EFFECT OF INTERNSHIPS ON PRE-SERVICE TEACHERS’ CONCEPTIONS OF PLANNING IN PHYSICAL EDUCATION

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Abstract  
The pre-service teacher (PT) training is a fundamental stage where the essential competencies of teaching are developed. The aim of this study was to find the effect of an internship on the PT’s conception of the planning of Physical Education (PE). 149 PTs from the University of Granada participated (22.3 aged). A quasi-experimental design pre-post was used. An ad hoc questionnaire previously validated and a semi-structured interview after the process were both employed to measure the PT’s conceptions. Results showed that before the internship, planning was the most important phase for the PT. After the internship, intervention significantly increased with regard to the pretest and became higher than planning. A significant increase of doubts about planning design and interactive decision-making inside the PE classes were also detected. The internship makes the teacher aware of the problems in coordinating theory and practice, thus causing important changes related to teaching PE.

Keywords: Beliefs, Teacher Thinking, Teaching, Interactive Decisions

Introduction  
The pre-service training is a crucial stage in the teaching profession for many reasons. In this stage certain essential competencies are formed in order to confront the teaching with coherency and a guarantee of efficacy (Martínez, 2004). Early beliefs of teaching Physical Education (PE) are established throughout the initial formation, and those beliefs mark the teaching actions during the first years of the profession (Marcelo, 1994). After that, the prominence of in-service experience dominates the actions in teaching.

In the PE career, sports experiences are the most influential factor to choose in these studies, but student experiences, family and sociocultural
context are influential as well. These influences and experiences form the beliefs and conceptions of PE teachers about teaching, and tend to be permanent across time (Gore, 1990). Nevertheless, the pre-service stage modifies and changes those beliefs throughout the university courses (Dootliddle et al. 1993), and all the subjects and their experiences are the instruments of that change (Contreras et al. 2002).

The internship that pre-service PE teachers do during their last academic course is crucial for configuring their conceptions of teaching in PE. A pleasant or unpleasant internship experience (with the typical shock of teaching the first classes, the control or lack of control of the group of students, the affective relationship with the tutor of the educative center and with the supervisor of the Faculty, the results of the students’ learning, the relationship with the other teachers of the center, etc.) affects definitively the election or rejection of continuing in the teaching profession.

Curtner-Smith (1996) checked the impact that an early field experience had on 28 pre-service PE teachers in secondary school, obtaining that the planning was more important than the intervention for achieving success in the teaching process. Fernández and Barquín (1998) stated that teachers considered the planning more important than the evaluation phase to improve as a professional, and to be a good curriculum maker and a good planner for assuring certain teaching efficacy. Del Villar (1993) considers planning as the most important phase for PE pre-service teachers, due to the sensation of insecurity they have during the first classes they teach in this formation stage.

Nevertheless, when the professional experiences accumulate, the results change. Placek (1984) detected that teachers with more experience in teaching had a decrease in the evaluation of planning; even some of them stop doing their planning on paper. The pre-service PE teachers studied by Viciana (1998), during their first years of the teaching profession, showed an increase of intervention and learning concern and a decrease of planning, although it was still highly valued. Afterwards, Viciana and Zabala (2004) studied 25 in-service PE teachers and confirmed that intervention was the higher valued teaching phase instead of planning.

For these reasons, we decided to analyze the changes manifested after the internship experiences by a group of pre-service PE teachers from the University of Granada. We wanted to verify if the internship that we developed in our Faculty was influential enough to change the demonstrated trends in literature of pre-service PE teachers in their beliefs and conceptions of PE teaching.
Method
Participants
The sample was constructed of 149 pre-service PE teachers (107 Males, 42 Females; average age, 22.52 years). All participants were from the Faculty of Physical Activity and Sports Sciences of the University of Granada, and in their last year of the degree. All the pre-service teachers were required to know the teaching material of PE, which is taught in the penultimate year in order to understand and have formed an opinion of the contents of the questionnaire. In performing the first measure with the questionnaire, 110 of the teachers had not had any teaching experience; meanwhile 39 had had some contact with teaching physical activity outside of the educational field. We can state that the variation on the beliefs on planning in PE was due to the experiences from the internship developed in this research.

Design and study variables
The design of the research was pre-posttest, recording the influence the teaching practicum had on the beliefs of a group of teachers in initial training on different aspects of planning in PE. Although we conducted a measure pre and post internship, it was not manipulated to produce a concrete effect on the conceptions of the pre-service teachers. The influential variable of the study was the teaching internship, while the measured variable was the evaluation given by the pre-service teachers to the different aspects of PE planning through a questionnaire and an interview. A mixed model methodology was used. Both quantitative (questionnaire) and qualitative (interviews) data collection procedures were used to obtain a more detailed understanding of possible changes. This design let us know if the influence of the internship was significant or not in shaping the beliefs of the teachers studied.

The internship consisted of 20 classes developed (planning and carried out) by each pre-service teacher in an Educational Center of Granada. The Faculty and the Educational Centers of Granada are in official collaboration, and the PTs were organized in pairs. One taught PE one hour a week to a real group of students in a secondary level of education, and the other pre-service teacher observed the classmate teaching, in company of the tutor of the Center (responsible of the group), and vice versa. This was repeated 20 weeks during a year. The themes of the observations were changing throughout the year (organization and control of the group, feedback and task information, affective relationships between teacher and students, students’ learning, evaluation, classroom environment, even two free observations that they could choose). Before these observations, all pre-service teachers receive a theoretical class to explain these tasks to them.
Also, two coaching sessions a month with the supervisor of the faculty were carried out to solve problems of the teaching that they were developing.

The measured variable was the opinion the pre-service teachers had about planning in PE, within the following aspects: planning, intervention and evaluation phases’ importance; satisfaction about the planning that they did during the internship; doubts about planning in PE teaching; disposition to planning on paper; improvisation; and changes in planning after the intervention.

**Instruments**

*Planning in Physical Education questionnaire.* An eight-item instrument was developed to determine the perceived opinion of pre-service teachers about planning PE. The categories were: (a) the importance of planning in PE teaching (PLA); (b) the importance of intervention in PE (INT); (c) importance of evaluation in PE (EVA); (d) satisfaction about the planning PE teachers did within the internship (SAT); (e) doubts in making plans/planning (DOB); (f) planning writing (WRI); (g) improvisation during the intervention (IMP); (h) and decisions to change planning after intervention (CHA). Pre-service teachers were asked to indicate their opinion in a Likert scale from 0 “totally disagree” to 100 “totally agree” (e.g., “Planning is the most important phase in PE teaching”; “Intervention is the most important phase in PE teaching”; “I’ll always write the PE planning when I become a teacher”; “I have many doubts about how to plan in PE”). It was statistically validated before the study with a pilot sample of 50 teachers. The consistency of the answers along time (reliability) was calculated with two measures within 15 days. All items indicated significant correlation coefficients between .74 to .92 ($p < .001$ or $p < .01$). Moreover, a qualitative validation discussing the clarity and appropriate items writing (grammar and understanding) was done by three experts in PE teaching and an expert in scales design. Finally, we added five more questions to the questionnaire, concerning the clarity and understanding of all items (e.g., “I understood clearly all the items that the questionnaire asked me”). All of them were valued between 85.1 to 92.7 points, demonstrating the adaptation of the items to the aim of the study and to the PTs’ knowledge.

A *semi-structured interview* was also applied to thirty PTs (20 men and 10 female, randomly selected) after the practicum. It was focused on PTs’ perceptions of specific aspects of PE teaching, including the variables measured by the questionnaire, such as: “Which phase of teaching (planning, intervention or evaluation) do you think is more important for a successful PE?” or “What do you think about the decisions you made to change your planning after this practicum?” This qualitative point of view allowed us more detailed insight into the reasons and justifications of the possible changes obtained after the practicum. This combined method let us confirm
the results obtained in this research, and explain the main motivation in the changes.

Procedure

The procedure of the research was developed following the subsequent phases: (a) Review the literature and analysis of PE planning; (b) Design the questionnaire and validation; (c) Application of the questionnaire before practicum at the beginning of the academic course (pretest); (d) Participation in the practicum during twenty weeks (university theoretical classes by the supervisor and practical classes by the PTs in the Educational Centre were developed during this time); (e) Application of the questionnaire after the practicum (posttest), and application of the interview to thirty PTs; (f) Processing the data collection from questionnaires into a SPSS software and verbatim transcription of data recorded from interview were generated; (g) Analysis of results and final report.

The internship develops during the whole academic course, nine months, and each PT spent three hours in the Educational Centre (one hour of teaching, one hour observing the peer, and one hour of coaching with the tutor, where they treated the problems that arose during the practical session). Furthermore, all PTs have a supervisor in the Faculty to give them theoretical information about teaching (tasks to be carried out in the practicum: teaching, observing, etc.) and they are advised at any time. The practicum also consists of realizing a one-year PE plan to be applied in the Educational Centre before starting the practical classes. This plan is corrected (advised) by the supervisor in a coaching meeting with the PT.

Data analysis

The data analysis was done through an inferential statistic (T test for dependent samples or related measures) to analyze the differences between pre and post measures of the questionnaire. A content analysis of the interviews was applied to qualitative data as a contrast or complementary measure of the quantitative analysis.

Results

In table 1, the values obtained for the measured categories given by PTs before and after the internship are compared. It shows that the most important phase before internship was the planning and after the internship it changes to intervention. Moreover, the intervention phase increased its punctuation significantly from pretest to posttest. The evaluation of teaching was the least valued phase by teachers before and after the internship.
Table 1. Comparison of the measured variables before and after the internship

<table>
<thead>
<tr>
<th>Categories</th>
<th>Mean Before Internship</th>
<th>Mean After Internship</th>
<th>95% Confidence Interval</th>
<th>Student T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLA</td>
<td>92.70 ± 12.30</td>
<td>86.49 ± 13.88</td>
<td>-0.560 - 12.993</td>
<td>1.860</td>
<td>.071</td>
</tr>
<tr>
<td>INT</td>
<td>82.56 ± 13.60</td>
<td>87.95 ± 14.68</td>
<td>-9.899 - 0.870</td>
<td>-2.415</td>
<td>.021*</td>
</tr>
<tr>
<td>EVA</td>
<td>80.00 ± 12.25</td>
<td>81.35 ± 13.33</td>
<td>-6.973 - 4.270</td>
<td>-0.488</td>
<td>.629</td>
</tr>
<tr>
<td>SAT</td>
<td>77.54 ± 15.54</td>
<td>83.93 ± 13.88</td>
<td>-12.732 - 0.053</td>
<td>-2.069</td>
<td>.048*</td>
</tr>
<tr>
<td>DOB</td>
<td>33.08 ± 16.96</td>
<td>45.64 ± 15.81</td>
<td>-23.359 - 1.769</td>
<td>-2.356</td>
<td>.024*</td>
</tr>
<tr>
<td>WRI</td>
<td>83.59 ± 16.78</td>
<td>80.26 ± 13.63</td>
<td>-3.121 - 9.788</td>
<td>1.045</td>
<td>.302</td>
</tr>
<tr>
<td>IMP</td>
<td>33.59 ± 16.85</td>
<td>35.38 ± 13.88</td>
<td>-13.829 - 10.240</td>
<td>-0.302</td>
<td>.764</td>
</tr>
<tr>
<td>CHA</td>
<td>60.79 ± 13.28</td>
<td>69.21 ± 14.12</td>
<td>-17.544 - 0.702</td>
<td>-1.870</td>
<td>.050*</td>
</tr>
</tbody>
</table>

Note: PLA = Planning; INT = Intervention; EVA = Evaluation; SAT = Satisfaction for the planning done; DOB = Doubts while planning; WRI = Disposition to write the planning in the future; IMP = Improvisation instead of planning; CHA = Decisions to change planning after intervention. (*) Significant statistical changes ($p < .05$).

It is known that planning is a theoretical and practical support for PTs (Sáenz-López et al. 2011; Del Villar, 1993), but after the internship the PTs gave more importance to intervention. Teaching makes them aware of the difficulty of planning in a good and effective manner, because of the problems they faced putting the planning into practice. Both phases were highly valued by PTs after the internship. Despite this, PTs were satisfied with the planning they did and even more so after carrying it out when the internship was finished. Ana María, a participant PT said: “I imagined teaching as an idealized thing before. You have to take into account that the objectives you have to reach a goal have to be more realistic and less complicated than you had thought in advance. You have to adapt yourself continuously to the students” (Ana María, question 9).

After the internship, the PTs took into account the complexity of the task that planning supposes, and this prompted the doubts they had to increase significantly. María Jesús said: “I have more doubts because I have more practical knowledge, and that is when the doubts arise. I think that it is good because it means that you know more about practice” (María Jesús, question 6). Although the PTs’ disposition to write down their planning in the future was good before and after the internship, around 20% of them recognized that they don’t intend to do so in the future. The evidences showed us that after a few years of teaching (in service) this function decreases and many teachers don’t write the planning in PE (Viciana y Zabala, 2004; Kneer, 1986; Placek, 1984). We need to make them aware of
the importance of doing it in the future from the initial and through continuous teacher training (DeCorby et al., 2005).

The majority of PTs recognized that they improvised within the practicum to adapt the planning to the circumstances of each context (tasks and students). Thus, there was a significant increase of the changes in planning they did after the practices carried out in the educational center (Shoval et al. 2010). Some research confirms that PTs are mentally prepared to give to planning the dynamicity and flexibility that it needs (Salinas et al. 2006). Here we need to emphasize the importance of tutors (collaborative teachers in the educational center) to help PTs make these adaptations (Banville, 2006). PTs declare that: “…at first teaching was harder because all the situations were new to me, and my capacity of solving problems was almost null. But when the classes were continuing all became better and the solutions were easier to apply” (Carmen, question 8); “…at the beginning I made modifications of my planning continuously, but these modifications decreased with the number of sessions delivered in the center” (Ana, question 8); “If there was some session were some students didn’t attend, I looked for a solution, but the problems I found were the lack of resources in that moment. I asked myself: What can I do now!...” (María Jesús, question 8).

**Conclusion**

The internship carried out for a year in an Educational Center, as we stated above in the introduction, is a determinant phase in the PTs training. It determines the theoretical and practical knowledge that PTs have for their profession, and it could be the main influence to choose or reject the teaching profession. It changes the beliefs and perceptions of PTs and conditions their teaching functions. In the words of the PTs: “The internship has changed me so much. The theory that we study is very different than what you have to do in practice. Furthermore, the things take sense in a real practice. You realize that everything makes sense” (José Luis, question 2); “…I choose the teaching internship to see if teaching was my kind of thing, and at the end of the process I decided that teaching is going to be future profession. It satisfied me and I’m convinced” (Francisco, question 1).

**References:**
Martínez, J. (2004). La formación del profesorado y el discurso de las competencias. Revista interuniversitaria de formación del profesorado, 0, 127-143.


