data, a number of coded transcripts were subjected to the assessment of a qualitative researcher with expertise in the field of reflexivity in teaching. The rate of inter-rater reliability was 90%, which exceeds the acceptability threshold of 85% proposed by Huberman and Miles (1991).

RESULTS

The objects of reflexivity of both teachers: Lucie and Philippe

Table 1 illustrates the objects of reflexivity of each teacher during the teaching-learning process. The objects of reflexivity are numerous and are oriented towards the three dimensions of reflexivity proposed by

³ These names are fictitious and are not the real names of the teachers.

Van Manen (1977). Of the 68 informational items of reflexivity produced by Lucie, 65% are related to practical reflexivity, 26% are related to technical reflexivity, and 9% are related to critical reflexivity. As for Philippe, 46% of the informational items are connected to the practical dimension of reflexivity, 47% are related to technical reflexivity, and 7% of items are related to critical reflexivity.

Table 1. Objects in the reflexivity of Lucie and Philippe.

		Lucie (5 years of experience)	Philippe (30 years of experience)
Technical Reflexivity	Lesson 1	2	10
	Lesson 2	11	14
	Lesson 3	5	12
	Total	18 of 68	36 of 77
	Percentage	26%	47%
Practical Reflexivity	Lesson 1	18	21
	Lesson 2	19	8
	Lesson 3	7	6
	Total	44 of 68	35 of 77
	Percentage	65%	46%
Critical Reflexivity	Lesson 1	1 (micro aspect)	1 (macro aspect)
	Lesson 2	0	1 (macro aspect)
	Lesson 3	5 (micro aspect)	4 (macro aspect)
	Total	6 of 68	6 of 77
	Percentage	9%	7%

Exploration of Lucie's objects of reflexivity

According to the data analysis, Lucie's objects of technical reflexivity appear, in most cases, during the warming-up phase of the teaching-learning process. At this level, the content of the reflection technique relates primarily to the effectiveness of student learning, and secondly to the effectiveness of the act of teaching. The teacher is also focused on creating a serene learning environment for all students. The paraphrased statements below are two examples that help to define the direction of the objects of technical reflexivity.

Given that this is the warm-up period and I do not want it to take all the time of the course, I would like this activity to be completed quickly, especially since it is just a small exercise. If the exercise is not performed properly, I will repeat the instructions using the same tone, not a louder or weaker tone. I continue the repetition until such time as the task is executed properly (L1e2, p.6).

This exercise is stretching of the back muscles. If they do the stretching in this manner, they will not strain anything; but if the exercise is performed this way, the back is strained. I want to ensure that the exercises are performed correctly each time. I observe whether they are turning to the proper side, and if not I help them (L1e2, p.7).

The above excerpts from the transcription reveal

that Lucie's preoccupation lies with the reproduction of a motor skill by the students, and ensuring that the activity is performed in a calm environment. In addition, she seeks to implement procedures (verbal, visual, and tactile) likely to allow the execution of the motor skills requested. In terms of hermeneutic reflectivity, it appears throughout the interactive phase of the teaching-learning process. In fact, during her recall of the reasons underlying her educational interventions, Lucie justifies most of her actions by considerations related to theoretical-pedagogical principles, contextual factors, and particularly, the cognitive and emotional characteristics of students.

Genevieve, among others, is one of my students who is a little lost, and who never correctly performs the task she is asked to do. So, I keep an eye on her because I know she likes to be monitored. She seems to feel more encouraged when she is supervised. She seeks out attention and I give it to her. She is sweet (L1e2, p.7).

In this transcription excerpt, the supervision provided by Lucie fulfills an emotional need in the student. Lucie utilizes this pedagogical approach as a means of respecting the student's individuality. Finally, Lucie occasionally demonstrates thought processes incorporating political-ethical issues into her teaching interventions. Further analysis of the transcriptions reveals that her primary concerns are related to the socialization and responsibility of her class.

With the individual movements, assessments, and all of that, there is a girl in the group who could work harder than the others because she is more motivated. However, if she is working alone and her team is not contributing to the work, but she knows what could lower the average mark of her group, she will be motivated to help the other team members. Therefore, for me it is important to set up situations that lead the girls to work harmoniously within the group (L1e3, p.8).

Basically, assessment strategies are a means of support, but what are the grades? I think it is mainly the whole idea of "I want to perform, I want to achieve, I want to be good, and I do not want to look ridiculous in front of the class because I want to succeed at what I am doing." This is what drives me when I implement a particular evaluation strategy for students (L1e3, p.9).

The object of thought in the first excerpt from the transcription presented above is social in nature. The teacher deliberately chooses to establish an instructional structure that ultimately requires students to develop attitudes of cooperation and mutual assistance. In the mind of the teacher, each one of the "girls" will have to place themselves at the service of others and the group they form. In addition, the second excerpt of the transcription leads one to believe that the teacher wants to see the students take charge individually by engaging in the learning process to the best of their ability. The implementation of this evaluation strategy (self-assessment and peer review) fulfills this goal according to the teacher.

Exploration of Philippe's objects of reflectivity

The technical reflexivity of Philippe primarily relates to the effectiveness of his teaching. For him, this efficiency results in a reproduction or an acquisition of motor skills and increased practice time for motor skills with students.

I place the materials before the students' arrival in order for my teaching time to be more efficient. We have 50 minutes of class time and I want those 50 minutes to be used for the development of gymnastic movements and not to carry or manipulate objects. This is not part of our course, therefore, I set out the material myself. I do this to save time and give the students more time to devote to the activity itself (P2e1, p.10).

When they are playing water-polo, I want them to be able to do projections, landings, and movements with the ball. This is what I do in the third workshop and over in the underwater hockey workshop. I allow them to perform movements that they have not mastered as is necessary (P2e2, p.1).

In the first excerpt mentioned above, Philippe is focused on managing the time allotted for the Health and Physical Education session. In his understanding, the time allotted for the course must be devoted to the development of motor skills. Any other form of practice (e.g., cognitive involvement in the final phase at the end of the session) is not necessary. Philippe presents the following explanation for not including a cooling down activity: *"I have not included a cooling down activity because the purpose is to utilize the maximum amount of course time for motor activities. I want the maximum amount of time to be reserved for the practice of physical activity. If I return to the activity, I prefer to do it the following day at the beginning of the next class. In any case, I do not believe it is necessary to review the activity at the end of the course. I do not want to waste time"* (P2e3, p.8).

In the second excerpt, the object of technical reflexivity is characterized by the determination of the teacher to see the students acquire new motor skills or master existing skills. This teacher's primary concern is the development of motor skills. Philip's thought process is also centered on the hermeneutic or practical considerations of his pedagogical interventions. These pedagogical interventions are supported by consideration of the theoretical principles of instruction, contextual factors, and personal beliefs stemming from his personal experience.

Here, I chose to work in subgroups because it is better when the groups are restricted. The students perform better and they are more active. In addition, I can do interventions that have a greater range because I have subgroups, and I like that. Moreover, they (referring to the founders of the new program from the Quebec Ministry of Education), advise us to work in groups more often, and I agree with that recommendation. This allows for better instruction (P2e1, p.1).

I let the students discover on their own because they will learn at a faster rate and will be more satisfied. Less time will be wasted because the students will focus on what is important to them, that is having the time to experiment. I do not want to take away that time by explaining, given that the environment is not conducive to giving explanations. Everything must be done with gestures or cries, or by exploration as is the case here (P2e2, p.6).

In analyzing these excerpts, the factors justifying Philippe's instructional approaches are made evident. In the first excerpt, for example, the teacher recalls two factors: a theoretical pedagogical principle (small group instruction) and compliance with ministerial guidelines (in this case being the Ministry of Education, Recreation, and Sports in Quebec). Philippe chose the approach of small group instruction out of concern to see improvements in both teaching and learning. Furthermore, he also wants to ensure that the new ministry guidelines are followed. As for the second excerpt, in addition to another pedagogical principle

(experiential learning), the teacher takes into consideration the learning environment (in this case, a water-polo lesson at the pool). For this second factor, the teacher believes that the learning environment (the pool) is not very conducive to a lengthy explanation (because of the noise frequently encountered in that particular location). Finally, Philippe deliberates on the critical considerations of teaching and learning. Analysis of Philippe's transcripts shows that even though these considerations are few in number (7%), they are essentially socio-ethical in nature, and extend to the teacher's gymnasium.

If I put this in a 3 against 3 situation, it is because I want to work on cooperation between students, and the responsibilities that each student has when helping a group of people. I want to keep a ball for us, we are three, therefore I employ strategies to ensure we keep control of the ball. I distance myself and I put myself in a good position to easily receive the ball. I move quickly, I focus on the target, and I cooperate with my teammates (P2e2, p.5-6).

The reason for which I remove the student is simple. I feel he needs to learn respect for the established rules. This is a way of learning how to function in society. Regardless of the rule, and whether or not you agree with it, there will always be rules in society and we must learn to respect them. People need to come to this realization as soon as possible and this is what I strive to achieve in the physical education classes that I teach (P2e3, p.4).

The critical reflexivity demonstrated by Philippe in these statements is social in nature. The teacher is concerned with providing opportunities for students to learn how to function in groups. Although in the first excerpt the aspect of "socialization" serves in the learning process of the students, this is not the case in the second excerpt. In this excerpt, the teacher's thinking extends beyond the Health and Physical Education class and leads into consideration of social factors. Cultivating respect for established societal rules becomes the ultimate goal of instruction. For this teacher, the Health and Physical Education class is a microcosm, a starting point for the training of individuals called to live in society.

In short, in the professional conduct of the teachers, there are multiple objects of reflexivity (technical, practical, and critical) and these are independent of their level of experience. If Van Manen (1977) presents a certain hierarchy between the levels of reflexivity which are therefore mutually exclusive, this is not the case in the teaching profession.

DISCUSSION AND CONCLUSION

Experience, objects of reflexivity, and professionalism of teachers

Careful analysis of the data from both teachers reveals that although both teachers show evidence of critical reflexivity, the impact of the latter is not directed to the same place. While Lucie (5 years of teaching experience) has a critical reflexivity primarily directed towards the micro aspect of the teaching-learning process, that is to say the gymnasium, Philippe (30 years of experience) appears to be ultimately concerned about the political and social dimensions of the teaching-learning process that go beyond the gymnasium to society as a whole. This leads to the postulation that with his years of experience, Philippe has positioned himself as real social actor who wants to participate in the (re) construction of society. From this perspective, Philippe views students as subjects, that is to say, as individuals anchored in their society and demonstrating a personal and social awareness (Daniel, 2004; Giroux, 1990). With experience, Philippe conceives that education should serve to contribute to the betterment of society, and therefore, learning is used to improve the individual and social experience of students (Gohier et al., 1999; Tinning, 1995).

Objects of reflexivity, the level of experience and the professionalism of teachers

Research data from these two teachers leads us to conclude that professional experience enriches critical reflexivity of the physical education teacher and consequently, citizen participation in the construction of a harmonious society. It appears to contribute to the raising of awareness of the teacher's social role as a professional (Giroux, 1988; Kirk, 1986). Thus, data from these teachers suggests that if the promotion of the exercise of reflective practice is growing in the literature related to health and physical education (Carlier et al., 2000; Paré, 1995), it is necessary and useful for researchers and instructors in physical education to go beyond mere reflection (or simply reflective practice, although it is important) to reach a critical reflection that incorporates the political and ethical dimensions of teaching and learning. Taking into account the critical dimension of reflexivity is, in contemporary society, an indicator of professionalism in teachers because this dimension makes them real social actors. Indeed, individuals who manifest the critical dimension of thinking are aware of social problems and take means to be true agents of change in society in a better perspective.

"I am not saying that the purpose of sports or physical education is to contain the enormous social and economic problems of the world. Obviously, this is ridiculous. Rather, I affirm that as teachers and trainers, we have a responsibility to recognize that our professional practice is often involved in larger social problems and that such acknowledgement is accompanied by a moral responsibility to try to change our practice" (Tinning, 1995, p.24).

With experience (the case of Philippe) the teacher comes to see himself as a genuine co-builder (constructor) of society. However, we need to remember that Health and Physical Education is an academic subject and, therefore, finds its legitimacy in the goals pursued by the school. In short, if for Tinning (1995), the school should contribute to the transformation of society, we believe that teachers of Health and Physical Education are also responsible for this role. Are the cases of these two participants isolated cases? We believe that further investigation is needed into the link between experience and the level of reflexivity in teachers through subsequent studies conducted with a large group of participants having various levels of experience.

REFERENCES

1. ALTET M. Les compétences de l'enseignant professionnel: entre savoirs, schèmes d'action et adaptation, le savoir analyser. In: L. Paquay M, Altet E, Charlier & P. Perrenouds (Eds.). *Former des enseignants professionnels. Quelles stratégies? Quelles compétences? (3e édition)*. (pp. 27-40). Bruxelles: De Boeck Université. 1991. [[Back to text](#)]
2. CARLIER G, RENARD JP, PAQUAY L. *La formation continue des enseignants. Enjeux, innovation et réflexivité*: De Boeck Université. 2000. [[Back to text](#)]
3. CONSEIL SUPÉRIEUR DE L'ÉDUCATION. *Rapport annuel 1990-1991 sur l'état et les besoins de l'éducation. La profession enseignante*. Québec: Gouvernement du Québec. 1991. [[Back to text](#)]
4. CRUM BJ. Le besoin urgent pour une pratique réflexive. In: C. Paré (Ed.). *Mieux enseigner l'éducation physique? Pensez-y! Actes du séminaire international sur la formation des enseignants à une pratique réflexive en éducation physique*. Trois-Rivières: Département des sciences de l'activité physique. 1995; 1-20. [[Back to text](#)]
5. DANIEL MF. Présupposés philosophiques et pédagogiques de Matthew Lipman et leurs implications. *Communication présentée au colloque organisé par le Parlement de la Communauté française de Belgique, Apprendre à penser dès cinq ans à l'épreuve du modèle de Matthew Lipman*. Bruxelles, le 14 février. 2004. [[Back to text](#)]

6. DUBOIS S, MOHIB N, OGET D, SCHENK E, SONNTAG M. Connaissances et reconnaissance de l'expert. *Les Cahiers de l'INSA de Strasbourg*. 2005; 1:69-108. [[Abstract](#)] [[Back to text](#)]
7. GIROUX H. Rethinking the boundaries of educational discourse: Modernism, postmodernism and feminism. *College Literature*. 1990; 17(2-3):1-51. [[Abstract](#)] [[Back to text](#)]
8. GIROUX H. *Teachers as intellectuals*. South Hardley, M.A: Bergin & Garvey. 1988. [[Back to text](#)]
9. GOHIER C, BEDNARZ N, GAUDREAU L, PALLASCIO R, PARENT G. *L'enseignant, un professionnel*. Presses de l'Université du Québec. 1999. [[Back to text](#)]
10. HABERMAS J. *Theory and practice*. London: Heinemann. 1974. [[Back to text](#)]
11. HUBERMAN AM, MILES MB. *Analyse des données qualitatives: Recueil des nouvelles méthodes*. Bruxelles: De Boeck. 1991. [[Back to text](#)]
12. KIRK D. A critical pedagogy for teacher education: toward an inquiry-oriented approach. *Journal of Teaching in Physical Education*. 1986; 5(4):230-246. [[Abstract](#)] [[Back to text](#)]
13. KPAZAI G. *Manifestations de la pensée critique chez des enseignantes et des enseignants d'éducation physique et à la santé: une étude de cas*. Thèse de doctorat non publiée. Université de Montréal, Faculté des études supérieures. 2005. [[Back to text](#)]
14. LEGAULT JP. *Former des enseignants réflexifs*. Éditions Logiques. 2004. [[Back to text](#)]
15. PAQUAY L. Vers un référentiel de compétences professionnelles de l'enseignant. *Recherche et formation*. 1994; 16:7-38. [[Full Text](#)] [[Back to text](#)]
16. PARÉ C. Mieux enseigner l'éducation physique? Pensez-y! Actes du séminaire international sur la formation des enseignants à une pratique réflexive en éducation physique. Trois-Rivières: Département des sciences de l'activité physique. 1995. [[Back to text](#)]
17. SCHÖN D. *Le praticien réflexif*. Éditions Logiques: Montréal. 1994. [[Back to text](#)]
18. SCHÖN D. *Le tournant réflexif. Pratiques éducatives et études de cas*. Éditions Logiques: Montréal. 1996. [[Back to text](#)]
19. SEBREN MA. Preservice teachers' reflections and knowledge development. *Journal of Teaching in Physical Education*. 1995; 14:262-283. [[Abstract](#)] [[Back to text](#)]
20. SMYTH, J. Teacher as collaborators in clinical supervision: cooperative learning about teaching. *Teacher Education*. 1984; 24:60-68. [[Back to text](#)]
21. TINNING R. *Nous avons des manières de vous faire réfléchir, est-ce bien vrai ? Réflexion à propos de la formation à un enseignement réflexif*. In: Claude Paré (Ed.). Mieux enseigner l'éducation physique? Pensez-y! Actes du séminaire international sur la formation des enseignants à une pratique réflexive en éducation physique. Trois-Rivières: Département des sciences de l'activité physique. 1995. [[Back to text](#)]
22. TSANGARIDOU N, SIEDENTOP D. Reflective teaching: a literature review. *Quest*. 1995; 47:212-237. doi:[10.1080/00336297.1995.10484153](https://doi.org/10.1080/00336297.1995.10484153) [[Back to text](#)]
23. VAN M. Linking ways of knowing with ways of being practical. *Curriculum Inquiry*. 1977; 11(5):565-575. [[Abstract](#)] [[Back to text](#)]