

THE INFLUENCE OF TEACHER EDUCATION ON THE PEDAGOGICAL THINKING OF PHYSICAL EDUCATION PRE-SERVICE TEACHERS

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INTRODUCTION

Pedagogical thinking refers to the area of a teachers' thinking that deals with different aspects of the teaching-learning process and it involves making decisions regarding different alternatives. A teacher's pedagogical thinking is based on his/her pedagogical belief system and personal philosophy of teaching. (Kansanen et al. 2000; Kansanen 2004).

It is quite difficult to study a teacher's pedagogical thinking during the teaching-learning process. However, the stimulated-recall method provides one promising possibility for the study of pedagogical thinking, as it allows the opportunity to recollect different situations which occurred during the PE lesson.

The main focus of this study was to investigate how the pedagogical thinking of pre-service teachers changed throughout a five-year PETE program. This information can provide valuable insights into pre-service teachers' professional development and may help teacher educators to better understand and support the learning of their students.

RESEARCH QUESTIONS

- What teaching-learning processes do physical education pre-service teachers observe and analyse
 - a) during their early teacher training practicum (in the autumn semester of second year) and
 - b) during their final one year teacher training practicum (in fourth or fifth year)?
- How does PETE influence the pedagogical thinking of pre-service teachers?

METHODS

The subjects in this study were four physical education teacher education students: two female and two male students. Their classroom instruction was recorded on videotape at two different stages, a) during their early teacher training practicum in the autumn semester of second year and b) during their final one-year teacher training practicum as fourth- or fifth-year students. After each videotaped lesson the subjects participated in a tape-recorded, stimulated-recall interview. The researcher asked the pre-service teacher to comment on and analyse their personal observations on and recollections of events that took place during the lesson. Special care was taken by the researcher to avoid directing the subject's attention to any particular focus. The only questions asked by the researcher during the stimulated-recall session were those designed to elicit more in-depth information. The tape-recorded, stimulated-recall interviews were transcribed into textual form and systematic content analysis was used to analyse and compare the resulting data.

The categories used to analyse the focus of pre-service teachers' comments were:

- 1) teacher (teaching behaviour, teacher thinking etc.)
- 2) pupil (pupils' behaviour, skills, characteristics etc.)
- 3) teacher and pupil (teacher-pupil interaction)
- 4) other content (lesson plan and objectives, equipment, facilities etc.)

RESULTS

During the stimulated-recall sessions 61% of the comments of second-year students referred to their own teaching behaviour. Teacher's talk and task presentation were the main focus under this category. Less than 20% of the comments of second-year students referred to pupil behaviour and only 15% to teacher-pupil interaction.

The pedagogical thinking of pre-service teachers changed during the teacher education program so that, by the end of their training, students' comments were

focused less on their own teaching behaviour and more on the behaviour and learning of the pupils (figure 1.). The category of teacher- pupil interaction, in particular, contained more comments in the final stimulated-recall interview (33,2%) than in the first (14,6%).

These findings suggest that by the end of their training student teachers had gained the ability to see beyond their own teaching behaviours and concentrate on the pupils' learning, movement skills and social interaction. Student teachers were able to notice when a task was too difficult for pupils and more instruction or practice time was needed. However, comments in the teacher and pupil category reflected the fact that it was easier for student teachers to respond to pupils' learning and movement behaviour than to their social interaction or inappropriate behaviour. For example one student teacher noticed during a lesson that pupils were criticizing and jeering each other but she did not figure out how to respond effectively to this inappropriate behaviour.

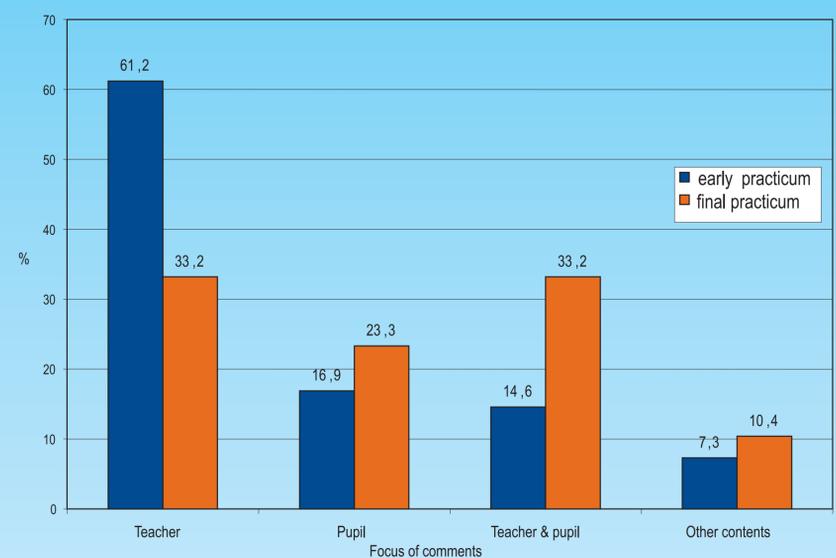


FIGURE 1. Focus of pre-service teachers' comments during stimulated-recall sessions at different phases of PETE. Distribution of comments among categories: teacher, pupil, teacher & pupil and other contents.

DISCUSSION

The results suggest that the teacher education program had a positive impact on the pedagogical thinking of pre-service teachers. By the end of their training, pre-service teachers had learned to view physical education from the perspective of the pupil and observe how pupils respond to instruction and tasks. On the other hand, student teachers still had occasional difficulties in deciding how to respond effectively to the actions of pupils in the classroom, especially those with disruptive or inappropriate behaviour.

Researchers have presented several models identifying and describing the stages of development of pre-service teachers (Cabel 1998, Fuller & Brown 1975, Siedentop 1991, 11-12). In all the models, the stages of development progress from focus on self to focus on the needs of individual pupils (Cabel 1998). The results of this study are consistent with these models and also consistent with the findings of McCallister and Napper-Owen (1999, 2005).

REFERENCES

- Cabel, S. 1998. PE students' stages of development as teachers. Part 1: The students' perspective. *The British Journal of Physical Education* 29 (3), 17-20.
- Fuller, F. F. & Brown, O.H. 1975. *Becoming a teacher*. In K.J. Ryan (Ed.) *Teacher education*. NSSE 74th yearbook. Part 2. Chicago: University of Chicago Press.
- Kansanen, P. et al. 2000. *Teachers' pedagogical thinking: teoretical landscapes and practical challenges*. New York: Lang. Cop.
- Kansanen, P. 2004. *Opetuksen käsitemaailma*. Jyväskylä: PS-kustannus.
- McCallister, S. & Napper-Owen G. 1999. Observation and analysis of skills of student teachers in physical education. *Physical Educator* 56 (1), 19-33.
- Napper-Owen, G. & McCallister, S. 2005. What elementary physical education student teachers observe and reflect upon assist their instruction. *Physical Educator* 62 (2), 76-84.
- Siedentop, D. 1991. *Developing teaching skills in physical education*. Mountain View, CA: Mayfield Publishing.

