Using Pedagogical Reflective Strategies
to Enhance Reflection Among Preservice
Physical Education Teachers

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The ability to think about why and what one does is vital to intelligent practice, practice that is reflective rather than routine (Dewey, 1904/1965; Richert, 1991; Zeichner, 1987). This study describes how specific reflective pedagogical strategies influence preservice teachers to reflect on practice. Six junior physical education major were assigned to one of two groups: the Level 1 reflective group (LI-RG) or the Level 2 reflective group (LII-RG). Participants in the LI-RG completed new reflective assignments while the participants in the LII-RG completed the course’s regular reflective assignments. Data were collected through interviews, logs, and video commentaries and were analyzed using inductive analysis techniques. The reflective framework for teaching in physical education (RFFPE) was developed to describe the focus and levels of reflection by physical education teachers. The findings supported the positive influence of new pedagogical reflective strategies in promoting the reflective abilities of preservice teachers.

There is universal agreement that teaching is a complex activity occurring in a complex environment (Doyle, 1986; Shulman, 1987). As Valli (1990) noted, “Life in classrooms is dynamic and uncertain. . . . Answers to teaching problems are not a simple process of rule application” (p. 39). Many scholars agree that teacher education programs cannot prepare prospective teachers for every situation they may encounter, nor can the programs provide teachers with all of the knowledge and strategies they will need for an entire career. Teacher educators can, however, educate preservice teachers to become effective decision makers who are able to translate pedagogical knowledge into practice (Berliner, 1985; Siedentop, 1991; Zeichner, 1986).

The preparation of reflective teachers has been a goal of teacher preparation programs for a long time. Dewey (1904/1965), as far back as 1904, emphasized that teacher educators should prepare teachers who are able to think and reflect on their actions and practices. The notion that teachers should be reflective

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practitioners and in control of their professional development has received increasing attention from teacher educators. As Gore (1987) pointed out, reflection has become part of the language of teacher educators. Reflection is a means of enhancing teachers’ decision-making power and autonomy (Calderhead, 1989; Korthagen, 1985; Schon, 1987). Even though reflective teaching has been accepted as a generic pedagogical principle in the teacher education community, there is some concern that its value in the education of preservice and in-service teachers may be overstated (Feiman-Nemser, 1990; Zeichner & Tabachnick, 1991).

Recently, teacher educators have developed and applied different models and instructional strategies in their programs to prepare teachers to reflect on teaching. Despite the emphasis on reflection in teacher education, empirical work on reflective teaching is in its infancy (Ross, 1990; Wubbels & Korthagen, 1990; Zeichner, 1987). As Richert (1990) stated, “The literature includes little evidence on what facilitates reflection in teaching, and affords scant attention to programmatic features designed to enhance reflectivity” (p. 509). Some studies indicated that preservice teachers can be helped to develop their reflective capabilities (Ross, 1990; Teitelbaum & Britzman, 1991; Wubbels & Korthagen, 1990). Surbeck, Han, and Moyer (1991), for example, found that keeping a journal had positive effects on preservice teachers’ reflectivity. The investigators concluded that journals assist “prospective teachers in becoming better thinkers who probe deeper into both professional literature and their own teaching/learning ideas and actions” (Surbeck et al., 1991, p. 27). Other studies suggest that some prospective teachers do not value reflection and are resistant to reflective practice (Calderhead, 1992). Findings also indicated that the process of fostering preservice teachers’ critical reflection is difficult (Zeichner & Liston, 1987). Summarizing their findings from four studies, Sparks-Langer, Colton, Pasch, and Starko (1991) reported the following:

Guided field experiences with writing, thought, discussion, and a coherent view of reflective thinking can help future teachers analyze and interpret their classroom experiences. . . . We feel fairly successful in promoting the cognitive/micro/technical aspects of teacher thinking. It is harder, however, to develop the critical reflection crucial for responsible professional practice. (pp. 13-14)

Scholars in the physical education field have also called for attention to reflective teaching. Theoretical propositions and suggestions about the aspects of teaching that physical education teachers should think and reflect on can be found in the literature (Dodds, 1989; Graham, 1991; Tinning, 1991). However, empirical evidence to support these propositions about reflection in physical education is almost nonexistent (Gore, 1990; Rovegno, 1992; Sebren, 1992). Gore (1990) conducted a case study of prospective teachers’ reflection during a pedagogy course and suggested that preservice physical education teachers differed in terms of what and how they reflected. In a study describing prospective physical education teachers’ reflection during an elementary methods course, Sebren (1992) suggested that the focus of 3 of the 7 participants’ reflection related to classroom control as they began the semester and evolved toward greater concern for teaching and learning by the end of the semester. The other 4 participants’ began the semester already concerned with teaching for learning and maintained that orientation for the entire semester.
Rovegno (1992) described one physical education preservice teacher’s perspective of knowing during an elementary methods course in which opportunities for reflection were provided. She indicated that the preservice teacher preferred received knowledge during the course’s reflective experiences. Despite continuous attempts to be more reflective, by both the preservice teacher and teacher educator, only slight changes occurred in the preservice teacher’s reflective capabilities. Based on the study’s findings, Rovegno (1992) concluded that “the desire to foster reflection does not carry with it any easy answer” (p. 509) on how to achieve this goal.

The literature suggests that reflection is a high priority in many teacher education programs, and almost every teacher educator considers reflectivity a desirable characteristic of preservice teachers (Gore & Zeichner, 1991; Herrmann & Sarracino, 1993). What seems to be missing from the literature are the voices of teachers. Teachers’ views on the value of systematic reflection on teaching and on the instructional strategies designed to foster reflection are just starting to be addressed in the literature (Richert, 1990). In a recent study, Richert (1990) examined four structures designed to promote reflective practice. To understand the relationship between program structure and teacher reflection, Richert analyzed how teachers’ abilities to think about their teaching was affected by each of the four conditions. Novice teachers perceived two of the four conditions—the structure of the partner reflection and the structure of the portfolio reflection—as being particularly influential on their reflection.

Recently, much have been written in the reflective literature about instructional supervision and reflective practice (Grimmett & Crehan, 1990; Smyth, 1991). As Nolan and Huber (1989) stated, “during the last five years, much literature in the fields of teacher education and instructional supervision has focused on the need to help teachers become more reflective about their teaching” (p. 126). Many have suggested that supervisors play a key role in helping preservice teachers to develop their theories of teaching and reflective capabilities (Grimmett & Crehan, 1990; Nolan & Huber, 1989; Smyth, 1991; Zeichner, 1990). According to Garman (1986), reflection is “the heart of clinical supervision.” She pointed out the following:

Personal empowerment is the essential ingredient for a professional orientation. This is a major assumption guiding the practice of clinical supervision. The teacher who maintains a reflective approach toward his or her practice continues to develop a mature professional identity. By understanding and articulating the rationale one holds for action, and then acting in reasonably consistent ways, the professional gains a power and control over his or her own destiny. In this context the function of clinical supervisor is to provide the teacher with collaborative help that encourages the teacher to become the primary knowledge generator (Garman, 1986, p. 18).

Research findings, however, suggested that not all supervisors use approaches that facilitate reflection (Korthagen, 1985; Zahorik, 1988; Zeichner, Liston, Mahlios, & Gomez, 1988). Herbert and Tankersley (1991), for example, analyzed the postconference discourses of two supervisors who received formal training in reflective supervisory strategies and found qualitative differences in the nature of their efforts to encourage preservice teachers to reflect on practice. Stout (1989) examined teachers’ perceptions of the degree to which they were encouraged to
use reflective thinking during their student teaching and indicated that teachers were only moderately encouraged by their supervisors to be critical thinkers as student teachers.

Unfortunately, little empirical evidence exists today in the physical education reflective literature to inform practice. With the exception of Gore’s (1990), Sebren’s (1992), and Rovegno’s (1992) studies, there is a paucity of knowledge on instructional models and strategies based on reflective functions in physical education. In addition, preservice physical education teachers’ views of the value of systematic reflection and the role of supervisors in developing reflective practice have not been documented through any empirical studies. The purpose of this study was to describe how specific reflective pedagogical strategies influence preservice physical education teachers to reflect on their practice. The questions that guided the investigation were (a) What was the nature of preservice teachers’ reflection on their teaching? (b) What were preservice teachers’ reactions to the value of systematic reflection on their teaching? and (c) To what degree did preservice teachers perceive that their supervisors influenced them to analyze their teaching?

Method

Participants, Setting, and Procedures

Thirty-six junior physical education majors who were enrolled in a secondary pedagogical course were formally informed of the purpose and methodology of the study, as well the nature and extend of their possible participation. Six preservice teachers, 5 males and 1 female, agreed to participate in the study. The participants were informed that confidentiality and anonymity procedures would be established in the study and that all data and reports would be given to them for member checks. Informed written consent forms were also obtained from the 6 participants.

This secondary pedagogical course included the preservice teachers’ first off-campus teaching field experience. The course had two major components: a theoretical, on campus component and two field experiences. The first field experience (one day a week for 5 weeks) took place in a K–8 parochial school, and the second field experience (15 days) in a public secondary school. Both field experiences were supervised by university supervisors and cooperating teachers using a clinical supervisory approach (Cogan, 1973; Metzler, 1990).

This study investigated two configurations of reflective assignments designed to facilitate reflection on practice by the preservice teachers. More specifically, two levels of reflective practice assignments were created under which the 6 participants were asked to reflect about their teaching. The participants were assigned to one of two levels of reflective practice assignments. Three males were assigned to the Level 1 reflective group (LI-RG) and the other 2 males and 1 female were assigned to the Level 2 reflective group (LII-RG).

Participants in the LI-RG completed new reflective assignments, whereas the participants in the LII-RG completed the regular course’s reflective assignments. Although, both sets of assignments included reflective logs, observations, and video commentaries, the strategies to focus reflection were different. The regular course’s assignments were designed to encourage preservice teachers to describe and discuss different aspects of their own and others’ teaching. The
new reflective assignments asked preservice teachers specifically to describe, analyze, and criticize different aspects of their own teaching and the teaching they observed. More specifically, the LI-RG participants received the following set of assignments:

1. Reflective logs. Prospective teachers were asked to keep a log in which they described in detail a significant event that happened during their lesson. Also, they were asked to analyze and reflect on the significant event by answering specific questions that were designed for this purpose. The significant events actions that stimulated the prospective teachers to think about their practice could be characterized as favorable or unfavorable.

2. Observations. The preservice teachers completed two observations in a physical education setting. They were asked to observe experienced physical education teachers and to analyze different aspects of the lessons by responding to specific written questions.

3. Video commentaries. The prospective teachers were asked to answer specific reflective questions designed to challenge them to analyze and criticize two of their videotaped lessons (see Appendix A).

The regular class assignments completed by the LII-RG group members were similar to those completed by the LI-RG but differed significantly in the strategy used to focus their reflection. In the reflective logs of the LII-RG group members, no specific questions were given to prompt an analysis of the significant event, and in the observations and video commentaries, these participants received general written questions to stimulate their analysis of the lessons (see Appendix B).

Sources of Data

Data were generated through three sources. The first consisted of comments taken from structured interviews that were conducted three times for each of the subjects: before the first field experience, following the first field experience, and following the second field experience. All interviews were tape-recorded and transcribed. The second and third data sets were from the participants' written logs and video commentaries. All reflective logs and video commentaries were collected and copied for later analysis.

Data Analysis

In answering the first research question, an inductive analysis of the interview transcripts, reflective logs, and video commentaries was completed and resulted in the development of a reflective framework for teaching in physical education (RFTPE). Data for the second and third research questions were gathered primarily from the interview transcripts. Case analysis and cross-case analysis were employed in analyzing these data (Merriam, 1988; Patton, 1990).

Triangulation and member checks were used to ensure credibility of the findings (Denzin, 1989; Erickson, 1986; Lincoln & Guba, 1985). Data triangulation was accomplished by comparing and cross-checking various sources of evidence. All interview transcriptions and reports were provided to the participants as a member check, and participants were invited to correct errors and provide comments or further information.
Results and Discussion

The Nature of Preservice Teachers' Reflection

Reflective Framework for Teaching in Physical Education. The RFTPE was first conceptualized while reading the reflective teaching literature (e.g., Ross, 1989; Sparks-Langer, Simmons, Pasch, Colton, & Starko, 1990; Van Manen, 1977; Zeichner & Liston, 1985). The final form of the RFTPE resulted through an inductive analysis of the data. The development of this framework was an attempt to describe the focus and level of preservice physical education teachers' reflection. In other words, the framework is a conceptual vehicle that describes the content of prospective teachers' reflection and the nature of that reflection. A description of the framework's major categories accompanied by examples from the data is presented below.

Definition of Focus of Reflection. The focus of reflection can be technical, situational, or sensitizing. Technical reflection is concerned with instructional or managerial aspects of teaching. Situational reflection deals with contextual issues of teaching. Sensitizing reflection represents reflection upon social, moral, ethical, or political aspects of teaching. An example of technical reflection would be the following:

I had difficulties with giving clarity on my instructions for drills. I didn't accomplish that. I think I was worried too much about OTR [opportunity to respond] and I left details out of the drills in explaining them that I should not leave out and made them [students] more confused. (Jan, interview transcription, LII-RG)

An example of situational reflection would be the following:

I learned that teachers should make an effort to be teaching at the level of the children. . . . The teacher would be more successful if he avoids technical terms and tries to talk in a way that the children understand. I caught myself doing it a couple of times. I said, "Get medium-body posture," or whatever. And I never thought that the children may not know what medium-body posture is. . . . So, it is really important to get down to the students' level and needs and try to work with what you have right there and try to improve. (Philip, interview transcription, LI-RG)

An example of sensitizing reflection follows:

I tried to have two males and two females together in the teams as much as possible. They [students] didn't like it, and I don't think that it was so much because of discrimination, but I think at that age the girls and boys are very separate in a junior high school level. There are so many changes in their bodies and they don't want to be together in teams. I didn't do the teams based on skills, but I made them based on two boys and two girls. I told them that I would change it if I saw a need for change. (Jim, interview transcription, LI-RG)

1The preservice teachers' names used in this report are pseudonyms.
**Definition of Level of Reflection.** The level of reflection can be represented by description, justification, or critique. Description provides descriptive information of an action about some aspect(s) of teaching. Justification provides the rationale or logic of an action related to teaching. Critique provides an explanation and evaluation of various teaching actions. The following is an example of description: "I feel good about my teaching performance" (Jenny, video commentary, LII-RG). An example of justification would be the following: "I think that I made the students feel comfortable. I think that I was positive, and at the same time I was able to give corrective feedback. The girls stayed involved in activity for the majority of the time" (Panos, video commentary, LII-RG). An example of critique would be the following:

Music seems to motivate students to a great degree. Also I’ve altered the situation for the games. I found that playing up to 11 points takes time... so I changed it to 3-minute games. These events are significant because off-task behavior decreased during the warm-up and waiting time decreased during games. I have learned that things don’t always work as planned, and you have to be able to make immediate changes whenever necessary. I am planning on maintaining music throughout warm-up because it works good and also play 3-minute games to decrease waiting time and also provide ample opportunities for students to practice with different partners. (Philip, Log 9, LI-RG)

Figure 1 illustrates the coding scheme, and Appendix C provides examples of the categories that were taken from the data. It should be noted here that the data were coded separately by two individuals who were familiar with the coding scheme. After categorization of the data, a meeting was held to check for agreement or disagreement in the classification of the data. An interobserver agreement was obtained, and the data were considered reliable. A total of 47 pedagogical events, which were derived from the interview transcripts, reflective logs, and video commentaries, were recorded for the LII-RG, and a total of 54 pedagogical events were recorded for the LI-RG (see Table 1).

**Focus of Reflection.** All 47 pedagogical events for the LII-RG were classified as technical (100%). As Panos stated, "Basically I felt that the drills that I set up moved rather quickly. The students' interest was kept, but they moved through the drills remarkably fast" (Panos, Log 3, LII-RG). Participants in the LI-RG reflected on technical, situational, and sensitizing aspects of their teaching. Of the 54 pedagogical events analyzed, LI-RG participants referred to technical issues 83.3% of the time. One student noted, "I lost control of the students about midway through the class. I didn’t explain the drills well enough, and as a result, the students didn’t know what to do during the second and third drills" (Ben, Log 9, LI-RG).

Participants in the LI-RG group reflected on situational events from their teaching 13% of the time. The unpredictable nature of situational incidents forced preservice teachers to make decisions that were contextually driven:

During the course of the lesson, I have discovered that it’s very useful to stop when necessary and demonstrate when instruction and teaching cues are not enough. Students did not have a good background in volleyball and had difficulty in understanding the instructions. I have learned that
sometimes it is hard for students to understand technical terms, so it's necessary that other strategies be employed to clarify critical instructional points. From now on I will try to use language and demonstrations that relate to students rather than using technical terms. (Philip, Log 2, LI-RG)

Four percent of the events were categorized for the LI-RG as sensitizing:

When I made up the teams for the tournament, I really didn’t take into account the skill level of the players. I just had boys and girls together.

Figure 1 — Reflective framework for teaching in physical education.

Table 1 Focus of Reflection

<table>
<thead>
<tr>
<th>Focus</th>
<th>Level 1 reflective group</th>
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<th>Level 2 reflective group</th>
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<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>%</td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>Technical</td>
<td>45</td>
<td>83.3</td>
<td>47</td>
<td>100</td>
</tr>
<tr>
<td>Situational</td>
<td>7</td>
<td>12.9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sensitizing</td>
<td>2</td>
<td>3.7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>100</td>
<td>47</td>
<td>100</td>
</tr>
</tbody>
</table>
This was important because a lot of kids weren't happy with the teams, and a lot of the teams were unevenly matched. I reacted to this by changing the teams around so they were a little more fair. I did this to make the competition better and to try to make everyone a little happier. (Jim, Log 14, LI-RG)

As this was the first major teaching experience in a school setting, it is not surprising these prospective teachers were mostly concerned with technical issues of teaching. Findings from other studies suggest that reflection on aspects of teaching that relate to social, moral, and political aspects of teaching tends to be missing from prospective teachers' reflection (Calderhead, 1989; Gore, 1990; O'Sullivan & Tsangaridou, 1992; Sparks-Langer et al., 1990).

**Level of Reflection.** The levels of reflection between participants in the two groups was very different. Levels of reflection ranged from descriptions of aspects of their teaching to description and justification of aspects of a teaching episode, to description and critique of their teaching, to description, justification, and critique of a teaching episode (see Table 2). For the majority of the events (54.4%), the participants in the LI-RG described pedagogical incidents without providing any justification and critique. Jan pointed out, "I had a female student who continued to talk and interrupt my lesson by not being on task. I stopped the student three times in class" (Jan, Log 6, LII-RG).

Sixty-five percent of the statements about teaching made by members of the LI-RG involved description, justification, and critique. An example was when Philip described how he tried to avoid using too much empty praise:

There were a few things that I never thought of that made me think of how to improve my teaching from now on. . . . I think it was a mistake to use the same specific feedback statements, and I will give you an example. I caught myself saying a lot of times, "Very nice job, but pay attention to this," or "Very nice but. . . ." And I want to try to get out of this. One strategy that I employed was to sit down prior to the lesson and make a list of 10–12 specific feedback statements to use in class. I put down a variety of statements that I had with me when I was teaching. Not so much to read them out but to remind me that I have to use something different every once in a while,

<table>
<thead>
<tr>
<th>Level</th>
<th>Level 1 reflective group</th>
<th>%</th>
<th>Level 2 reflective group</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>2</td>
<td>3.7</td>
<td>27</td>
<td>57.4</td>
</tr>
<tr>
<td>Description &amp; justification</td>
<td>11</td>
<td>20.3</td>
<td>11</td>
<td>23.4</td>
</tr>
<tr>
<td>Description &amp; critique</td>
<td>6</td>
<td>11.1</td>
<td>6</td>
<td>12.7</td>
</tr>
<tr>
<td>Description, justification, &amp; critique</td>
<td>35</td>
<td>64.8</td>
<td>3</td>
<td>6.3</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>100</td>
<td>47</td>
<td>100</td>
</tr>
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</table>
The analysis revealed that the participants in the LI-RG became more thoughtful in their comments and responses about teaching than the members of the LII-RG. It appeared that the new pedagogical reflective strategies that included more challenging questions influenced the level of reflection of the preservice teachers. Members of the LI-RG not only described pedagogical events of their teaching but also justified and criticized their instructional actions, even though it would have been possible for the LII-RG participants to have responded that way also.

The Value of Systematic Reflection on Teaching

Many educators consider reflection a characteristic of good teaching. As Richert (1991) pointed out "reflection is at the heart of good teaching" (p. 131). All 6 participants of the study suggested that reflection is an element of effective practice and a means of professional growth and development. The following comments highlight this view:

I think reflection is part of learning. When you actually sit back and look at it and actually ask, "Did I do this effectively, or did I do it ineffectively?" you can self-reflect. You are growing when you are able to do that with your teaching. Not only the teaching but everything about you when you actually self-reflect and think about it. (Jan, interview transcription, LII-RG)

Three reflective strategies were used in this study to facilitate reflection—video commentaries, reflective logs, and observations. The participants indicated that the reflective strategies required a lot of their personal time, but they felt the time was well spent. Jim noted, “You know, nobody likes to sit down and do what is considered busy work, but I think this busy work is good. It is important, is needed, is necessary” (Jim, interview transcription, LI-RG).

Video Commentary. The literature suggests that video analysis can be a promising vehicle for improving instruction because such analysis can facilitate reflection (Berliner, 1985; Wildman & Niles, 1987; Wood, 1991). The participants considered video analysis a very useful strategy since it provided feedback about their practices and made them think on how they could improve their teaching. One participant commented as follows:

When I saw it [video] I was very surprised. The one thing that I noticed about that, it was amazing, I couldn’t believe that I did just one demonstration for the children. I thought that I did more than one. I think that the video commentary was really helpful. I learned a lot of things about my teaching. (Ben, interview transcription, LI-RG)

The participants also pointed out that the video analysis made them more aware of what was happening in their teaching. It forced them to scrutinize their teaching and rethink ways they could make changes. As the following statement suggests, the video stimulated preservice teachers to see their teaching from the "observer’s perspective":

The video commentary was excellent. From the videotape you can see yourself. You can get out of the role of the teacher and get the perspective
of the observer, not the teacher that is teaching. You are out of the situation. Being able to see what you did, what actually happened, and what you think you did are two different things. Because a lot of times you make assumptions. I did this, you know. Then, when you get out and you observe yourself, you think, "I did this, but I could have done this instead, and it would have worked a lot better." That's what I mean. You get the observer's perspective. (Philip, interview transcription, LI-RG)

*Reflective Logs.* Findings from other studies suggested that reflective logs or journals can be a promising tool in helping preservice teachers become reflective teachers (Bolin 1988; Oberg, 1990; Stover, 1986; Surbeck et al., 1991). Evidence from the present study suggested that the reflective logs encouraged introspection and helped prospective teachers to think about what happened in their teaching and how they could improve some aspects of their practices in the future. In other words, these preservice teachers believed the logs helped them become deliberate about their teaching. An example is the following statement:

After your lesson, you may say, "It's over," and you may not think about it again. But with the reflective logs, you are forced to sit down and really think about what was something significant about the class and what did you do about it? So, I think it is important. Because if this assignment wasn't there, I probably would just go on and forget about the lesson, and this is not a good thing to do. (Jenny, interview transcription, LII-RG)

*Observations.* Learning to teach is a complex task. People can learn how to teach through direct and indirect teaching experiences. The indirect method of observing teaching has been found to stimulate teachers' awareness of the classroom and school events and to be beneficial in helping teachers to be more analytical and reflective (Freiberg & Waxman, 1990; Teitelbaum & Britzman, 1991). The participants of the study noted that when they were observing their peers or experienced teachers, they learned about teaching and schooling:

I am getting better, and I am getting even better when I observe. Because after I observed somebody doing something, I am picturing myself and go back and think, "He did this, or that wasn't too good, or that what excellent. Do I do that?" And then, when I go back and teach after I observed, I make sure I don't do this particular thing that it wasn't too good, or I try to make sure that I do that thing that worked well. (Philip, interview transcription, LI-RG)

The observations were helpful in the sense that you got to know how the students are in the school, you got a better feeling of the atmosphere of the school, the way the school is, the type of teaching they support. So that was helpful because you got to know the school. (Jenny, interview transcription, LII-RG)

*The Influence of Supervisors on Preservice Teachers*

Participants in the study indicated that the role of supervisor is very important during field experiences. In contrast with Brunelle, Tousignant, and Pieron's (1981) finding that student teachers did not feel supervisors' observations
were useful for their teaching, the participants in this study perceived the supervisors as critical while learning to teach:

It is always good to have someone observing your teaching. Because the supervisors are the expert in the field. It definitely does help to have someone observing your teaching. . . . Always you need someone there to evaluate and analyze your teaching. There is no doubt about that. . . . Because it is how you learn. (Jan, interview transcription, LII-RG)

Evidence suggests that these preservice teachers would prefer to experience a more indirect supervisory process during their field experiences. When the participants were asked to provide some recommendations regarding the supervisory process, they proposed some rather sophisticated supervisory strategies that their supervisors could use in helping them to analyze and improve their teaching. These strategies included using multiple data collection, accepting different pedagogical methods, asking questions, and using methods that build confidence.

Using Multiple Data Collection. A rich description of a teaching situation can provide useful feedback to the teacher. By using different strategies for recording teaching events, the supervisors can provide the preservice teacher with a more complete picture of the lesson for reflection and analysis. These preservice teachers suggested that their supervisors should use different methods of collecting information about their teaching. Philip noted, “Instead of observing a target student each time, I would rather have my supervisor observe the class overall. I would prefer to see that instead of one student because that gives me a more realistic perspective of what happened” (Philip, interview transcription, LI-RG).

Accepting Different Pedagogical Methods. Korthagen (1985) emphasized that to provide supervision effectively, supervisors need to develop specific helping skills and strategies, “the most important of which is the ability to set aside their own schemata of good teaching and to help the students to develop theirs” (p. 13). Prospective teachers leave the university campus to practice pedagogical skills in real schools. During early field experiences, prospective teachers experience real teaching for the first time and want to try out their own teaching and learning methods. The participants in this study noted their supervisors should encourage them to think why a particular strategy should be employed and the possible disadvantages and advantages of this and alternatives strategies. The following example highlights this view:

They [the supervisors] had experience in teaching and know what works for them, and so they threw out ideas of their own, which is good. But at the same time, I think they need to respect the techniques of the individual who is teaching. Maybe when they are giving information, say, “That is what works for me more, this is the way I would have done it, think about it. If it’ll work for you great. If not, think of something similar.” Or discussing with them some similar technique which can help the student teacher. (Panos, interview transcription, LII-RG)

Asking Questions. Wood (1991) found that a questioning strategy was beneficial in helping student teachers to reflect on their teaching performance. She stated that “a straightforward and always available approach to generate reflection in student teachers is simply to ask appropriate questions. Rather than telling a student teacher how to do something, asking the right questions at the
right time will often lead the student to develop ideas on their own” (Wood, 1991, p. 206). Richardson-Koehler (1988) also suggested this strategy be used by supervisors in stimulating student teachers to reflect. Participants in the present study suggested their supervisors ask them questions to help them think and analyze their teaching:

I think they [supervisors] should also ask questions. Ask questions to the students and make them think right there on the spot, right after their teaching. The supervisor should come to the student teacher and say, “How do you think your management time was?” before they show them the numbers. I think before giving the students information, or criticism, or advice, they should talk to the students first, ask them some questions and make them think, see what they think. Because the students focus their attention on the supervisor’s coding sheet and comments, they cannot see other things. I think that the supervisor and the student should first talk about the lesson and then go back to the paper and compare what was written and what you thought. I think it will make the students think and analyze more about their teaching. (Jim, interview transcription, LI-RG)

Using Methods That Build Confidence. The prospective teachers indicated that their supervisors should have been more empathetic with them. Since anxiety and uncertainty often accompany field experiences (Fuller & Bown, 1975), the supervisors should support preservice teachers and help them build self-confidence (Hoover, O’Shea, & Carroll, 1988). By providing positive confirmation of the prospective teachers’ success, confidence is developed. Not only areas that need improvement but also areas of strengths should be pointed out to a prospective teacher. Ben stated the following:

The supervisors give you a lot of feedback about what you are doing wrong and not too much of what you are doing right. Maybe focusing on a couple of things, especially in the beginning when you are kind of nervous and you are not sure of what is going on, maybe focusing on things that you are doing right also. Not just going right there and tell them what they are doing wrong. Maybe support the students a little better than usual. (Ben, interview transcription, LI-RG)

The findings from these 6 preservice teachers suggest that supervisory approaches that enhance reflective practice are viewed as more favorable by these teachers. Preservice teachers’ reflection on teaching may be encouraged or discouraged by the supervisors’ actions. Using multiple data collection, accepting different pedagogical methods, asking questions, and using methods that build confidence were identified as alternative supervisory strategies for helping the participants become reflective practitioners. This suggests that if supervisors expect their students to be reflective teachers, they need to learn how to be reflective supervisors.

Reflective practice is a desirable goal of many teacher education programs. The process of enhancing reflection among preservice teachers, however, is not an easy task. Developing reflective practitioners requires time, commitment, and programmatic efforts (Armaline & Hoover, 1989; Dodds, 1989; Graham, 1991; Zeichner, 1990). Teacher educators should teach their students how to reflect
and stimulate multiple dimensions of teaching for reflection during field experiences. As Dodds (1989) pointed out,

Continuous practice in making conscious choices about teaching and in reflecting about the consequences of such choices enriches the impact of field experiences and gives trainees enhanced opportunities to become students of their own teaching—the ultimate goal of effective teacher-training programs. (p. 101)

Conclusions

Three major conclusions resulted from this investigation. First, the act of reflection can be a learned enterprise that can lead to professional growth and development. The cross-case analysis between the Level 1 reflective group and the Level 2 reflective group suggested that the analytical abilities of the preservice teachers can develop with practice. Evidence from this study indicated that reflective pedagogical strategies such as logs, video commentaries, and school observations that included specific and challenging questions influenced prospective teachers to develop more analytical responses to their teaching as presented in the framework for teaching in physical education.

A second conclusion is that the prospective teachers placed asymmetrical emphasis on the focus of reflection, since the focus of reflection was mostly dominated by technical issues of teaching as distinct from situational and sensitizing issues. Since these preservice teachers experienced teaching for the first time in off-campus experiences, it is logical that technical issues would dominate their teaching. However, it would be a mistake if teacher educators did not provide opportunities and encourage these novices to reflect on all aspects of teaching from initial field experiences. The three foci of reflection—technical, situational, and sensitizing—ought not to be in a hierarchical order, nor should their values be contrasted. All three foci are important and interconnected and ought to be part of the reflective dimensions of undergraduates during all field experiences. Prospective teachers should be taught in their foundational and methods courses how to view and interpret teaching from a variety of perspectives.

The third conclusion from the study is that the supervisory process is critical in promoting preservice teachers’ reflective capabilities. Findings from this study suggest that an indirect type of supervisory process may be more suitable in helping preservice teachers to be reflective. Many have pointed out that supervisory strategies that encourage reflection and analysis should be extensively employed by the supervisors (Wood, 1991; Zeichner, 1987). Evidence from this study in the form of preservice teachers’ perceptions suggests that supervisors did not use supervisory strategies that promote reflection extensively. Other researchers have also found that not all supervisors employ strategies that enhance reflection (Herbert & Tankersley, 1991; Zeichner et al., 1988). This may imply that training in a clinical supervisory model may not be enough. It may be more beneficial for teacher educators to pay more attention to supervisory processes that focus on reflection when they train supervisors. Supervisors should also receive theoretical and practical knowledge on ways to enhance prospective teachers’ reflective abilities. They should know how to use dialogue in supervisory conferences in ways that challenge preservice teachers to think and reflect about different aspects of teaching and schooling.
References


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Appendix A

New Reflective Assignments

Reflective Log
A. Describe in detail one significant event that happened during your lesson. It may be significant because it was something that excited you, bothered you, made you rethink your intentions/beliefs, or made you realize that your intentions/beliefs were sound.
B. Analysis of the event:
   1. Specify why this event was significant.
   2. Explain how and why you reacted to this event.
   3. What did you learn from this event?
   4. How do you plan to follow up regarding this event?

Video Commentary
Based on your video, summarize and criticize your lesson. In analyzing your video, you may consider the following questions:

1. What did you learn about your teaching?
2. What did you learn about the students?
3. What effects did your teaching have on the students?
4. Where do you think the lesson could be improved?
5. What will help you to improve this lesson?
6. Do you think you can solve any identified teaching difficulties by yourself?
7. How do you plan to follow up in the next lessons?
8. What would you change about the lesson if you could teach this unit again?
9. What did you learn about yourself?

School Observation Reactions 1
Please evaluate/react to the following aspects of the lesson in terms of what you understand about good teaching:

1. Teacher’s instructional skills/strategies (presentation of materials, etc.).
2. Teacher’s managerial skills/strategies (rules or routines, monitoring, etc.).
3. Teacher’s verbal or nonverbal interaction with students (questioning, etc.).
4. Focus on one positive or negative salient event of the lesson (something of significance that merits attention). Describe it briefly, and explain how the teacher dealt with it. If you were the teacher, how would you have dealt with it?

School Observation Reactions 2
Please evaluate/react to the following aspects of the lesson in terms of what you understand about good teaching:

1. Teacher’s instructional skills/strategies (presentation of materials, etc.).
2. Teacher’s managerial skills/strategies (rules or routines, monitoring, etc.).
3. Teacher’s verbal or nonverbal interaction with students (questioning, etc.).
4. There are equity issues in physical education classes such as those related to sex, race, high or low student ability, etc. Describe any equity issue (positive or negative) you observed during this class period. If you were the teacher, how would you have dealt with such an issue?

Appendix B

Regular Course Reflective Assignments

Reflective Log
Describe in detail one significant event that happened during your lesson. It may be significant because it was something that excited you, bothered you, made you rethink your intentions/beliefs, or made you realize that your intentions/beliefs were sound.

Video Commentary
Based on your video, summarize and criticize your lesson. You may consider the following questions in doing so:

1. How do you feel about your teaching performance?
2. What are the strengths of this lesson?
3. What aspects of this lesson do you think you could improve?

School Observation Reactions 1
Comment on the following aspects of the lesson:

1. Organizational routines of the lesson (specific equipment routines, management routines, etc.).
2. Teacher's presentation of material.
3. Teacher's choice of activities.
4. Teacher's verbal interaction with students.
5. Teacher's monitoring of the class.
6. The skill level of the students and their general behavior.

School Observation Reactions 2

1. Comment on content choice.
2. Comment on instructional presentation.
3. Comment on student and equipment organization.
4. Comment on goals for the lesson (for the students and yourself).

Appendix C

Examples of the Reflective Framework for Teaching in Physical Education

Technical Reflection
Technical—description: Reflecting on instructional or managerial aspects of teaching by providing descriptive information of an action:
I introduced a new rule at the beginning of the class. I told the children when I blow the whistle, I want them to sit down and put the ball in their lap. (Ben, Log 7, LI-RG)

**Technical—description and justification:** Reflecting on instructional or managerial aspects of teaching by providing descriptive information and the logic/rationale of an action:

I introduced a new rule at the beginning of the class. I told the children when I blow the whistle, I want them to sit down and put the ball in their lap. I introduced this rule because I had a little problem with the students’ dribbling, passing, and shooting the basketballs when I was giving directions. (Ben, Log 7, LI-RG)

**Technical—description and critique:** Reflecting on instructional or managerial aspects of teaching by providing descriptive information, explanations, and evaluation of an action:

I introduced a new rule at the beginning of the class. I told the children when I blow the whistle, I want them to sit down and put the ball in their lap. It worked! The students sat down on the floor and put the basketball in their lap. I was able to give the students directions without the students misbehaving. (Ben, Log 7, LI-RG)

**Technical—description, justification, and critique:** Reflecting on instructional or managerial aspects of teaching by providing descriptive information, the logic/rationale, explanations, and evaluation of an action:

I introduced a new rule at the beginning of the class. I told the children when I blow the whistle, I want them to sit down and put the ball in their lap. I introduced this rule because I had a little problem with the students’ dribbling, passing, and shooting the basketballs when I was giving directions. It worked! The students sat down on the floor and put the basketball in their lap. I was able to give the students directions without the students misbehaving. (Ben, Log 7, LI-RG)

**Situational Reflection**

**Situational—description:** Reflecting on contextual aspects of teaching by providing descriptive information of an action:

One boy started to get off task in one of the drills. I went and stood very close to him, and he stopped messing around. (Jim, Log 5, LI-RG)

**Situational—description and justification:** Reflecting on contextual aspects of teaching by providing descriptive information and the logic/rationale of an action:

One boy started to get off task in one of the drills. I went and stood very close to him, and he stopped messing around. This was important because I was able to stop a misbehavior without being negative. I tried to get him [the student] on task so he could be an example to the rest of the kids. (Jim, Log 5, LI-RG)

**Situational—description and critique:** Reflecting on contextual aspects of teaching by providing descriptive information, explanations, and evaluation of an action:

One boy started to get off task in one of the drills. I went and stood very close to him, and he stopped messing around. I learned that you don’t have to yell at kids or be negative to desist a behavior. You don’t even have to say anything. I plan
to keep an eye on the student, as well as the rest of the class. I will try to remain positive when I desist or try to keep students on task. (Jim, Log 5, LI-RG)

*Situational—description, justification, and critique:* Reflecting on contextual aspects of teaching by providing descriptive information, the logic/rationale, explanations, and evaluation of an action:

One boy started to get off task in one of the drills. I went and stood very close to him, and he stopped messing around. This was important because I was able to stop a misbehavior without being negative. I tried to get him [the student] on task so he could be an example to the rest of the kids. I learned that you don’t have to yell at kids or be negative to desist a behavior. You don’t even have to say anything. I plan to keep an eye on the student, as well as the rest of the class. I will try to remain positive when I desist or try to keep students on task. (Jim, Log 5, LI-RG)

**Sensitizing Reflection**

*Sensitizing—description:* Reflecting on social, moral, ethical, or political aspects of teaching by providing descriptive information of an action:

When I made up the teams for the tournament, I really didn’t take into account the skill level of the players. I just had boys and girls together. (Jim, Log 14, LI-RG)

*Sensitizing—description and justification:* Reflecting on social, moral, ethical, or political aspects of teaching by providing descriptive information and the logic/rationale of an action:

When I made up the teams for the tournament, I really didn’t take into account the skill level of the players. I just had boys and girls together. This was important because a lot of the kids weren’t happy with the teams, and a lot of the teams were unevenly matched. (Jim, Log 14, LI-RG)

*Sensitizing—description and critique:* Reflecting on social, moral, ethical, or political aspects of teaching by providing information, explanations, and evaluation of an action:

When I made up the teams for the tournament, I really didn’t take into account the skill level of the players. I just had boys and girls together. I reacted to this by changing the teams around so they were a little more fair. I did this to make the competition better and to try to make everyone a little more happier. I learned that you can’t make teams up so they are equal number of boys and girls. If they are 3 girls that are good, let them play together. (Jim, Log 14, LI-RG)

*Sensitizing—description, justification, and critique:* Reflecting on social, moral, ethical, or political aspects of teaching by providing descriptive information, the logic/rationale explanations, and evaluation of an action:

When I made up the teams for the tournament, I really didn’t take into account the skill level of the players. I just had boys and girls together. This was important because a lot of the kids weren’t happy with the teams, and a lot of the teams were unevenly matched. I reacted to this by changing the teams around so they were a little more fair. I did this to make the competition better and to try to make everyone a little more happier. I learned that you can’t make teams up so they are equal number of boys and girls. If they are 3 girls that are good, let them play together. (Jim, Log 14, LI-RG)