

# *P4C in Preservice Teacher Education: Difficulties and Successes Encountered in Two Research Projects*

*This paper was presented at the North American Association for Community of Inquiry (NAACI) conference held in La Crosse, Wisconsin, USA, in July, 1998.*

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**I**n teacher training, reflection centres on three primary aspects: technique, interpretation and the critical sense. The technical approach emphasizes means rather than ends in education. It deals primarily with the *how* rather than the *why*. From this perspective, reflection is considered a means for trainees to compare their use of the educational techniques they have been taught to the use made of these techniques by their peers. This perspective is centered around reproduction rather than on the development of autonomous, critical and creative thinking (Bullough and Gitlin, p. 38).

From an interpretive viewpoint, reflection is essentially founded on the expounding and clarification of personal meaning. Callings into question, doubts and reconstructions occur via reflection. Individual experience is thus at the heart of reflexive activity, and individualism plays a significant role. Group discussions can ultimately degenerate into group therapy, which is not the objective of teacher training (Bullough and Gitlin, p. 39).

From the pragmatist and interactionist -constructivist perspectives, the view is that in order to train professionals for teaching, programs should not be focused exclusively on the acquisition of objective knowledge, but rather should focus primarily on the development of critical thinking. Indeed, knowledge is beneficial only insofar as students understand it from a critical perspective, know how to create relationships from it, and know how to reorganize it in order to meet their own personal and professional goals.

More and more researchers consider that if we wish future teachers to participate in democracy, and in improvement of the professional and social experience, they must first develop higher-order thinking skills, as well as the attitudes and predispositions that go with this type of thinking. The critical orientation of reflection appears most promising when the goal is significant teacher training. Indeed, reflection aims not only to clarify the principles and educational goals, but more importantly, to also analyze them in a critical fashion. This orientation presupposes a confidence in the future teachers with regard to their capacity to recognize, and thereafter to question, the role of the teacher and of the existing structures and power relationships that fuel oppressive relationships. Here, reflection strays from the relativism that threatens the interpretive perspective, since reflection is an integral part of the political project which itself is based on social justice and equity (Bullough and Gitlin, p. 39).

My basic postulate is that one of the ways to develop critical thinking in this group, without falling victim to rhetoric or laxity, is to reintroduce philosophical dialogue among peers during their initial training. Lipmanian philosophizing means creating connections, particularly between theory and practice, between action and consequence. It is an experiential process and a personal undertaking requiring all of the individual's faculties, with the most solemn intention of producing, as a unique individual, a specific effect on one's environment.

I have worked with the P4C approach for more than 12 years, both with students and with teachers. These latter are experienced teachers who chose to get involved in the P4C approach within the framework of their continuing education. Our researches revealed that experiencing the community of philosophical inquiry leads experienced teachers to: 1) a widening and deepening of their teaching knowledge; 2) development of their thinking skills; 3) a personal and critical re-appropriation of their teaching experience; 4) the development of self-esteem.

For the last three years, within the framework of two subsidized research projects,<sup>1</sup> I have been exploring the possibility of adapting Lipman and Sharp's program to a different set of participants: preservice teachers in physical education. The locus of my interventions: their practicum. My objective: to foster higher-order thinking in these future teachers.

In this paper, I will briefly describe the two research projects, highlight the main difficulties encountered and present some results.

### CONTEXT OF THE FIRST RESEARCH PROJECT

The first research project, in 1995-1996, was exploratory. It was conducted with four teachers-to-be who, within the context of their practicum, were working full-time at school, that is, 4 days per week, 5 hours per day. Parallel to this, we conducted a two-hour discussion period each week from September to December 1995, for a total of 9 discussion periods. During each of these meetings, we discussed pedagogical problems in a «community of philosophical inquiry» mode.

My intent was to use Lipman and Sharp's methodology, but not their material. I use philosophical novels by Lipman to educate experienced teachers who are interested in getting involved in P4C. But my hypothesis was that this would not work with the preservice teachers, for several reasons. Firstly, the novels by Lipman are not adapted to their age group. Secondly, the plots and the philosophical concepts involved are too distant from their interests and immediate needs, and addressing these is the key to success in teaching physical education and sports.

There is a significant difference between in-service and preservice teachers. The former consider the classroom context in a more global fashion. They are capable of establishing connections between

events. Their knowledge structures are more complex and more elaborate, in that they detect similarities and relationships between facts or bits of information that are conceptually disparate. These similarities and relationships are integrated into their knowledge structure automatically and unconsciously. Also, expert teachers interpret and recognize classroom events with greater speed and accuracy. They actively plan and teach routines early in the school year.

Preservice teachers, on the other hand, want to work on the bows rather than on the whys. In addition, future teachers, while in training, are going through an intense period that leaves little time for, or interest in, reflection. They are almost in «survival» mode. They are working to their limit, doing work that is new to them and that they must get to know intimately. They interact with pupils whose names and psychological characteristics are as yet unknown to them, in institutions equally unfamiliar, each of which has its own implicit culture, perhaps administered by an inaccessible bureaucracy, and under the supervision of a teacher who is not always available for discussion, and who may be resistant to reflection or self-criticism. (Bullough and Gitlin, 1991, p. 44-45).

An additional point concerns the field of teaching for which these preservice teachers are preparing. This is neither philosophy nor P4C, but physical education and sports. Of course, since antiquity there has been a strong relationship between philosophy and physical education. But I expected that, these days, those who intend to become physical educators are probably not particularly interested in philosophical praxis.

These facts placed me in a dilemma. On one hand, there is the awareness that practical training should not be used solely to introduce teaching techniques or exclusively to develop professional skills, as has been attempted by too many training or microteaching experiments. Practical training's main role should be rather the development of a framework for personal and social reflection. Indeed, the work of Gore (1990), Richert (1990), Rovegno (1992, 1995), Sebren (1992, 1995) and Tsangaridou and O'Sullivan (1994) indicate that future teachers possess the necessary cognitive skills to reflect in a structured manner; that it is possible to improve the quality of these reflections if the teachers-to-be exert significant effort to this end; that the latter can learn to value the role of reflection in teaching. On the other hand, there is the awareness that motivation is a fundamental criterion that must be respected in order to guide students toward successful learning.

Taking these two elements into account, I came to the following conclusion: the most significant starting point for philosophical discussion among preservice teachers would be to read, to other members of their community of inquiry, the story of their own teaching experience. Each subject was thus asked to be actively aware of the problematic and ambiguous situations that might arise during their teaching week and to note them in a logbook. At weekly meetings, each subject would share with the members of the community of inquiry the problematic situations noted in their logbook. This should lead to philosophical discussion among peers.

## SUMMARY OF RESULTS AND DISCUSSION

During the first six weeks of the research project, I observed three main characteristics in the discussions among peers. 1) Subjects raised questions that were essentially factual. 2) Over the weeks, the type of communication passed from anecdotal to monological.<sup>2</sup> The discussion increasingly developed from a common topic, and the subjects listened more often to the comments of their peers. However, everyone persisted in their own ideas without letting themselves be influenced by anyone else's ideas. There was no construction of ideas from points of view expressed by their peers, nor dialogue as such. The exchanges were informal. 3) The thinking skills used during the discussions were mostly description and explanation, which correspond to lower-order thinking. Within the same category of thinking skills, differences of degree were detected. Thus, for example, descriptions developed from the fourth meeting involved more cognitive work (observation, analysis and knowledge assimilation) than those developed in the first meetings.

I acknowledge with Bullough and Gitlin (1991) that preservice teachers need a locus in which to exchange in anecdotal and monological modes. These forms of communication are mainly necessary at the beginning of practical education since at that time, the trainees are in a situation where for the first time in their lives they are not part of the group of those who are learning, but of those teaching. The awareness of their new role leads them to focus on the inherent difficulties of their teaching practice. The relating of teaching anecdotes and personal experiences from the gymnasium become a necessary release from some of the stress and emotions experienced.

However, the weekly meetings could have been more significant and useful if they had included a philosophical discussion to bring out the criteria, justifications, causes, consequences, etc. of the pedagogical problems encountered, or to search for alternatives to these problems, to propose and analyze hypotheses, to argue, etc. (Dewey, 1897/1972; Lipman, 1988; Lipman and al., 1980).

In other words, the monological and anecdotal exchanges that took place during practical education were necessary at the affective level, but not sufficient to develop the trainees' critical and responsible thinking.

As this was an exploratory research project, I modified the procedures and replaced the initial logbook with a different type of text. But what kind of text to use? Either pedagogical, to foster preservice teachers' interests, or philosophical, to be used as a model for critical reflection. The scholars involved in P4C (Lipman, 1984, 1985a, 1985b, 1991; Matthews, 1980; Pritchard, 1985; Reed, 1983, 1985, 1992; Splitter and Sharp, 1995) promote the use of philosophical texts rather than the didactic ones traditionally used in schools and universities. Indeed, philosophical texts do not transmit a unilateral message, but reflect various perspectives; they question and create doubt. A rational explanation can be found in Dewey and in the interactionists-constructivists. Dewey contends that it is when doubt and ambiguity occur that the individual asks questions and the process of reflection starts (1916/1983, chap. XI). The interactionists-constructivists maintain that exchanges that reflect different perspectives favor the cognitive imbalances in one's mind, leading to a deeper reflection about problematic situations (see Vygotsky, 1985).

My initial reluctance to impose philosophical texts on preservice teachers was also corroborated by many studies in the field of teacher education. As especially outlined by Bullough and Gitlin (1991), preservice or novice teachers have neither time for nor interest in reflection. Their training period is simply too intense (pp. 44-45).

Actually, it did not appear essential to me to apply the Lipmanian principles. I intended, above all, to rely on the subjects' teaching experiences and interests, believing that intrinsic motivation for critical reflection would then follow spontaneously.

So I decided that the starting point of the discussion for the last three meetings would be pedagogical texts related to the teaching of physical education. Yet, as I really wanted to apply the pragmatist and constructivist principles, I searched for texts provocative enough to launch a cognitive disequilibrium within the subjects, and generate as a result a discussion employing higher-order thinking.

Analysis of the last three discussions revealed significant progress, which manifested itself particularly at the ninth and final meeting: 1) the questions generated from the reading were less technical. 2) the mode of communication was more dialectical: subjects were able to talk with each other and argue among themselves; they listened to the comments made by the others and took them into consideration before developing their own comments. 3) at times, some subjects used higher-order thinking skills such as justification, argumentation, counter-argumentation and criticism.

There was a significant evolution in the results of the research project, but I was still not satisfied. I applied for another grant (FCAR, 1995-1998) in order to try something different with the same type of participants, that is, preservice teachers in physical education.

## SECOND RESEARCH PROJECT

The second research project took place from January to May of 1997, involving 13 volunteer subjects, all trainees in physical education. Their training was intensive; four days per week for 15 consecutive weeks. During this training period, the trainees were invited to participate in a weekly 2-hour group meeting at the university. During this meeting, which I led, there was a period dedicated to the exchange of pedagogical experiences that took place during the week (approximately 1 hour), and another dedicated to philosophical reflection (approximately 1 hour).

The methodology used in the second part of the meeting was again that proposed by Lipman and Sharp. This time, however, I had decided to introduce, as a starting point to the discussion, a series of «philosophico-pedagogical» short stories (approximately 3 pages each) that I had written. Each short story portrayed physical education teacher trainees taking up the great philosophico-pedagogical debates anew. Thus the principal characters questioned themselves on and discussed the themes put forward in the «hidden curriculum», that is to say, the messages, values and concepts that are unconsciously conveyed and implicitly taken for granted. Here, as an example, are a few of the questions subjacent to the

stories: What are the differences between educating and instructing? What is authority? What are the consequences of power? Where does humour fit into teaching? What are the criteria for competence in teaching? Why do we evaluate (not how should we evaluate) students? Is there a difference in degree or in kind between a pupil and a teacher?

After the reading phase, questions were collected, followed by a philosophical discussion within the community of inquiry.

Video recordings were made of each meeting with the trainees. Analysis of verbatim transcripts during 1998-1999 will allow us to establish, with the help of an observation grid, the thinking skills used by trainees as the meetings progressed in order to determine whether or not there was an evolution, and if so, in what sense. The reflections noted by the trainees in their logbooks will also be collected and related to their pedagogical actions in order to verify whether a relationship exists between the development of critical thinking and teaching quality.

There was an individual interview with each trainee at the end of the training period to verify trainees' awareness of their cognitive evolution. The trainees' answers are also

enlightening with regard to the relevance of philosophical training among peers, and to the necessity of developing among teachers-to-be complex thinking skills. Following are a few excerpts from these meetings.

#### TRAINEE ANSWERS TO QUESTIONS ASKED DURING THE INTERVIEWS

The interview protocol included the following questions:

1. Do you think you have evolved since the beginning of your training?
2. (a) Do you think your critical thinking has evolved since the beginning of your training?
  - b) If there was evolution, what contributed to it?
3. In your opinion, does critical thinking constitute an essential quality for a good physical education teacher?
4. The department is presently restructuring its teacher-training program. In your opinion, what should we emphasize in order to develop the most competent physical education teachers?

The first question is merely an introduction designed to instill confidence in the interview activity and is not directly related to the research. The second question is intended to verify the subjects' perceptions regarding the evolution of their critical thinking and the causes of this evolution, if indeed there was one. The third question attempts to defocus the development of critical thinking from its academic context, and place it within the framework of the subjects' future teaching reality. In other words, its aim is to verify the importance the trainees assign to critical thinking in physical education teaching. The fourth question is related to the third. Therefore, if a subject answered yes to Question 3, one

would expect the critical thinking theme to appear in the subject's answer to Question 4. An external expert, who had followed the development of the research from its beginnings, had approved the interview protocol in advance. During the interview, each trainee's interventions were noted in writing by the researcher.

### **Question 1**

In the research, we did not take the subjects' answers to the first question into consideration since, as previously mentioned, this question only constituted a preamble whose goal was to put the subjects at ease for the duration of the interview.

### **Question 2 (a)**

All trainees, without exception, reported that their thinking had evolved during their training. One trainee, however, reported that he had not evolved much on the level of critical thinking, since he judged himself to have been sufficiently critical prior to the beginning of his training, but he stated that he had evolved greatly in terms of creativity. Another reported that he had not evolved with regard to creativity, but had evolved greatly on the level of critical thinking.

The other eleven trainees spoke of an evolution of higher-order thinking skills. Following are a few comments made by the trainees:

*I have evolved in my way of dealing with problems; in my classes, I think in a more systematic and orderly or articulate manner. (..) I care more about my arguments, I take a stand more than I used to, I really know where I stand in relation to the grounds of the discussion; I have less reflexes and more reflection. I question my way of acting, I search for better solutions, for other alternatives.*

*I am more alert to what goes on in the classroom - reflection during the action and not just following the action;*

*My ideas are more coherent;*

*I detect problems more promptly when they present themselves. (..) I am more critical regarding myself: for example, instead of blaming the pupils when a class didn't go well. (..) The class assessment is now done automatically, as with my self-criticism.*

### **Question 2 (b)**

To the sub-question on the causes of any evolution in subjects' complex thinking skills:

-one trainee reported that the principal cause of his cognitive evolution was the natural evolution of a person from the beginning to the end of training: At the beginning of the training period, there was too much stress, we couldn't think and reflect with the idea of improvement in mind; we only thought of the present moment. One needs time to familiarize oneself with the pupils and to create interactions;

-one trainee considered that it was due to: a) work involving reflection on teaching carried out with the local supervisor, and b) personal cognitive work (as in effort) to succeed in bettering oneself as a teacher;

- three trainees deemed the principal causes of their cognitive evolution to be jointly: a) the natural evolution of the person from the beginning to the end of the training period and/or the reflective work carried out with the local supervisor, and b) participation in communities of philosophical inquiry;

-eight trainees cited the communities of philosophical inquiry as the principal cause of their cognitive evolution.

### **Question 3**

On the third question, which was whether the development of critical thinking constitutes an essential quality in a good teacher, all trainees without hesitation answered in the affirmative. Here are the justifications they gave:

*with critical thinking, I can know where I'm going; I am able to question my teaching, to learn from others and not teach in the same manner for the next 25 years;*

*critical thinking allows us to reflect on the hows and whys in every field;*

*critical thinking allows us to stay up to date, that is, to be aware of changes in society and in the needs of pupils;*

*it allows us to question ourselves, to know ourselves as individuals and as teachers, to take stock of ourselves, to assess ourselves, to drive ourselves further than we ever have, to improve or to evolve;*

*it is important, for without it, we live in darkness and routine.*



#### Question 4

Despite the fact that, according to their answers to the preceding question, all the trainees judge that critical thinking is an essential element to ensure quality in teaching, indeed, for some, to ensure quality in daily experience, and despite the fact that some noted that *«too few classes led us to reflect in a critical manner»* and that *«during our undergraduate studies, we are bombarded with information»*, still, in answering Question 4, few trainees suggested the addition of a critical thinking class to the revised program.

In fact, with regard to the restructuring of the teacher-training program, only three trainees suggested more classes to ensure the development of critical thinking; the other ten trainees emphasized the pedagogical dimension.

In summary, the second research project, at this point in the analysis of the data, allows us to state that: a) contrary to what many researchers suggest, trainees had both time and interest enough to exert significant effort toward their cognitive development during their practical training; b) philosophical material leads to significant discussions among trainees.

#### CONCLUSION

A priori, from both research projects, it appears that: 1) philosophical novels are pertinent to practical training in physical education; 2) adaptation of philosophical material to the age group of the participants, to their particular context and to their interests is essential; 3) philosophical practice is an adequate and pertinent means, during practical training, to foster the development of the components critical thinking in these individuals' and to improve their mode of communication.

The second research project allowed us to observe that the philosophical, far from repelling the trainees, corresponds to a need they experience: a need that manifests itself in the short term by a high level of interest among trainees and curiosity on their part about the concepts inherent in the philosophy of education. In the long run, the philosophical, being a significant means for the development of critical thinking, appears to be a solution to quality teaching that also provides teachers with a needed escape from routine.

Nevertheless, we should question these results in these terms: were these 13 subjects, given that they volunteered to participate in the research, already predisposed to critical reflection? Without allowing ourselves to generalize the data to all trainees, we are forced to recognize that the experience was fruitful in this case. This also raises the question of whether the fact that teacher training is frequently centered around technical issues might be simply the result of an unfavorable prejudice born of a lack of critical willingness on the part of the teachers responsible for the training of teachers-to-be.

## NOTES

1. The first research (1995-1996) was subsidized by the Comite d'attribution des fonds internes de recherche (CAFIR) of the Universite de Montreal, the second (1996-1999) by Quebec's FCAR.

2. Our experience in teacher training allowed us to distinguish three modes of communication: anecdotal, monological and dialogical. We define these as follows: 1) Anecdotal communication is based on the elaboration of anecdotes or personal experiences experienced by the subjects. 2) In monological communication, the students pursue a monologue from a common topic. They don't listen much to each other. Each individual pursues their own idea without letting peers influence their point of view. 3) Dialogical communication is based on interrelations. It emphasizes the construction of ideas from peer points of view to find a solution to a common problem or to reach a common goal. It is this last mode of communication that we aim to investigate in this research project.

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