

Teacher Training in Physical Education

TOWARDS A RATIONALE FOR A SOCIO-CONSTRUCTIVIST APPROACH

Marie-France Daniel

In physical education, three dominant discourses in teacher training exist, namely pedagogy of performance, critical pedagogy and postmodern pedagogy. The pedagogy of performance (Siedentop, 1983, 1994) is traditional pedagogy. It finds its essence in techniques and strategies of practical application. It mostly involves questions which tend towards probable results. This paradigm is called scientific or positivist.

According to the critical pedagogy in physical education (Gibson, 1986; Giroux, 1988, 1990; McBride, 1991; Tinning, 1991), the most appropriate discourse in teacher training programs is not the scientific one, but rather the one claiming social justice. The key concepts which constitute the foundations of this paradigm are liberation, dialogue, criticism and practice. Critical pedagogy puts an emphasis on fields related to ethics, morals and politics. Its aim is to relate diverse elements such as school, physical education, teachers and the social reality. The heart of critical pedagogy is found in history. And it is through critical reflection about history that it trains teachers who reflect about their daily practice and about the political, social and moral dimensions of their educative acts.

Postmodern pedagogy (Bain, 1990; Gore, 1987, 1990; Sparkes, 1991) is associated with the critical paradigm, in the sense that they both question the positivist foundations. Nevertheless, it denies the neomarxist discourse of critical pedagogy. It also rejects the importance that critical pedagogy gives to rationality and prefers the search for intersubjective truth which finds its essence in the multiplicity of interpretations. The aims of postmodern pedagogy is to be a significant answer to the social, cultural and economic conditions which characterize contemporary capitalism.

In a study concerning the different approaches in teacher training in physical education, Kirk (1986) advocates that it is the paradigm of performance that is most popular that is, a dualistic pedagogy, which tends to isolate the two dimensions of learning, namely theory and practice. According to Kirk, the consequences are negative, for this conception of education forms prospective teachers who are somewhat or not at all autonomous, critical or conscious of their political and moral role within their profession. Moreover, as Kirk mentions, these prospective teachers are not trained to create relationships by themselves. As a consequence, within the reality of daily practice, they are bewildered and incapable of dealing adequately with classroom problems when they happen.

It is believed that most teacher training programs produce somewhat passive and docile 'transmitters' of information rather than 'creators' conscious of the importance of their role. According to the supporters of critical and postmodern pedagogies, the teacher training programs at most universities still consider knowledge as an objective notion, which 'exists somewhere', waiting to be discovered and learned. Knowledge is thus not intended to provoke reflection and questioning amongst prospective teachers, but merely to be memorized. The impact of this static training on the education of youngsters can be problematic. Indeed, the teacher who has not developed the habit of thinking in a critical, autonomous and responsible fashion will not create, in her or his classroom, a culture of critical reflection and moral behavior. As a consequence, there is little chance that future generations will develop such a culture.

In my opinion, the problems in physical education teacher training programs seem to have two sources: On the one hand, the theoretical and practical dimensions of teaching are isolated one from the other, and do not respect the fundamental principle of continuity. On the other hand, the training given to prospective teachers increases the standing of memorization and comprehension, instead of the development of higher

order thinking skills such as autonomous, critical and responsible thinking.

The approach we intend to put forward in the Physical Education Department of the Université de Montréal lies between the critical and postmodern paradigms. It emerges from a constructivist epistemology (Bauersfeld, 1994; Larochelle et Bednarz, 1994; von Glasersfeld, 1994; Pepin, 1994), whose essence is not found, as we have previously seen, in the transmission of information, but rather in personal questioning and in the construction of personal meaning. To be more precise, we would say that the perspective that we support is socioconstructivist (Blaye, 1989; Gilly, 1989; Girotto, 1989; Lefebvre-Pinard, 1989), in the sense that its basic creed lies in the belief that the construction of meaning is the result of cognitive conflicts which appear within group discussions.

In this paper, we will present the constructivist and socioconstructivist epistemologies and see to what extent they include the Philosophy for children pedagogy. We will then present the actual situation in teacher training programs in physical education. Finally, we will propose an alternative approach to teacher training in physical education, which, we believe, can contribute to the development of a more significant training for prospective teachers.

ABOUT CONSTRUCTIVISM AND SOCIOCONSTRUCTIVISM

Carl Hammerschlag has a medical degree and is a family practitioner. In the late 1960s, he went to work for the Native American Health Service. He went to the reservation to cure people. On the first day, an old Native American asked Carl: 'Do you know how to dance? Because you must be able to dance if you are to heal people.' Because the old man was insisting, Carl agreed to do a few steps. After a while, he asked if the old man could teach him some of his steps. The old man replied. 'Yes, I can teach you my steps, but you will have to hear your own music.' (Mogilka, 1993, p. 13-14)

Constructivism is an epistemology about the search for and construction of personal interpretation and understanding in an age of ready-made knowledge.

Giambattista Vico (1688-1744) was a professor of rhetoric at the University of Naples. He was first influenced by Cartesian epistemology, but he soon criticized its dualism. Vico complained that Descartes arrived at a mechanistic view of human nature, which he considered faulty. For him, a person is not merely someone who reasons from self-evident principles; feelings must also be taken into account along with the individual's creativity (Craig, 1993). Vico viewed education as an essentially moral enterprise. Indeed, for him, a human being is an active totality, developing her or his own history. Also, he insisted that education ought not to be concerned merely with empty erudition, but with the development of language, which supposes a moral dimension (Vico, 1948).

Vico appears as one of the first philosophers offering to the world of education a monist epistemology, which breaks with the traditional conception of knowledge. He was the first one to assert that knowledge does not exist 'out there' with a life of its own, and to support the constructivist activity of human reason. Moreover, Vico laid another stone in the development of a new conception of academic research, when he claimed that not all subjects should be determined by the same method, and thus, that the mathematical method should not be appropriate for the humanities (Vico, quoted by Craig, 1993). Vico opened the door to qualitative research which is more concerned with dialogue and uncertainty.

In the nineteenth century and at the beginning of the twentieth century, pragmatists and particularly instrumentalists contributed to the development of the constructivist conception (see Daniel, 1992c, introduction).

Then, in the twentieth century, Jean Piaget gave it an explicit life. Piaget is the major figure in constructivism, breaking with conventional ideas concerning the acquisition of knowledge related to Vico's ideas. Piaget's conception of learning and knowing leads to a constructivist epistemology, which is in opposition to traditional ones, by which knowledge should or could represent reality. In Western history, most philosophers tried to find answers to the following epistemological questions: 'What is knowledge?' 'Does certainty exist?' Piaget, on the contrary, wondered 'How can a child reach what we call knowledge?' This means that Piaget, instead of considering that knowledge represents a real world that exists independently of the individual's experience, considered that knowledge is a tool that contributes to adaptation. When we use the word 'adaptation', here, we

refer to two levels: biological (whose goal is survival) and conceptual (whose goal is the development of coherent precise cognitive structures).

For a contemporary, Ernst von Glasersfeld, constructivism is articulated around two realities. On the one hand, it presupposes an ontological reality, which exists beyond any knowledge. On the other hand, there is the concrete reality of our experience from which we draw all kinds of knowledge, that is, the conceptual structures and actions that we consider good and those which failed (1994, p. 22).

Here are some elements of the constructivist epistemology, as described by von Glasersfeld. In constructivism, rational knowledge always concerns the field of experiences and abstractions that have been constructed by the individual. The construction of paradigms by the individual is based on the belief that coming experiences will be similar to past experiences. 'Experience', here, does not mean everything that reaches consciousness. It consists mainly of sensations and empirical and reflective abstractions that we are aware of. In this sense, experience is essentially and completely subjective.

Another fundamental point: scientific knowledge is not omnipotent nor does it reflect a set of fixed objective laws, for it is a social construction. In this perspective, a scientific paradigm is never considered as the only possibility for solving problems. Furthermore, constructivism does not search for 'truth', but for theoretical paradigms that have shown their viability within their field of experience and compatibility with other paradigms. In other words, scientific paradigms carry the status of means and not ends.

Also, constructivism does not consider that language is a tool to 'transport' information, knowledge and ideas from one person (knower) to another (learner) (von Glasersfeld, 1994, pp. 23-25).

The last point noted by von Glasersfeld about language introduces the notion of activity and responsibility in education, for it supposes that language must be conceived as one of the tools to guide the students in their reflexive process which consists in the organization of the representations formed by the taught knowledge. The distinction between students as discoverers or inventors is thus assumed. If students are discoverers, they look at the world through the 'keyhole'; if they are inventors, they participate in an enterprise where they continuously invent the rules, norms and traditions. In socioconstructivism, students are considered as living organisms who create a theory of the world (Larochelle, M. and Bednarz N., 1994, p. 7-10).

As Marie Larochelle and Jacques Desautels mention, the actual act of teaching is permeated with a conception of learning that results from a script which was written 2500 years ago and that can be summarized in these terms: the observer and the objects observed are two independent and separate entities; it is the cognitive ability of the learner that can relate these two elements; as a result, there is knowledge or, more explicitly, knowledge about objective reality which stands 'out there', waiting to be discovered. This promotes the learner's cognitive passivity, for she or he is not an active subject who constructs her or his system of comprehension, but a receptacle that receives the predigested heritage of previous generations. Constructivism, however, refuses to separate the 'subject who searches for knowledge' and the 'things to know' and to consider them as two distinct entities. Our knowledge has to result from our own experience and our own interpretation (Larochelle and Desautels, 1992, p. 18-33).

Traditional teaching transmits a conception of a static and never-changing world and leads the learners to believe that objective knowledge that is presented to them describes a unique 'reality'. In this context, teaching is characterized by the transmission of isolated bits of knowledge, the use of predictive testing, and the measuring of performance on out-of-context tasks. Traditional teaching is sometimes called positivism or objectivism; others would call it educational reductionism (Tippins et al, 1993).

While studying conceptual development that is, the conditions that favor evolution in students' cognitive structure, some researchers propose the importance of social interactions in the construction of knowledge (Doise, Mugny and Perret-Clermont, 1975, among others). They considered that peers are essential in the development of one's concepts and perspectives, for an individual will hardly revise her or his personal interpretation and perspective unless she or he is confronted with others' questions, doubts, and criticisms.

From Vygotsky's perspective, for example, the socioconstructivist epistemology puts a special emphasis on the role of social interactions in the development of the person. In this epistemology, the key point is the notion of 'conflict', namely a structured conflict, which causes cognitive changes and progress. This conflict is possible when interactions occur and favor the simultaneous expression of a diversity of actions, solutions and discourses. It is diversity itself which provokes a cognitive conflict in the listener which drives her or him to enter

into a reflective process. Indeed, on many occasions, work in interaction reveals a difference in the responses. This difference is due to the participants' different focuses or points of view. As a result, there is a disequilibrium which comes from the awareness of another possible good answer.

Some authors observed that the impact of opposed responses is more significant when these are accompanied by verbal argumentations. At the same time, they realized the poor quality of the latter (Blaye, 1988).

Although socioconstructivism arose from Piagetian structuralism (among others: Gilly, 1989), it is fundamentally different from Piaget's perspective, which considers that social interactions and transmissions cannot, by themselves, explain the child's development and learning (Piaget and Inhelder, 1966, p. 123). For instance, Piaget explained that the logical structure developed by the individual contributes more to children's moral development than do social consensus, social conventions or the rules of the group (Schleifer, 1989). Actually, the characteristic of the Piagetian conception of conflict is more psychological than social: a conflict results from confrontations and contradictions within the individual's actions or anticipations. We could say that the nature of conflict, for Piaget, is 'infra-individual' and not 'inter-individual' as Doise, Mugny and Perret-Clermont explicitly contend (1975).

In short, the main characteristics of constructivism, which is a theory about the formation of knowledge and not about human beings, are the following: 1) knowledge cannot be transmitted from one person to another person, but is always constructed and contingent. 2) Cognition has to be seen as an adaptive function which is used to organize the world around us, rather than to discover reality. Regarding socioconstructivism, we could say that: the developmental process happens by means of questioning and cognitive conflicts; personal evolution is promoted by social interactions; a school's first aim is to develop autonomous and critical subjects and not standardized students.

SOCIOCONSTRUCTIVISM AND THE PHILOSOPHY FOR CHILDREN PEDAGOGY

Matthew Lipman and Ann Margaret Sharp conceived a program of philosophy for children, in the 1970's. This program postulates that young students can develop their higher order thinking skills inasmuch as school creates the conditions that favor dialogue among peers (Lipman, 1988, 1991; Lipman, Sharp and Oscanyan, 1980; Sharp and Reed, 1992).

We find some interesting relationships between the socioconstructivist epistemology and the Philosophy for children pedagogy. The latter considers that too many societies still function according to a hierarchical model, and that children, like women, blacks and the poor, are marginalized and are not respected (Daniel 1994; Sharp, 1992a, 1992b). Too often, they are treated as objects in the sense that they are considered incapable of investigating their own social reality (see also Freire, 1970). In this sense, it meets the socioconstructivist objection.

Also, Philosophy for children and socioconstructivism consider it essential to give all persons a locus to think and to construct their own interpretation and representation of the world. Both consider that education should give the marginalized a voice in articulating their perception of their problems and relevant solutions.

Like the Philosophy for children pedagogy, socioconstructivism represents an alternative view of society. Both are opposed to the traditional and dominant discourse, and in its own terms, advocates the creation of more just and equitable systems, emancipation, autonomy and critical knowledge.

Finally, they both propose an alternative form of knowing which could be called, after Maguire (1987), 'interpretive knowledge'. Interpretive knowledge stresses the importance of understanding how human interactions function, in order to create the conditions for cooperation and emancipation. It considers that 'objectivity is an illusion because it suggests that it is possible to separate the subject of knowledge, the knower, from the object, the known' (Maguire, 1987, p.19).

Finally, Philosophy for children and socioconstructivism call for individual and collective action. Actually, they search for and attempt to develop meanings within a community of peers, in order to create a more just and significant reality. It assumes critical knowledge that is, a dialectical relationship between reflection and action or between theory and practice.

To use the metaphor of the old man in Carl's story, we could say that Philosophy for children and constructivist (or socioconstructivist) paradigm represent some of the ways for the self and the collectivity to

start the active search for the sacred ground of his or their own thinking, acting and being. Technological systems and pedagogies based upon performance sell the illusion of education as a spectacle in which beings exchange their own selves for an appearance, as though these were the 'necessary steps' to be taken and to promote in order to 'get better'.

THE ACTUAL SITUATION WITH TEACHER TRAINING PROGRAMS IN PHYSICAL EDUCATION

In Quebec, in the field of physical education, although all models of intervention do not come from a traditional epistemology, socioconstructivism is valued not at all or very little in the teacher training programs. Some marginalized scholars appear, however, to be going in this direction. For instance, since 1981, Arthur Sheedy has condemned the technicist approach. He notes that the regular use of such a paradigm creates a distance between the body and the self, in the sense that it promotes the students in physical education to acquire scientific knowledge and to develop techniques of gestures in ways that require the separation of thought and feeling. Sheedy is aware that this reductionist approach reflects the culture in which it evolves. Therefore, he is not working for a restructuring of the traditional programs, but for a radical change in our conception of the how and why of physical education in the classroom (1981).

From another intellectual tradition, but with the same desire for radical change, the Confederation des éducateurs et éducatrices physiques du Québec (CEEPQ) claims that physical education must change its perspective, forget about the development of the mere biological machine, and favor the development of all dimensions of the person (1994).

Also, François Desbiens calls for 'transdisciplinarity', a training model whose goal is to integrate theory and practice and in which autonomous and critical thinking is valued (1995, p. 41). This model gives rise to the organization, planning and evaluation of the apprenticeship by the self (1995, p. 42).

In the United States and around the world, the situation seems to be similar to the one in Quebec. Some studies condemn the fact that reflection about the social, moral and political aspects of teaching are missing from prospective teachers' training (Tsangaridou and O'Sullivan, 1994, p. 21). Scholars in physical education (namely: Bain, 1990; Giroux, 1990; Gore, 1990; Kirk, 1986; Kirk and Tinning, 1990; Tinning, 1991) point to the detrimental influence of the technicist perspective and promote the development of 'reflective practitioners', to use Schon's denomination (1983/1994). However, according to Tsangaridou and O'Sullivan, despite the emphasis on reflection in teacher education theories, empirical work on reflective teaching to support these propositions is in its infancy (1994, p. 14). Actually, a review of the literature shows not much more than the empirical studies of Gore (1990), Sebren (1992), Rovigno (1992) and Tsangaridou and O'Sullivan (1994).

The investigation of Tsangaridou and O'Sullivan, for instance, reached three major conclusions. First, evidence from their study indicated that reflective pedagogical strategies such as logs, video commentaries and school observations influenced prospective teachers to develop more analytical responses to their teaching in physical education, and that 'pedagogical reflective strategies that included more challenging questions influenced the level of reflection of the preservice teachers.' (1994, p. 22)

Second, it showed that the prospective teachers place asymmetrical emphasis on the foci of reflection, since the focus of reflection was mostly dominated by the technical issues of teaching (reflecting on instructional or managerial aspects of teaching) as distinct from situational (reflecting on contextual aspects of teaching) and sensitizing (reflecting on social, moral, ethical or political aspects of teaching) issues (1994, p. 20).

Third, Tsangaridou and O'Sullivan concluded that supervisors should also receive theoretical and practical knowledge on ways to enhance prospective teachers' reflective abilities, that 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. In the present study, it was the participants who suggested that their supervisors ask them questions to help them think and analyze their teaching (1994, p. 24-25).

We share Tsangaridou and O'Sullivan's point of view, which contends that it is our responsibility, as professors or supervisors, to offer the preservice teachers the means to develop higher order thinking skills, such as reasoning, conceptualizing, justifying, and criticizing. However, we understand the difficulty of this enterprise, for our experience with teachers and prospective teachers since 1987, regularly shows us that too many of them still consider that thinking or making students think is a waste of time. Indeed, it is faster to understand and

memorize the theories developed by others than to construct our own. As Arthaud wrote, quoting John Dewey, 'books and school material give us the discoveries of others and thus appear as necessary short-cuts' (Arthaud, 1987).

Nevertheless, we believe, as in Carl's story, that prospective teachers must take the time 'to hear their own music'. For instance, as teachers-to-be in physical education, it appears fundamental that students reflect in an autonomous, critical and responsible fashion about concepts such as the body and the self:

Or my body and my self are identical, or we are not. If my body and my self are identical, thus my body cannot belong to me. If my body and my self are different, thus who am I? (Lipman, 1984, p. 10)

In our Western societies, the hierarchy and dualism between body and mind are still omnipresent, although not easily visible (Falks, 1991; Thines, 1977, among others). If prospective teachers are not trained to reflect on these concepts and all those that revolve around education and physical education, there is a strong probability that they will not be aware of the necessity for epistemological changes in society.

A PROPOSAL FOR AN ALTERNATIVE APPROACH IN TEACHER TRAINING IN PHYSICAL EDUCATION

The essence of the alternative approach that we propose in teacher training in physical education is grounded epistemologically in socioconstructivism. Along with Giroux and Simon's claim (1988), we claim that:

We are not concerned with simply motivating students to learn, but rather establishing the conditions of learning that enable them to locate themselves in society and to interrogate the adequacy of that location as both a pedagogical and political question. (p. 3)

In this sense, the aims of the alternative approach that we propose are the following: 1) to enable prospective teachers to think in an autonomous, critical and responsible fashion and, in so doing, make them aware of the importance of their role in the education of young generations; 2) to help them unify the theoretical and practical dimensions of their training in physical education and, in so doing, help them transfer the knowledge to educative practice in order to solve properly the problems they will encounter.

TOWARDS THE PRINCIPLE OF INTEGRATION

As professors involved in teacher training, we are mainly concerned about the integration of theory and practice, since we agree that 'theoretical and practical knowledge are inextricably interlinked in any complex action or series of actions such as teaching.' (Kirk, 1986) Also, we believe that it is the dialectical relationship between theory and practice that creates cognitive conflicts in the students' minds, and therefore, leads to significant education. According to what has been presented about teaching and learning in previous sections of this paper, traditional dogmatic teaching cannot, by itself, meaningfully educate prospective teachers in physical education. Nor can reflexion alone about students' personal experience result in significant learning. We believe that both components of the curriculum have to be unified in a dynamic whole, where theoretical and practical knowledge are in a continuous reciprocity, with each sphere of knowledge informing the other.

A radical perspective would eliminate any kind of theoretical foundation. On our side, our goal or belief is not that teachers should continuously construct new pedagogical strategies or epistemological theories to solve or understand their daily classroom problems. We contend that in order to offer a variety of theories about education, pedagogy and epistemology can meaningfully promote the act of teaching, and develop teachers' competency as well as their capacity for reflective self-development. Without a theoretical framework, knowledge remains essentially based on one's personal experience and can hardly develop (Arthaud, 1987).

A general framework of theoretical knowledge (which is presented not as truth or an end in itself but as an instrument to be analyzed, criticized, modified, adjusted and improved) is a necessary and useful component of curricula, for it can create cognitive and metacognitive conflicts in students' minds (see also Dewey, 1916/1983). Moreover, when it is interrelated to practice, theory is connected with meaning and context. It is therefore useful to verify students' beliefs, to support and clarify the act of teaching, to broaden the students' conceptions, and

to contextualize the experience of the teaching act (see Kirk, 1986).

However, we contend that the starting and end points in teacher training should be in the teaching act itself (see Daniel, in press; Dewey, 1916/1983; Kirk, 1986). Indeed, from a constructivist point of view, learning means searching for meaning and making sense in terms of what has already been experienced and is already known. Learning is an active and subjective process in which students construct knowledge and draw on their personal background experiences to make sense (Tippins et al, 1993).

In short, the principle of integration presupposes the development of autonomous, critical and responsible thinking. Studies on Lipman and Sharp's pedagogy, have shown that a philosophical community of inquiry can foster children's higher-order thinking skills (among others: Schleifer et al, 1987; Thomas, 1989). Concerning preservice teachers, we postulate that learning how to think philosophically about pedagogical and epistemological realities could help preservice teachers integrate the diversity of theories they are receiving at university and to combine them with their own teaching practice.

One could argue: Why philosophy? Our justifications appear in the next section.

PHILOSOPHICAL VALUE OF THE COMMUNITY OF INQUIRY

Philosophy is not understood here in its traditional meaning. Its essence is not found in dogmatism nor in 'truths' gathered into deep and immutable formula (Jaspers 1965, introduction). On the contrary, the role of philosophy is to question, to doubt, to criticize, to clarify, to explain ideas and beliefs that are at the basis of human activities. In this sense, doing philosophy means developing a natural curiosity and sense of wonder, becoming aware of the ambiguities, contradictions and problems that exist in society, and developing the motivation to act positively on it.

Sheedy writes that philosophy is not an activity reserved for a few professional philosophers, but concerns any practitioner. Indeed, by constructing a personal conception of her or his professional field of action and by developing a personal interpretation of this universe, the practitioner is 'doing' philosophy, for she or he questions in a critical manner some fundamental elements of her or his field (1981).

Actually, we understand philosophy as a 'critical and responsible reflexion with peers' about professional practice and educational theories. Critical reflexion helps prospective teachers 'to distance themselves from their own practice and so create enough analytic space for reflection on this practice'. (Woods, 1985, quoted by Kirk, 1986) However, critical reflexion by itself is incomplete. Caring thinking can help teachers to choose appropriate solutions when confronted with social and moral dilemmas within their daily practice (See Daniel, 1994; Sharp, 1994). Studies show that the community of inquiry can contribute to the development of caring thinking (Lipman, 1995; Sharp, 1994).

Working with philosophical concepts fosters higher-order thinking skills (Lipman, 1991). Indeed, to understand them and to construct the logic of their structure as well as their meanings, the participants have to reason, translate and get involved in research.

Also, philosophical concepts such as the self, the body, the mind, culture, education, relationships, and so on, are universal. In this sense, they are consistent with the person's fundamental interests and personal experiences and, for this reason, motivate students to 'struggle' with them. The knowledge that is then acquired by the prospective teachers does not come from outside, but from inside the self and, consequently, is significant (Daniel, 1992c).

Finally, the introduction of philosophical concepts into teacher training programs is quite educative, for once a person gets interested in the search for an ever better meaning, she or he is on a royal road to develop personal, social and political consciousness (among others: L. Legrand, 1991).

In short, the philosophical community of inquiry is a social vehicle which may lead to the development of autonomous, critical and responsible thinking, for it works at three levels: first, it is a method of personal and collective investigation of problems, involving students in the posing and solving of problems; second, it is an educational process, for it helps students to become aware of these problems and to analyze critically their causes and consequences through structured dialogues and interactions; third, it leads to action (see Daniel, 1992; Hall, quoted by Maguire, 1987).

METHODOLOGY OF THE PHILOSOPHICAL COMMUNITY OF INQUIRY

The methodology that we advocate consists of five steps: 1) being conscious of problematic and ambiguous situations in teaching physical education and keeping note of it in a reflexive journal; 2) sharing the written reflexions with the members of the community of inquiry; 3) raising philosophical questions about the pedagogical problems that have been presented to us; 4) engaging in a philosophical dialogue about it within the community of inquiry; 5) acting positively on pedagogical reality.

Step 1:

Preservice teachers are suggested to keep a reflexive journal (log) in which they write their own reflections and questions, and in which they describe, in detail, significant events that happened during their lesson. For the preservice teachers, this represents an opportunity to become aware of their thinking and to develop the habit of metareflection on their ways of doing and being while teaching physical education. Being conscious of a problem, question or particular situation is the first step in solving, answering, or improving it.

Step 2:

The reflexive logs serve as the novels in Lipman and Sharp's approach. Instead of engaging the philosophico-pedagogical dialogue with the reading of a novel (which also could happen, at times), each preservice teacher is invited to read aloud a part of her or his reflexion. Other participants are listening; they can take notes. The preservice teachers are, in turn, actor, writer, story-teller, and listener and cooperator.

Step 3:

Once everyone has presented their reflexion about an epistemological concept or pedagogical situation, the community of inquiry proceeds with the gathering of philosophical comments or questions that the previous steps may have raised in the participants' minds. Are there two or three persons who felt the same feeling, to whom the same problem happened, who wonder about the same theory, and so on? If so, the participants may decide to organize a dialogue on it; or they may organize it around any ambiguity or conflictual situation that has been presented to the group.

Step 4:

The next step is the philosophical dialogue about the topic that has been chosen by the preservice teachers (and not the supervisor or the professor). A philosophico-pedagogical dialogue is characterized by the following elements:

- the concepts that are discussed by the group have their origin in a personal and concrete problematic situation;
- the problematic situation is shared with the group not only in a descriptive fashion, but in a reflexive one. This means that it causes the participants to question, wonder, doubt or, in other words, to have cognitive conflicts;
- the dialogue is mainly involved with why the problem exists. By reflecting on the whys of the problem, the community investigates the concrete and complex social and pedagogical reality of physical education in which they live and teach, but which they may not thoroughly understand;
- because the participants meet in a large community of inquiry, the dialogue is characterized by pluralism. This implies that the exposed doubt or conflict is answered by a variety of solutions, interpretations and perspectives - which all come from a personal construction and conception of epistemology and pedagogy. It requires autonomous thinking;
- although any comment might be useful to the enrichment of the community of inquiry, all comments might not be accepted. Philosophical dialogue should never be characterized by laxism or relativism, but rather by the individual's efforts to reach a pertinent and meaningful construction. In this sense, it should be grounded on good reasons or built on sound justifications;
- even then, not all grounded justifications can be accepted to solve a problem. The variety of contexts play an important role in pedagogy. Moreover, pedagogical problems usually involve children that is,

unique people. In this sense, the justifications have to be critical that is, sensitive to the context.

As it was stated in a previous section of this paper, preservice teachers often lack the skills and knowledge for a critical analysis of their pedagogical situation. This is why this step becomes so fundamental. The community of inquiry is the locus where they can gradually learn to solve their pedagogical problems. Indeed, preservice teachers are invited to reflect on the why of their problems and construct their own solutions. In doing so, the participants are prompted to look for the theories that they have learned, examine them in a critical manner, and build on this to develop their own theories and solutions to problems.

Discussing pedagogical and epistemological questions in a philosophical (namely, autonomous, critical and caring) manner is not an easy task. It is the professor's role to guide preservice teachers (see Splitter and Sharp, in press).

Step 5.

The philosophical community of inquiry should enable preservice teachers to create their own relationships between theories and pedagogical problems, in order to improve their teaching actions.

However, the improvement of action is a never-ending process. This means that what has resulted from the dialogue within the philosophico-pedagogical community of inquiry should be considered as a mere hypothesis of solutions that may fit or may not fit in with the reality of the class. The solutions found within the community of inquiry should not be applied as 'band-aids' to the problems, but should serve as a starting point for further reflection about why and how one can contribute to the improvement of the pedagogical experience in physical education. Having identified and investigated important situations in their personal and pedagogical experience, preservice teachers should be more able to decide how to use the knowledge and skills gained.

By treating preservice teachers as objects to be counted, as machines to be developed and controlled, traditional teacher training programs reflect marginalizing social conditions which cause prospective teachers to relinquish their capacity to make real choices and to be cut out of meaningful decision-making. The collective processes of reflection in the community help rebuild the capacity of teachers and prospective teachers to be creative actors in the world (see Maguire, 1987).

As a final remark, let us mention that as a basic condition, it appears essential to work only with the prospective teachers in physical education who show a real interest in this approach. Indeed, a community of inquiry is not a collection of bodies, but rather a communion of selves. And we believe that if there is no intrinsic motivation to improve oneself or no belief in the philosophical value of dialogue to do so, that the community of inquiry will have no or little positive impact on the participants (see Daniel, 1992 a). We meet these voluntary persons in a community of inquiry for two hours once a week, for the duration of the in-service namely, 15 consecutive weeks.

CONCLUSION

In the teacher training programs in physical education, there exists, in theory, a variety of paradigms. However, the reality of the classrooms shows little diversity. Most of the pedagogical acts are oriented towards technical performance, which involves a capacity of imitation rather than creation.

To come back to the metaphor of the old man in Carl's story, we could say that educated persons usually do not know how 'to dance' in order to cure or educate people. They did not learn to listen to their 'own music'.

Based on Lipman and Sharp's pedagogy, which corresponds in essence to the socioconstructivist paradigm, we postulate that a teacher training program built on philosophical reflection, which calls for autonomous, critical and caring thinking, could give the prospective teachers some elements to improve their epistemological and pedagogical reality.

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Address correspondence to:

Marie-France Daniel
Universite de Montreal
C.P. 6128, succursale
Centre-Ville Montreal, Quebec
Canada, H3C 3J7