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Students' and Staff's Opinions about the Reflective Practice Process Implemented in a Preservice Physical Education Teacher Programme

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Abstract: Teachers' reflection is considered as a determining factor in physical education teacher education (PETE). Despite the emphasis that is provided to this approach, it is noteworthy that it is not proposed systematically in higher education. A specific unit focusing on reflective practice was developed at the University of Liege (Wallonia, Belgium). This paper reports the opinions of the preservice PE teachers (n = 18) as well as involved staff members (n = 3) about the process. Students completed a questionnaire after completion of their preservice programme. Staff members' reports (n = 22) of their reflective practice sessions (RPS) as well as one final report focusing on the whole process were analysed. Findings showed that the opinions are mainly positive, with the staff members rating the process at a higher level than the students. If the latter emphasized the interest of the RPS, they underlined the organisational constraints and regretted the requirements dealing with the formalizing of the reflections.

 Keywords: *Physical education teacher education, reflective practice, opinions of the participants*

Introduction

Since the 1980s, teaching approaches that involve learners in their education have been growing worldwide as well as at primary and secondary school levels and in teacher education programs. In Wallonia (Belgium), official guidelines published since the last reform of the educational program (Ministère de l'Education, 1997) emphasize that public

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authorities are concerned with the need of the development of teaching strategies that involve the learners more. Despite this, physical education (PE) contexts seem to be resistant to this evolution (Cloes, Berwart, & Frédéric, 2010; Frédéric, Gribomont, & Cloes, 2009). Informal sources are supporting that in-service PE teachers lack opportunities to change their traditional teaching style. At the same time, preservice teachers would continue to be mainly confronted to ex-cathedra courses.

In parallel, despite the well-known positive role of reflection in teacher education (Calderhead, 1989), reflexive practice was introduced as a priority in teacher education in 2001 (Ministère de la Communauté française, 2001). According to this, concrete projects have been experimented with at least three years later in higher education. In the PETE program proposed by the University of Liege, an effort has been done to respect the official requirement and to follow the recommendations of the literature. After several trials taking into account the parameters of the local context, a well-structured model has been developed. Moreover, in the perspective to continue to improve the quality of the educational context, it was decided to concretely determine how those involved accepted this new process. This paper is presenting the results of this analysis.

Review of the Literature

Today's PE teachers must evolve in a complex and changing educational system, continually refresh and update their knowledge and skills, and figure out students' problems. Mutations observed in the professional context of PE teachers nowadays concern the versatility of their job and are characterized by an increased demand of the schooling context. Those improvements in teaching demand that teachers acknowledge, reflect, and build upon their own experiences (Tsangaridou & O'Sullivan, 1997). This constant reflection about the everyday PE teaching context is therefore crucial for their professional development.

Teacher Reflection as a Determining Factor in Education

As defined by Schön (1996), reflective practice involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline. It underlines the development of a professional who is self-aware and able to engage in self-monitoring and self-regulation (Bandura, 1986).

Reflection and reflective practice were first investigated in the general education literature and considered as essential attributes of competent health care professionals who are prepared to take up these challenges (Boud, Keogh, & Walker, 1985; Schön, 1983). Today, the concept of reflection has been adopted in the teacher-education community as a common pedagogical principle (Calderhead, 1989; Cochran-Smith & Lytle, 1999).

Jarvis (2006) defined reflective practice as a process where "individuals think about the situation and then act upon it, either conforming or innovating upon it" (p. 10). Moreover, as mentioned by Jay and Johnson (2002), reflective practice provides "the time in which a context, feeling, or idea that the students find either perplexing or worth celebrating can be taken apart in order to better understand it" (p. 81). This context could be considered as a "virtual world" (Schön, 1983, p. 157) in which the real teaching environment experienced by students during their field experiences is combined with the theoretical knowledge accumulated in the education program. Those two aspects can be constructed, connected, and possibly reconstructed (Jay & Johnson, 2002) during a reflective practice

seminar. In this direction, reflective practice gives the opportunity to the students to begin to bridge the gap between theory and practice.

Teacher Reflection as a Competence Requested in Teacher Education

According to Brau-Anthony and Grosstephan (2006), teacher education needs to prepare more professional teachers who (a) have a knowledge basis, (b) are transmitters of knowledge, (c) possess the ability to act in an emergency and to decide in uncertainty, (d) are able to think about and analyse their teaching, (5) show autonomy and responsibility, and (6) have professional ethics that are compatible with the values of the public educational service. The fourth item underlines how reflection is a fundamental quality in educators as in any human (Jarvis, 2006).

For teachers, reflection provides a means of enhancing decision-making power and autonomy (Tsangaridou & O'Sullivan, 1994). Rather than require students to learn theory before they can engage in practice, Boud (1999) supported the need for students to act and think professionally as an integral part of learning throughout courses of study. Tsangaridou and O'Sullivan (1997) noted, "Encouraging reflective thinking among preservice teachers should incorporate real-life settings and concrete experiences rather than abstract situations that challenge explicit or implicit beliefs about teaching and schooling, and provide opportunities for description, justification, and critique their actions" (p. 22). An overview of several national teacher education programmes showed that an emphasis on the acquisition of this competence is evidenced worldwide (Cloes, 2008).

Teaching reflection encompasses various components, and literature is then extremely scattered into those dimensions. Some authors have studied the process, how teachers think about their practice (Richert, 1991), as others have studied the product, what teachers reflect upon (Brubacher, Case, & Reagan, 1994; Zeichner, 1994).

To embrace those two dimensions, several strategies were designed to promote reflection in teachers (Behets & Vergauwen, 2006). They can be classified in two main categories. One consists of involving them in action research projects. As action research is pragmatic, participatory, and directed toward actionable outcomes, it generates knowledge and understanding in tandem with the finalisation of implementation plans (Lawson, 2009). As described by Tsangaridou and O'Sullivan (1994), the second category of tools considers the analysis of teaching situations: case studies (ethnographic studies of students, teachers, classrooms, and schools; work on scenarios; microteaching; supervised practicum; auto-supervision; and structured curriculum tasks [analysis of practice, portfolio, reflective logs, observations, video comments, etc.]).

In the field, informal observations underline that teachers education programs usually propose a combination of all of these tools with a large range of coordination between the educators involved in the process. No systematic model seems to emerge, and any teacher education department tends to adapt the recommendations to the specific characteristics of its context (available time; local policies; human, financial, and equipment resources). Moreover, it would be necessary to systematically collect and share information about the process all over the world.

Reflection in Physical Education Teacher Education (PETE)

In this specific domain of teaching, developing reflective praxis is extremely valuable from the standpoint that physical educators often work in isolation (Tsangaridou & O'Sullivan, 2003). The PE specialist must rely on the self-reflexive process to respond to the

complexities of gymnasium life and to develop their own theories, which guide their actions. Tsangaridou and O'Sullivan (1994) pointed out that improving reflection in preservice PE teachers is possible through systematic use of reflective pedagogical strategies. Usually PE teachers focus on reflection that is mostly dominated by technical issues of teaching (distinct from situational and sensitizing).

According to Curtner-Smith and Sofo (2004), modest progress has been made promoting reflective practice of PE preservice teachers. In Wallonia, Belgium, very few descriptive data are available about the content of the existing PETE programs (Cloes, 2009).

In order to apply the current needs of the professionals as well as to respect the official requirements, a reflective practice unit has been developed in the University of Liege specifically for preservice PE teachers. A critical analysis of this experience was needed to provide an insight to the importance of reflection in PETE and to determine the appropriateness of the proposed model.

Therefore, the purpose of this study was to analyse the opinions of the students and staff members involved in the reflective practice unit about its content, organisation, and interest. Moreover, the intent of the study was to identify the positive and negative aspects identified by the subjects, in order to propose future improvements.

Context and Participants

Official Requirements for Reflective Practice

Teachers' competencies are defined by a decree (law edicted by the Regional Parliament), representing the official requirements for teachers in Wallonia (Ministère de la Communauté française, 2001). One of them (#13) considers that teachers should be able to "bring a reflexive view to bear on one's practice and to organise one's career-long professional preparation" (Art. 3). The decree states also that teacher education programmes should comprise "seminars of practice comprising activities which allow student teachers to focus on the development of professional competences and attitudes in addition to reflective practice" (Art. 9 § 2). This policy underlines that PETE (as for any other subject matter) has to prepare reflective teachers.

At the University of Liege, a committee who coordinates teacher education programmes proposed in each faculty, according to the subject matter decides application of the legal requirements (Centre Interfacultaire de Formation des Enseignants, 2009). Twenty hours are dedicated to reflective practice within the specific programme (total of 315 hours) that is proposed during the second year of the master's degree focused on teacher education. The professor in charge of the general didactics coordinates 10 hours, while a subject matter specialist organises the remaining 10. Together, they provide a set of complementary activities for student teachers that are supposed to develop the professional competences and encourage reflective practice.

The development of a specific approach to reflective practice in the Sport Sciences Department has been influenced by (a) the involvement of staff members in research on sport pedagogy, (b) the characteristics of the students and initial teacher education programme (small number of students, available equipment, higher emphasis of the overall program on teaching/coaching compared to other subject matters), and (c) the use of

video technology during the earlier years of the program (this is not common within other programs proposed by the institution).

The Reflective Practice Unit

The implementation of the teacher education reform started during the 2002–2003 academic year. The initial project comprised two individual and two collective sessions (Table 1). This paper will focus specifically on the development and improvement of the individual part of the project. Despite careful planning of the activities, some problems appeared during the first two years of implementation: organisation (availability of the video equipment), students' follow-up (delayed reports), quality of the video and audio recording (technical problems), and integration within field practices (maladjusted planning). Therefore, it was decided to propose a more structured unit that was directly integrated in the field practice organisation.

Table 1

Content of the Specific Reflective Practice

Individual sessions	Collective sessions
- Two lessons (field practice).	- Two seminars.
- Video recording + wireless audio recording.	- Critical incidents (positive + negative).
- Autoscopy using a questionnaire + supervision grid.	- Nominal Group Technique[1].
- Analysis of the videotape with an instructor.	- Sharing of experiences and problem solving within the students.

[1] A group identifies problems and decides to work on those that are elected (Brunelle, Drouin, Godbout, & Tousignant, 1988).

Figure 1 shows the content of one individual reflective practice unit, comprising four steps. Documents describing the task are distributed to student teachers at the beginning of the academic year. In parallel, a seminar focusing on how to use video and audio recorders is planned in order to provide relevant information to the students and to help them to increase the quality of their data. Moreover, electronic report forms are sent to the students and to a staff of three instructors. These instructors will analyse the videotaped lessons with the students. For each student, four types of reports are produced during the whole reflective practice unit.

Student's report from the supervision meeting with the master teacher. The purpose of this report is to help the student teacher to think about his/her lesson immediately after the interactive period of teaching. Three aspects are described: identification and description of topics discussed with the master teacher, opinions and comments of the master teacher, reactions of the student teacher to feedback and thoughts on how to improve practice based on feedback.

Student's report from the autoscopy. Watching one's own lesson is considered as providing an objective feedback to the learner. Guiding his/her observation by using an analysis grid can provide a powerful reflection. Student teachers analyse their lesson using a list of questions that has been developed for all the supervisors involved in the PE field practices. These questions are related to themes of the theoretical course. The students have to enumerate the events that challenged them during the analysis of the videotaped lesson. They must also outline their opinion about these events and write down any questions that could be raised to the instructor.

Student's report from the analysis of the lesson with the instructor. After the session, the student identifies the aspects that were developed, underlining the information that he/she collected as well as explaining how he/she would take it into account in his/her future lessons.

Instructor's report from the analysis of the lesson. The expert teacher is requested to list the positive and negative opinions that the student had before the analysis as well as the comments that he/she proposed during the session and his/her conclusions about the perceived reflective process of the student.
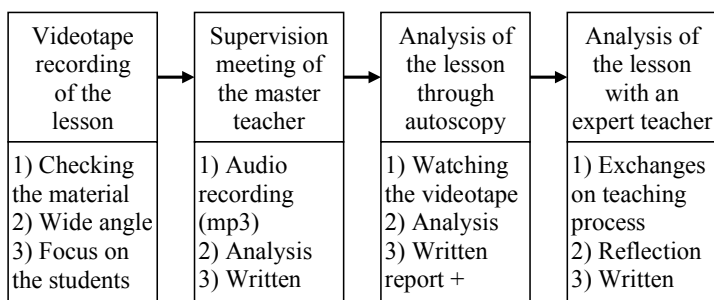
Videotape recording of the lesson	Supervision meeting of the master teacher	Analysis of the lesson through autoscopy	Analysis of the lesson with an expert teacher
1) Checking the material 2) Wide angle 3) Focus on the students	1) Audio recording (mp3) 2) Analysis 3) Written	1) Watching the videotape 2) Analysis 3) Written report +	1) Exchanges on teaching process 2) Reflection 3) Written

Figure 1. Description of the Individual Reflective Practice Unit

Methods

This study respects a design corresponding to the teaching-learning model (Carreiro da Costa, 2008). Variables were directly analysed in order to describe the context. In this case, data collecting is focused on the perceptions of the subjects. Instruments are belonging to those described by Brunelle, Drouin, Godbout, and Tousignant (1988). In order to assess

the quality of the design proposed in the individual reflective practice unit, it was decided to collect systematic data through the main actors of the process: the student teachers and the instructors.

Students' Data

Once all PE students achieved the reflective practice unit following the 2009 teacher training program (n = 19; 14 men; age = 24 ± 4.3y), they received an e-mail inviting them to complete an online questionnaire. Participation to the inquiry was voluntary and remained anonymous. A high rate of response was noticed as 18 students validated their questionnaire. This instrument comprised eight closed questions (Likert scales of four levels) asking the subjects to assess different aspects of the whole unit (1 = *Very negative opinion* to 4 = *Very positive opinion*): basic information provided about the unit, supervision meeting with the master teacher, analysis of the supervision meeting with the master teacher, analysis of the lesson through the autoscopy, session with the instructor, overall impact on the teaching, profitability based on the relationship between invested time and the perceived impact, and organisational aspects. Moreover, three open-ended questions were also included, asking students to list positive and negative aspects as well as suggestions to improve the process.

Staff Members' Data

The three instructors involved within the unit were involved in the study (two males; teaching experience = 20 ± 4y; supervision experience = 8 y). They are all well recognized PE teachers who have full positions in secondary schools. Because PE is organized in single sex classes in Belgium, the male instructors had randomly selected seven student teachers, while the female instructor met the five female preservice teachers. Their role consisted of analysing and commenting on the individual videotape with each of their student teachers. The student teachers were in charge of the organisational aspects (preparation of the videotape, meeting planning, video lab reservation, etc.).

Instructors' opinions about the fourth step of the reflective practice unit were collected through two different approaches. On one hand, we asked the instructors to assess each session that they chaired, focusing their attention on the behaviour of the student, the organisation of the session, and the sessions potential benefit. Eight Likert scales with four levels were used (1 = *Totally disagree* to 4 = *Totally agree*): qualitative and quantitative sides of the preparation of the session by the student, qualitative and quantitative sides of the reactivity of the student, student's attitude, quality of the video, organisational aspects, and benefits for the student. Instructors were also asked to describe any particular event that happened during the session. A total of 22 evaluation sheets were gathered and coded in an Excel file. On the other hand, at the end of the reflective practice unit, we asked the instructors to list positive and negative aspects that they identified and to suggest actions aiming to improve the quality and effectiveness of the unit.

Data Processing

For both groups of subjects, answers to the Likert scales were coded into an Excel file, while a content analysis was processed to analyse the answers to the open-ended questions. Therefore, an inductive category system was created for each question, and any unit of sense was coded in the database. In this case, according to the low number of data, both authors worked in parallel to reach a full agreement in the classification of the items. Descriptive statistics were processed using Statistica software.

Results and Discussion

Opinions of the Student Teachers about the Unit: Closed-Ended Questions

Most of the items received positive opinions: 61.1% (analysis of the supervision meeting with the master teacher) to 83.3% (supervision meeting with the master teacher, analysis of the lesson through the autoscopy, session with the instructor, overall impact on the teaching). Even if the involvement of the students is quite high during the unit, it was considered fruitful. In fact, 66.7% of positive opinions were identified in the assessment of the profitability based on the relationship between invested time and the perceived impact. These findings show that the model of reflective practice that has been developed meets the expectations of a majority of the student teachers. The item focusing on the organisational aspects was the only one with a negative opinion (33.3%). It underlines that a special effort should be done to help the students in the organisational side of the process since this is the first implementation of the unit. Precisions about the directions to take should be determined through the analysis of the answers to the open-ended questions. Moreover, it can be hypothesized that new improvements of the organisation could increase the satisfaction of the students about the whole process.

Mean scores of each item can refine the analysis of the opinions (Figure 2). It appears that the session with the instructor received the best rating (3.44/4), underlining the value of that special opportunity to speak about the teaching process. The use of this dialogue within the session brings multiple perspectives into the conversation and is considered as a central feature of the reflective process (Zeichner, 1994). It seems that receiving external comments about interactive decisions that are visible on the videotape meets the expectations of beginning teachers. For the preservice teachers, it is easier to understand the feedback provided by the supervisor as they can visualise the situation. Indeed, the use of audio and video recording are needed in order to contextualise and qualify the preservice teacher experience (Amade-Escot, 1997). Compared to what is going on in the field (meeting with the master teacher), the instructor has more time during the individual reflective practice session to develop specific aspects and involve the student teachers in a "constructive process," asking alternatives or sharing experiences. This supports the interest of the analysis by the instructors themselves of this part of the reflective practice process.
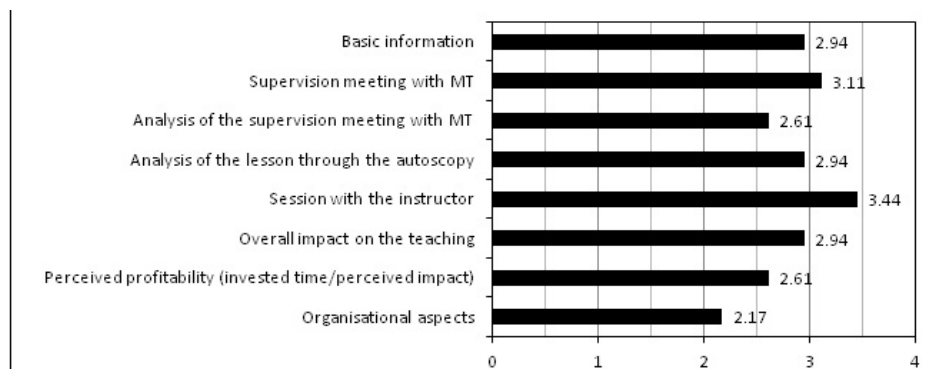

Figure 2. Opinions of the Student Teachers about the Reflective Practice Unit (Mean score/4; MT = Master teacher)

The supervision meeting with the master teacher still remained important (3.11/4). This confirms again the place that master teachers play in PETE (Behets & Vergauwen, 2006). Self-analysis of the lesson through the autoscopy was quite well assessed (2.94/4). We consider that this technique could receive a better evaluation if the student teachers were more used to analysing the teaching process. Beginners lack an overall vision of all aspects that contribute to make a lesson effective. They need to focus their attention on specific aspects using supervision analysis' instruments as proposed by Brunelle et al. (1988). This process could be improved in our model. On the other hand, it seems that student teachers appreciated being "coached." Involvement of experienced teachers brings confidence.

The perception of the overall effectiveness was encouraging (2.94/4). This is, of course, an important finding. In fact, it provides support to the model as most of the main actors feel that the unit helped them to improve their teaching competencies. This is validated again considering that they were mainly positive about the balance between the time needed to meet the requirements of the unit and the perceived impact on their teaching (2.61/4). It underlines also that student teachers are ready to give time to their preparation when they are able to identify a concrete interest, such as in this reflexive unit aiming to teach them how to "think like a teacher" (Zeichner & Liston, 1996). Moreover, this emphasises the need of analysis that can help teacher educators to assess the interest of the content of the activities they propose.

As pointed out earlier, the organisational aspects are the weakest point of the unit. This item had the lower score (2.17/4). In fact, during the reflective practice unit, students need to respect several steps, and they are not always managing themselves within the timeline. For example, meetings with the master teacher and/or the instructor were sometimes difficult to plan according to the schedules of each person. Moreover, video equipment was not always available when the subjects needed it. More details would be proposed in the analysis of the open-ended questions.

Opinions of the Student Teachers about the Unit: Open-Ended Questions

Not all subjects were equally involved in answering the open-ended questions (Table 2). This is a common behaviour as this kind of question requests more time according to the in-depth analysis that is needed. It is noteworthy that two subjects did not propose an answer to the three questions (#7 and #18), while one (#3) mentioned only positive comments, and another one (#8) focused on negative aspects. Perception of the reflective practice unit can be influenced by specific events that happened during the personal experience as all students were not exactly in the same conditions (different schools, master teacher, schedule, and personal organisational aspects such as availability of public or private transportation resources, etc.).

For the positive opinions, 15 students proposed one to five items with a total of 36 items (2.4/responding subject). The opportunity to watch one's lesson through the video gathered almost half of the items (n = 15). Twelve out of the 15 responding students mentioned this aspect, underlining the general interest for this tool as illustrated by these quotes:

- *"Doing a videotape of the lesson and watching oneself is interesting. It allows you to become aware about several elements."* (# 3)

- *"That makes it possible to realise how one behaves and what attitudes one shows (verbal tics, gesture)"* (# 5)

Table 2

Distribution of the Items Identified in the Student Teachers' Answers (n)

Subject	Positive comments	Negative comments	Suggestions
1	3	3	-
2	2	3	-
3	1	-	-
4	3	5	4
5	2	1	1
6	2	2	1
7	-	-	-
8	-	1	1
9	2	3	2
10	4	3	3
11	5	3	2
12	3	3	3
13	1	3	3
14	2	3	2
15	1	2	1
16	2	2	-
17	3	2	2
18	-	-	-
Total	36	39	25
n/subject	2.0	2.2	1.4

- *"It's always different to see oneself teaching. One doesn't always realize what one makes, and even if the master teacher conducts an analysis after the lesson, it's not the same thing as seeing oneself."* (# 6)

- *"One sees oneself teaching → much more evidence → one becomes conscious of certain things"* (# 10)

- *"The information collected during the autoscopy (the most important step, I think)"* (# 11)

- *"The video is an asset, for sure. That's the only way of being aware of what doesn't work!"* (# 17)

During the previous years of their curriculum, use of video was introduced to the students (task analysis, video feedback in sports courses, etc.). In their teaching education, it seems logical that they appreciate the video feedback. Moreover, research on teacher education evidenced early the interest of video in teacher education (Moreno & Valdez, 2007).

Eight students with one comment each have evidenced the analysis of the lesson with the instructor. Comments underline the interest of direct discussion during video viewing:

- *"Information provided by the instructor was very useful. I found it more interesting to speak with him about my questions and my problems than to analyse the video by myself"* (# 4)

- *"Watching the video with the instructor has been really beneficial for me. He opens my eyes on many details."* (# 16)

In fact, it seems that student teachers could rely more on instructors than on their own analysis of the lesson, decreasing the real place of the reflective process in which the learner should try to find solutions to his/her problems rather than ask for solutions. According to informal comments of the students and instructors, it is noteworthy that real discussions and exchanges of points of view were the thread of the sessions. Nevertheless, instructors should be encouraged to request more supervisees' own thinking processes as reflection is widely considered as both an individual and a collaborative process (Jay & Johnson, 2002).

Five other categories of positive comments were identified. They underline that student teachers appreciated the availability of the instructors (n = 3), the quality of the video equipment (n = 3), and the feedback received from various sources (n = 3). Two subjects highlighted the quality of the supervision by the master teacher and the opportunity to receive a precise "return" about the intervention in the field.

Fifteen students wrote 39 negative comments (2.6/responding subject). The number of items identified in each responding student ranged from one to five. While the positive opinions were clearly stated through the closed-ended questions, it appears that in open-ended questions students pointed out aspects that did not meet their expectations. The most critical one dealt with the video equipment used to record the lesson or to analyse it (n = 15):

- *"Difficulties to obtain the equipment during the allowed time interval. In fact, we have several who need the devices at the same time."* (# 14)

- *"The problem of framing (I was often out of focus). Sometimes, it is linked to a lack of distance from the camcorder but I don't know how to solve it."* (# 6)

The loss of time was identified seven times by six different students. Three aspects were combined: the repetition of steps student teachers need to work with on the same "problems" (*"There are too many steps to say again the same thing."* - #12), the opinion of some subjects that analysis of one lesson would be enough (*"To analyse a second time with the instructor; I believe that that we are able to realize after a single observation what is wrong with the way we teach."* - #13), and the analysis of the whole lesson with the instructor despite focusing on specific events (*"It isn't interesting to watch the whole videotape with the instructor. Selecting the parts of the lesson that are not going well and stretch to there directly to talk about them with the instructor."* - #4). In the students' point of view, as they are involved in a requiring curriculum in which they have much work to do, analyzing the same lesson with the master teacher, by themselves, and with the instructor could be perceived as a heavy task mainly because the same comments can be pointed out from the three axes. On the other hand, it can be assumed that repetition is fruitful according to the high intensity process. This is supported by three students who underlined this aspect among their positive opinions (e.g., *"Receiving several different opinions"* - #1).

The validity of the teaching performance of the student during the videotaped lesson has been proposed five times (e.g., *"Video generates stress [lower quality of the lesson]."* - # 1; *"The videotaped lesson is analysed out of its context."* - # 5). This finding underlines that some student teachers seem to consider the reflective practice process as an evaluative approach. They feel that comments could be used for their final achievement; however, this is not the case as university supervisors integrate the unit in a formative way rather than in an evaluative one. Of course, in some cases, according to various aspects, the videotape lesson can be unrepresentative of the usual teaching of the supervisee. The latter should be invited to videotape another one.

Four students pointed out timing problems. This is linked to organisational aspects as time requirements impose strict planning that is sometimes difficult to respect according to field problems. Nevertheless, it seems that those preservice teachers who developed the ability to manage their tasks are always ready with all these constraints.

Finally, four other categories were identified: low interest of the discussion with the instructor (n = 3), lack of interest in writing reports (n = 3), weakness of the initial instructions (n = 1), and wish of independence (n = 1). The first one is almost surprising as the contact with the instructor was evidenced as the better rated aspect in the closed-ended questions. We believe that few subjects had poor experiences with the expert teachers. This is not decreasing the interest of the studied reflective practice model.

Analysis of the negative comments confirmed the scores of the closed-ended questions. Students seem able to understand that the process is effective for the acquisition of competences for their future job. At the same time, they would wish to limit time loss due to organisational gaps and their investment. If this is understandable, it should be considered that most of the difficulties encountered by the student teachers could be avoided by better planning at their level.

Only 12 students provided suggestions to improve the whole process (n = 25). It is unfortunate that supervisees did not take this opportunity to change the educational process. Maybe they do not have the maturity level or the professional experience to take all parameters into account.

Without surprise, improvement of the video equipment's availability is the first suggestion (n = 7). Moreover, student teachers proposed adaptations of the timeline in order to have a greater flexibility in the planning (n = 6). The third category deals with the wish to adapt the reports (n = 5). In this perspective, they recommended combining the reports about each part of the process. On one hand, this could be interesting and could increase "transversal" reflection. On the other, it would limit the time during which students are verbalizing what they are learning at each step.

The three remaining categories gathered a limited number of items: improvement of the basic information focusing on technical aspects and guidelines for the videotaping (n = 3), modification of the moment designed for videotaping the lesson (n = 2), and exploitation of the feedback provided by the instructor (n = 2).

Opinions of the Instructors – Assessment of Each Video Analysis Session

The three instructors presented really positive opinions (Figure 3). The scores are always above 3 on a maximum of 4. This underlines that the "new" process corresponds to what they were expecting. In fact, these expert teachers have been chosen according to their motivation to share their experience in a positive way with the student teachers. Thus, being able to discuss with the student about what is shown on the video met the instructors' own interests.
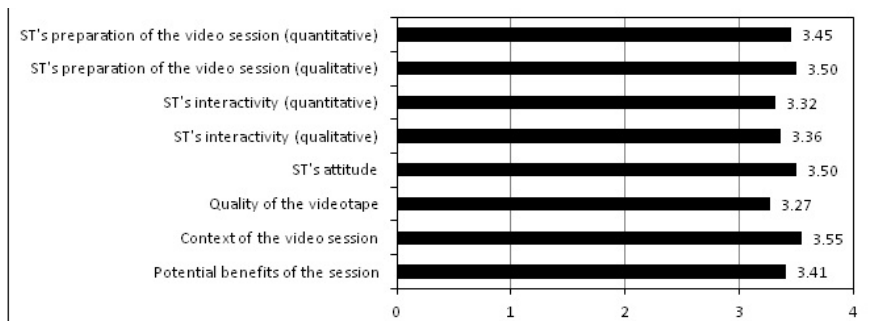

Figure 3. Opinions of the Instructors about the Video Session
(Mean score/4; ST = Student teacher)

The instructors considered that the sessions were organized in a good context (3.55/4) and underlined the positive attitude of the student teachers (3.50/4). This could be related to similar scores about the preparation of the session by the students (3.45 and 3.50/4, respectively). It means instructors considered that most of the students were ready to work with them, guaranteeing the effectiveness of the session.

On the other hand, they pointed out some relative "weaknesses" in three aspects: the quantitative (3.32/4) and qualitative (3.36/4) aspects of the student teachers' interactivity and the quality of the videotapes (3.27/4). The student teachers would be more demanding (of solutions) rather than engaging in problem solving. Literature has then shown that student teachers were generally unable or unwilling to recognise and analyse the difficulties on their own (Calderhead, 1987). This underlines that beginning teachers need to be motivated to look for questions about their teaching process as well as for solutions to their

possible problems. Student teachers seemed not to analyse the professional literature to find alternatives or improve their teaching framework. These characteristics clearly correspond to the traditional approach identified in in-service PE teachers. This justifies the value of today's emphasis on the development of more reflective professionals. Moreover, this finding underlines the emphasis that coordinators of the program have to put on the effort that students need in order to involve themselves more in critical analysis. The "lower" assessment of the item about video is related to some problems that students pointed out. Of course, when the lesson does not present specific events (poor conditions for the analysis, lesson in which the student teacher does not have a determining role such as in long distance running activities, etc.), instructors lack content to react effectively. Moreover, they added written comments recognizing the improvements that were done since they were invited to integrate the reflective practice unit. Fortunately, students were not aware of the difficulties encountered by previous students.

Opinions of the Instructors: General Opinions about the Video Analysis Sessions
    When asked about their global opinion of the video sessions, the three instructors considered that this approach represents a good opportunity to think about real teaching situations (n = 2) that confirm and/or complement the action of the master teacher (n = 2) in a way that enriches the students' preparation (n = 2). Starting from his own experience, one male instructor highlighted the appropriateness of the model. As stated in the literature, involvement of learners in their learning process in not so well developed in Wallonia, so the efforts to increase the reflection in PETE are logically positively considered by the experts. It is an encouraging point.
    Seven positive items were identified. According to the instructors, the procedure to follow was clear and precise (n = 4). They received a copy of the documents provided to the students and do not seem aware the latter are experiencing some difficulties. Another category underlines that one interesting aspect of the process deals with the immediate application of the feedback into the practice (n = 2). The last positive comment was that student teachers were perceived as preparing effectively their video analysis session (n = 1).
    Only six negative proposals were collected. All instructors underlined that the topic of the lesson was not always suitable for an interesting reflection (n = 3). As it was explained above, some students need to videotape lessons in which their teaching role is limited. Therefore, the instructor is not able to develop powerful discussion. It is the role of the student to organize his/her lesson content in order to learn the most. Unfortunately, in some cases, field practices are not always offering the best conditions despite a careful selection of the schools and master teachers integrated into the program. Moreover, one instructor mentioned that the required tasks were too time consuming for the students. He agreed with most of the students, even though he recognized that the process was necessary and fruitful. It seems difficult to find the most balanced solution. An important critique proposed by one male instructor was that the student teachers were very quickly satisfied about their own teaching. In fact, student teachers frequently considered that their lessons were good when the pupils were kept busy and there were no discipline problems. It is necessary to systematically emphasize that it is always possible to improve some aspects of any lesson. The potential result of an ineffective instruction is a preservice teacher who knows how to fit into existing contexts but lacks the skills and confidence to make decisions that will make a difference (Walkington, 2005). Nevertheless, this is difficult to share with the preservice teachers without "killing" their perception of competence and confidence.

Finally, the female instructor pointed out that students tended to not take the objectives of the lesson sufficiently into account when analysing the videotape. This should then be more developed in a preparatory session.

Six suggestions were analysed. Four of them concerned modifications of the planning of the lessons to be videotaped (e.g., teaching one lesson at the beginning and a second at the end of the teaching field practice and proposing that the student teacher teaches the same lesson after the video analysis session). Even if these suggestions were really interesting, they would be difficult to implement because they increase the organisational requirements. Moreover, an instructor recommended inviting supervisees to choose more difficult classes in order to increase the opportunities of reflection. In fact, with "easier" groups, fewer pedagogical aspects can be developed. Finally, a more general improvement of the whole reflective practice unit was suggested to improve the process again. It consists of integrating the student teacher's self-evaluation with the pupil's evaluation. This approach is already proposed in some teacher education programmes (Barnes, 1985). In this case, it would cause a new increase of the students' workload that has been pointed out as a critical point of the unit.

Conclusion

Through the analysis of a reflective practice unit implemented within the PETE programme of the University of Liege, this study tried to illustrate the interest of a systematic assessment in the perspective of improving the quality of the activities proposed to the student teachers.

As a majority of the opinions were positive, we can argue that student teachers recognize the interest of the unit despite their important involvement. The opportunity to watch one's teaching performance through the video was underlined by most of the student teachers who emphasized the interest of systematically integrating this activity within teacher education. The session during which they analyse a videotape of one of their lessons is also viewed as a powerful means for increasing their teaching practice. Nevertheless, the need to improve the organisational aspects has been clearly pointed out through the closed-ended questions and was confirmed by the open-ended questions. These revealed problems with the video equipment and the timing of the different tasks to be done during the unit. Students' suggestions were corresponding to the main critics.

The instructors involved in the reflective practice specifically organized during the videotaped lessons expressed their satisfaction about the attitude and behaviour of the students. Through their answer in both individual reports and final global report, they were able to propose interesting feedback and suggestions.

This study aimed to identify several aspects in order to improve the initial model of this reflective practice unit. According to the context and resources, several changes were adopted for the next academic year:

- The duration of the seminar designed to inform students about the content of the unit as well as the use of the video equipment has been increased. In order to improve the quality of the video recording, practical trials have been added to help students to concretely experiment with the situations that they could meet in the field.

- Another seminar has been integrated to give the instructors the opportunity to meet the students before the beginning of their field teaching practice. This activity allows all

actors to be aware of what needs to be done. Instructors emphasise the good practices the students need to use as well as the traps that students need to avoid. One particular point is to prepare their video analysis, emphasizing the goals of the lesson and trying to find ways to improve the teaching. Instructors were asked to provide more priority to the students' thoughts and to let them develop their own solutions rather than give them immediate answers to problems encountered in their practice.

- During these seminars, an emphasis is placed on the formative goal of the reflective practice activities. It is regularly repeated that trying to improve several aspects of the lessons does not mean that the teaching performance is not satisfying. This strategy is implemented to keep the perception of competence and confidence of the students.

- To help the student teachers and limit the organizational constraints, additional video equipment was acquired. Nowadays, one system is available for four to five students. Moreover, a better coordination of the human resources allowed the improvement of the video equipment's management. Students also have access to long-term planning in order to organize collectively the reservation of the equipment.

- Finally, it was decided to shorten the reports requested during the whole unit. For example, the report after the supervision meeting of the master teacher has been limited to a list of points to be remembered. Moreover, students are asked to produce a synthetic table of the topics that were analysed at any moment of the process.

Teacher education is continually evolving. There is no doubt that studies such as this one should contribute to and highlight the necessary connection between fundamental and field researches. Moreover, this initiative supports the importance of nurturing the reflective voice of student teachers in the higher education process.

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