

THE IMPACT OF PHYSICAL EDUCATION BASED ON AUTONOMY AND RESPONSIBILITY ON STUDENTS' EVERYDAY LIFE: A LONGITUDINAL CASE STUDY

Eloisa Lorente* and Alfredo Joven
National Institut of Physical Education of Catalonia
University of Lleida, Spain

Abstract

The article intends to show the impact of a pedagogical proposal in Physical Education (PE). The proposal was focussed on autonomy, personal and social responsibility, and decision-making in order to prepare the individual to be able to keep an active lifestyle, in terms of exercising, after finishing compulsory education. This proposal could be considered as an interactive teaching model (Blanchard, 2009) in which the students play an active and reflexive role in all the decisions taken during the teaching-learning process. Also, it shares aspects with the Sport Education model by Daryl Siedentop and the Social and Personal Responsibility model by Don Hellison. The research is a longitudinal study that used an ethnographic methodology to study the teaching-learning process of a mixed group of 25 students led by a PE teacher at a school in Catalunya, Spain. The aim was to learn about students' opinion on their learning in PE lessons, their current exercise habits and their own autonomy and initiative to keep on exercising. The results show that the specific learning environment, the personality of the teacher, the teacher-student relationship, the strategies and the contents had had a significant impact on students. This impact exceeded any expectations related to concepts of physically active lifestyles and it included aspects of social awareness, responsibility, respect, empathy and recognition of the importance of PE in their lives.

Keywords: autonomy, responsibility, independent learning, physical education, self-management

Introduction

According to the guidelines provided by the government of Catalonia (in Catalan, *Orientacions per al desplegament curricular d'Educació Física* -Generalitat de Catalunya, 2010), autonomy is understood as the acquisition of tools and strategies to learn while being aware of

* Corresponding author. National Institut of Physical Education of Catalonia, University of Lleida, Spain, Partida Caparrella, s/n, 25192 Lleida, Catalonia, Spain, e-mail: elorente@inefc.es

one's own learning process. Autonomy must be an essential ability to help people to sort out new situations and experiences beyond the school environment, it must help people to adjust to the sudden changes of the current world (Kesten, 1987). The person who wants to cope well with this changing world will have to be able to develop a number of individual, social and moral skills as well as tools. As an individual, he or she will have to be able to learn on his or her own, to find out information and to make decisions. These skills will help a person to improve his or her self-esteem and to satisfy the need of freedom and the need of being responsible for one's own life. As an individual in society, a person will be involved in different situations such as agreeing or negotiating with others, defending ideas or living with someone else (Savater, 1997). These ideas, which are present in nearly all education curricula in any democratic society, agree on a main goal which is to prepare young people for lifelong learning and to be responsible citizens in a democratic society. Achieving this goal means, for instance, to present situations throughout schooling which allow the student to feel that he or she is the protagonist of his or her own learning process.

The significance of these ideas for physical education can be considered from two points of view: 1) the role of P.E. in the school curriculum and its contribution to the education of citizens, 2) the role of longitudinal studies as a way of accountability.

With respect to the first point, it is necessary to mention that P.E. plays an important role in the education of children and young people. If we consider that our current society promotes a physically active lifestyle and that it is accepted that this culture of exercising contributes to a better quality of life, then participating in this culture will require competences which need to be taught. This would justify the role of P.E. at schools in preparing the students for individual autonomy, for an active lifestyle and for being part of a culture of movement (Crum, 1994).

In addition to this, it seems that there is some consensus among the professionals of P.E. in terms of considering that this subject plays a fundamental role in promoting a physically active lifestyle throughout the life cycle. This has become evident not only by the curricular display in most curricula[†] but also at a political level in Europe by the European Parliament resolution of 13 November 2007 which says:

"...physical education is the only school subject which seeks to prepare children for a healthy lifestyle and focuses on their overall physical and mental development, as well as imparting important social values such as fairness, self-discipline, solidarity, team spirit, tolerance and fair play..."

Nonetheless, it is also important to be self-critical. There is not much evidence of the real contribution of the subject on this matter. Surveys conducted over the last 50 years about the habits of the adult population reveal that only a small proportion is physically active and even a smaller proportion keeps playing sports and games learnt at school (Engström, L. M., 2009; Kirk, 2011). According to this information, it seems that current P.E. is not achieving the expected results despite having qualified professionals (Kirk, 2011), which means that it is necessary to review the teaching of P.E. in schools. Kirk advocates a radical change in the mid and long term if we do not want P.E. to disappear from the curriculum for not being able to account for the responsibilities assigned. This radical change should consider three different aspects of P.E. teaching: 1) the student centred learning, 2) inclusion and motivation, and 3) working with pedagogical models which research has demonstrated to be effective such as *Sport*

[†] For example, it is significative the expression from Catalonia's self-government in 2010 (Orientacions per al desplegament curricular d'EF Catalunya): "In this new frame of skills in the curricula, P.E. plays an essential role since its aims are to prepare students for a healthy lifestyle and to develop multiple possibilities of physical activities for life. In this way, it is important to highlight the instrumental nature of the subject (...) During the initial mandatory stage of P.E., the foundations for acquiring and consolidating healthy routines by physical activity and sports must be laid."

Education by Daryl Siedentop, *Social and Personal Responsibility* by Don Hellison, *Education for Peace* by Cathy Ennis and *Teaching Games for Understanding* by Bunker and Thorpe.

In the last years the expectations on P.E. have increased considerably because of the benefits which have been attributed to the subject, for instance, cognitive benefits, social and emotional benefits as well as self-esteem and health. However, achieving these benefits will depend on achieving other aspects such as a high level of autonomy and responsibility for one's own habits in life. It is essential that P.E. works towards attaining this aim and it is also essential to assess the proposals or models from a longitudinal study perspective in the long term.

Hence, regarding the consequences which these ideas have on the research of the processes, we could say that it is necessary to use longitudinal studies which allow studying in depth the transference of the learning and the impact of the models in question in people's life. Only in this way it will be possible to provide some justified answers about in which way the teacher can plan a lesson which fosters and encourages the development of autonomy and personal and social responsibility.

In this paper, it will be shown the results of a longitudinal research conducted on a teaching proposal of P.E. whose aim is to promote independent learning, and it will be analysed the influence that has had on adopting physically active lifestyles.

Necessary conditions for independent learning

We could define independent learning as the learning in which a student can make the necessary decisions to fulfil one's own learning needs with the help of other relevant elements (Kesten, 1987). In this process, the student develops the values, attitudes, knowledge and skills which allow a responsible decision-making and to act on one's own learning process.

Independent learning is an aspiration which is shared by all plural and democratic societies at nearly every level of education. Every element involved in the education of a person is responsible for developing this skill but specially the family and the school. In this article, we will particularly focus on the school's responsibility because it is important to respect what most of school teaching projects express in their purposes and because as teachers we believe that teaching is not just about transferring knowledge but creating the possibilities to produce it or to build it, as Freire believed (1998). It is important that students become the producers of their understanding of the world instead of being merely recipients of what a teacher transmits. From this point of view, the teacher's role will be orientated to creating opportunities and experiences which encourages students' participation in matters that affect them, thus, fostering tolerance over different opinions and their responsibility in the institutions and the society where they belong. All this within a comfortable emotional atmosphere where there are stable patterns and everyone feels accepted (Puig y Martínez, 1989; Martínez y Bujons, 2001; Rodríguez Moreno, 2003).

Experiences which encourage decision-making and responsibility must be at the core of pedagogy of autonomy because the only way to learn to make decisions is by doing so, (Freire, 1998). Furthermore, the decision to accept the consequences of one's own decisions is part of the learning process. There is no decision without consequences whether these are clearly expected, roughly expected or completely unexpected. For this reason, decision-making is a responsible process.

The implications of these ideas on teaching will be focused on the observation of students' autonomy in any teaching activity. Autonomy is acquired throughout education, every time one learns a new skill, it becomes one's own skill and it is used in other new situations. A learning process can only be liberating if we can transfer what we learn. Only a teaching process in which its acquisitions can be used with no monitoring from the teacher and outside the learning environment allows a truly liberation of the subject (Reboul, 1972, 1999).

Nonetheless, despite it might be obvious to say that what schools offer is meant to be useful afterwards, and not just to pass an exam, apparently this is not so obvious. According to Meirieu:

“Every teacher assumes that students will learn something which will be useful later on at their own initiative and in unpredicted situations...We assume that this is going to happen but neither we can estimate the implications nor establish if it certainly happens, in a spontaneous and easy way” (Meirieu, 1998:112).

Therefore, it is important to consider the idea of the transference during the learning process. This will be possible if we are willing to allow the student to become aware of:

- one's own knowledge
- what is that knowledge for
- what to do with that piece of knowledge
- how to use it
- how to take ownership of that piece of knowledge
- how to recreate it in different new situations

But this will only happen if we can build bridges between the learning in class and the psychological, social, technical and cultural background of the child (Meirieu, 1998).

The independent learning is also an interactive process between teacher and student which fosters the intellectual development and independent and reflexive thinking skills. According to Blanchard (2009) if a teacher clearly expresses his or her expectations, the culture of the class tends to be transparent, but if teacher and students express and share their expectations, then the culture is not only transparent but also interactive. When the aim is the interaction, then the student becomes an essential part of the decision-making with the support of the teacher. In this way, an interactive model is more receptive to the perceptions and preferences of the students and it also fosters autonomy and responsibility.

The features of the interactive teaching model can be analysed from the following aspects: a) the learning environment, b) the teacher-student relationship, and c) the learning strategies used in the learning activities.

As regards the learning environment, a flexible and democratic atmosphere which is sensitive to the students' needs benefits independent learning. It is preferable when teachers and management are involved in fostering this learning environment. Also, it is necessary to start with independent learning gradually and to give more responsibilities to students in the decision-making about the process of the lesson progressively. For students to take ownership of the project, it is important how the task is presented for which a cooperative educational environment which recognises the importance of students needs is preferable to an authoritarian or permissive learning environment (Ayuste, Flecha et al., 1994). The role of the teacher is to facilitate the learning by working together with the students and being always available (Rogers, 1986; Lobrot, 1980; Ayuste and Flecha, 1994; Meirieu, 1998; Van Manen, 1998).

As regards the second aspect about the teacher-student relationship, we share Rogers' views (1986) when he says that it must be based on authenticity, acceptance, appreciation, trust and empathy. It must be based on a dialogue and on the one to one relation (Ayuste, Flecha et al., 1994). The teacher must be a committed, passionate, encouraging and assertive person -in a way that he or she becomes a safe and consistent role model- who cares for the students. The teacher must be open to listening and to discussing. It is important to establish meaningful relationships without intending to be another teenager because the teacher guides, shows paths and entrusts responsibilities (Florence, Brunelle y Carlier, 2000:49). The teacher must be involved in the

process and he or she must transmit his or her passion for teaching thus the student can perceive and take the enthusiasm and motivation from the teacher (Aebli, 1991).

Our third aspect is about the characteristics of the activities. It is worth to mention the results from Bandura's research (1997) about what do effective teachers do to organise accessible and motivating learning activities. According to Bandura's research, they organise enjoyable activities which present personal challenges by setting goals. Also, there is a variety of activities which encourage taking personal responsibility for the achievement and providing feedback about the progress. Likewise, Carr (2004) highlights that authentic and interesting tasks help students to make associations to their own lives. Accessible and clear tasks facilitate the students the understanding of what they need to do thus keeping them engage for longer. Furthermore, the students enjoy when they manage to achieve challenging and engaging tasks and the cooperative tasks allow them to share experiences and ideas.

In the following section, it will be briefly shown the main ideas of some of the models which are focused on autonomy and responsibility.

Teaching models that foster independent learning and responsibility

Among the models that emphasise independent learning, and personal and social responsibility, we would like to highlight Institutional Pedagogy [in French, La Pédagogie Institutionnelle], whose main representative is Michel Lobrot and which saw its most successful period during the 80s. Also, we would like to mention Sport Education by Daryl Siedentop and Teaching Personal and Social Responsibility (TPSR) by Don Hellison particularly in Physical Education.

Michel Lobrot's Institutional Pedagogy carries out the idea of the students being responsible to the very end. He proposes a self-management model beginning in the classroom and reaching the whole scholastic institution hence its name Institutional Pedagogy. Students have a high level of participation in decision-making across all management areas, i.e. from deciding what to learn, how and when to do so up to organisational issues in the school (Lobrot, 1980). The teacher is available for the students whenever they decide they need the teacher's intervention.

We also would like to highlight some models which specifically address the issue of students' responsibility in decision-making in P.E. First of all, the Sport Education model which is rooted in games and sports and according to its author, Daryl Siedentop it is:

“(...) a curriculum and instructional model designed to provide authentic, educationally rich sport experiences for girls and boys in the context of school physical education (...) Students participate in seasons that are often two to three times longer than typical physical education units. Students become members of teams immediately, and this affiliation allows students to plan, practice, and compete together, as well as benefit from all the social development opportunities that accompany membership in a persisting group. A schedule of competition is organized at the outset, which allows learners to practice and play within a predictable schedule of fair competition. A culminating event marks the end of the season and provides both the occasion to mark progress and the opportunity to celebrate successes. Records are kept and used for purposes of motivation, feedback, assessment, and the building of standards and traditions. The entire season is festive with continuous efforts made to celebrate success”. (Siedentop, 2002:409).

Something that especially characterises this model is that students go beyond adopting a simple performer role since in each term they learn and adopt different roles such as referee, score keeper and performance statistics keeper. Over different terms, they will have adopted the roles of coach, manager, team publicity director and team trainer.

The aim of this model is to support students to become people who are competent, literate and enthusiastic sportspersons. This is also important for its similarity to the proposal studied in

this research. In both models, the students learn from their peers in the context of being members of a team, which is an example of peer tutoring and self-management.

By the 90s, there were over 50 studies on this model and at the beginning of following decade it had already been tested by a great number of teachers all over the world (Siedentop, 2002). The results of these studies show how “the teachers recognized the gains being made by students and also valued the manner in which students took responsibility for their own sport participation, freeing the teacher from typical managing duties and allowing him or her to interact with students more around the substantive issues of the season (Grant, 1992; according to Siedentop, 2002). Currently this model is spreading in terms of both practice and research (Hastie, 2011).

The second model that we would like to highlight is Teaching Personal and Social Responsibility (TPSR) proposed by Don Hellison in 1978, which is still in use and is subject of research after 40 years of its creation.

The main aspects of this models are: a) teaching skills and values for life must be integrated into physical activities and must not be taught separately; b) lessons learnt in the gym must be taught for them to be transferred to the participants’ life afterwards; c) teaching strategies must be based on the gradual change of responsibility from the teacher -or leader- to the participant; d) for succeeding in these, the teacher must acknowledge and respect the individuality, the strengths, opinions and the ability for decision-making of each participant.

In this way, Hellison decided to develop a set of alternative goals for physical education which were more focused on human needs and values, than only on a physical aspect and sport skills (Hellison, 1985, Tinning, 1992). The model is designed with the aim of providing adolescents and young people, particular those at social risk, experiences of success which will foster the development of personal and social skills and social responsibility both in sports and in life. According to TPSR there are two values associated with personal development and well-being which are effort and self-management. There are also two values associated with development and social integration; these are respect for the feelings and rights of others, and the ability to listen and to be in someone else’s place, respectively. When adolescents can understand these values and behave accordingly, they have reached what this model define as the level of personal and social responsibility (Escartí, Gutiérrez, Pascual, Marín, Martínez, & Chacón, 2006)

In the 40 years of existence of this model, there have been many experiences and numerous studies about its application and its impact on young people at social risk. Despite some claims about methodological gaps in its application, there is some agreement on its benefits. According to research, there is evidence of improvements in self-control behaviour and a decrease in anti-sport behaviours (Ceccini, Montero y Peña, 2003). There is also evidence of an increase in self-directed behaviours, as well as, an increase in helping others, in decision-making and in taking on responsibility (DeBusk and Hellison, 1989). Furthermore, it improves interpersonal relationships and team work, among other skills (Hellison and Walsh, 2002:333).

Nonetheless, research also found out that there are difficulties to achieve some of the goals of this model such as the difficulty to establish personal goals (Martinek, Schilling and Johnson, 2001).

As we will show below, the proposal studied in this research presents characteristics from the models described above.

Method

An interactionist educational ethnography from a naturalistic standpoint (Lincoln and Guba, 1985; Rodriguez, Gil and Garcia, 1996) has guided the research of an unique and intrinsic longitudinal case of 12 years long (Bodgan and Biklen, 1982; Stake, 1998). The educational ethnography approach allows reconstructing the life of a social group from gathering valuable first-hand information such as descriptions of contexts, activities in which members of a group take part and the group's belief (Goetz and Lecompte, 1988). In this particular case, it allowed understanding and reconstructing the teaching-learning process conducted by a teacher with his class. The requirements of Spindler and Spindler for executing a good ethnography (1992) have been considered in the design of this research.

Symbolic interactionism has been the theoretical framework for this study. This approach allows attributing great importance to the social meanings that people assign to their worlds (Blumer, 1969; Taylor and Bodgan, 1986). This research complied with the methodology that Woods (1998) proposed for using interactionism (Lorente, 2005, 150).

Participants

The study took place at a private school of a not too big city -120.000 inhabitants- in Cataluña, Spain. The study focused on one P.E. teacher with the same mixed class of 25 children. This teacher had a degree in P.E. and a varied professional experience in the fields of sports and P.E. activities. He was a highly motivated teacher with good communication skills who had been influenced by the ideas of critical pedagogy.

During the first year of this research, two observers attended all the lessons in which it was carried out the experience of self-management. Over the following years, only the main researcher collected information about the development of the proposal.

Intervention

The teaching model of the teacher can be described as an interactive model as it is explained by Blanchard (2009). However, the study focuses on his teaching proposal which he names as self-management. In this proposal, the students became the protagonists, they proposed an activity and they decided on it with their classmates and the teacher. Once the activity was agreed, they designed it and executed it and at the end of the lesson there was a reflection, which started with a self-assessment and finished with constructive comments from classmates. In other words, for one day the students took the role of the teacher in which they were responsible for the design, the organisation and the management of the class. Here we would be talking about a teaching activity which stresses independent and cooperative learning, personal and social responsibilities, and critical thinking[‡].

The research is divided in three stages (figure 1):

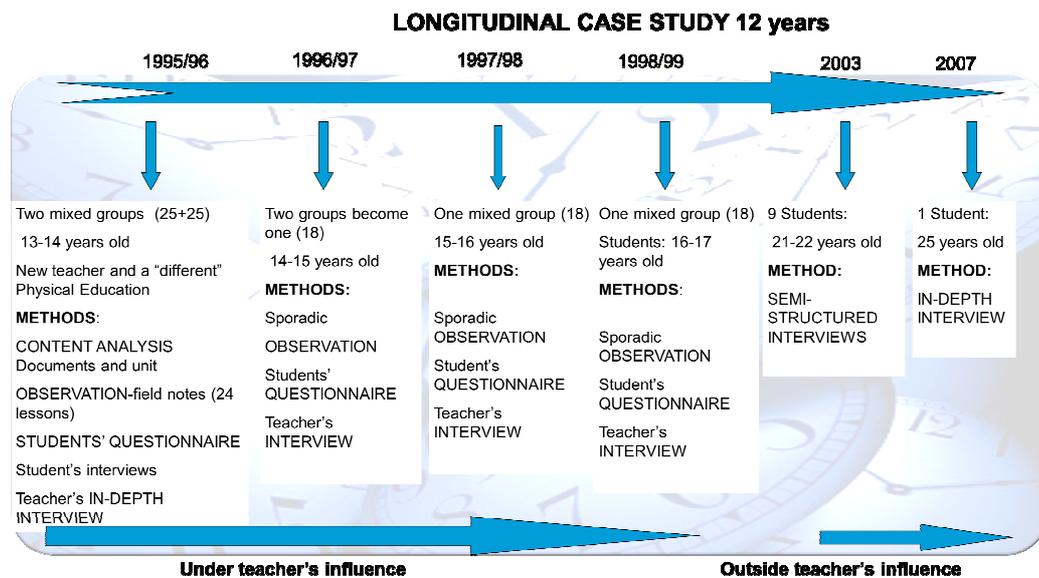
- a) The first stage corresponds to the first four years of Secondary Education from 1995 to 1999. The first academic year –from 1995 to 1996- was characterized by intensive observation of classes devoted to self-management, which took place during the last quarter. At the beginning of this research, the students were 13 years of age. From 1996

[‡] For more information about the characteristics and working of the proposal see: Lorente, E. (2008). “Estimular la responsabilidad y la iniciativa: autogestión en Educación Física”, *Apunts Educació física i esport*, 92, 2nd trimestre, 26-34.

to 1999, we kept contact with the teacher and the students at different times by interviews or open questionnaires to gather information about the changes at the moment of putting this teaching proposal into practice and the students' perception about the proposal itself.

- b) The second stage corresponds to contacting the students three year after they left school and away from the influence of the school and the teacher. In 2003, 9 out 18 students that finished school were interviewed about their experience in self-management lessons and whether this had had any impact on their everyday life.
- c) The third stage took place 8 years after leaving school, in 2007. An in-depth interview was conducted to one of the students who now were 25 years old –12 years after the exposure to the first time experience- with the purpose of knowing the impact of the experience in the long term.

Figure 1. Design of the research



Research questions

The purpose of the whole research was to reconstruct the teaching-learning process as it was perceived by the participants –teacher, students and observers-, thus to find out the effects of the experience years afterwards, away from the school environment.

These are the initial research questions:

- How is conducted a pedagogical proposal based on self-management?
- How is this perceived and experienced by the participants?
- What type of relationships is established during the process?
- What do students learn from this process?
- What is the purpose of this process according to the students?

Later on, it was considered interesting to add a final question, in which this paper is based, to answer from a time perspective:

- What impact has this experience had in their lives over time?

Data generation and analysis of information

The procedures and techniques employed to explore the social reality and to gather information were based on field notes from lesson observations, a log of different particular situations, semi-structured and non-structured interviews for memory stimulation, in-depth interviews, recorded log of the reflections at the end of the lessons, school documents, teacher's documents, students' work and open questionnaires (Lorente, 2005, Lorente and Joven, 2009).

Nonetheless, this paper only focuses on 9 semi-structured interviews conducted in 2003, three years after finishing school and on one in-depth interview conducted 8 years after, in 2007, to one participant.

In 2003, after 8 years of the first experience of independent learning in 1995, there were two important aspects to find out. Firstly, how the students used what they had learnt in these P.E. lessons and particularly during the experience of self-management. Secondly, what memories they had about it, in order to know what had had a stronger impact on them. Despite having been an object of study during the whole secondary education, it was more meaningful to find out about these two issues once the students had left school and had been away from the influence of the teacher. Nine students who had participated in the experience were selected randomly to conduct a semi-structured interview with each one of them.

In order to achieve high standards, it has been used four indicators: credibility, transferability, consistency and neutrality (Lincoln and Guba, 1985). Particularly, methodological and temporal triangulation and revision have given consistency and credibility to this study.

Results

Impact of the model from a time perspective

In first place, one of the aspects which had the strongest impact on the students was the close relationship between teacher and students characterised by trust and respect. These are concepts which were strongly defended by renowned authors such as Freire (1998), Rogers (1986), Ayuste & Flecha (1994), Meirieu (1998), Aebli (1991) and Florence et al. (2000). This is how students referred to this:

“Today I can say that K had a strong influence in my life. In the way he used to talk to us, the way he taught his lessons, the topics...and ultimately, his way of transmitting values because we always were present in his decisions” (Juan, 21 years old)

“We were always at the same level. There wasn't such a thing of teacher and students. It was more like friend to friend.” (Ana, 22)

Second, the students agree that one of the things that impressed them most was the possibility to decide and choose what they wanted to learn. The students are motivated when they have the opportunity to decide about their learning (Ayuste & Flecha, 1994; Fernández-Balboa, 2002). Furthermore, the fact of becoming involved in the process gives them confidence in themselves, which confirms the importance of becoming aware of a particular skill to increase intrinsic motivation thus to develop a lasting behaviour (Kirk, 2010; MacNamara, Collins, Toms, Ford and Pearce, 2011). The students have said:

“It was really impressive when the teacher asked me what I wanted to do during the P.E. class. Then I realised that something had changed and things were getting more difficult. Now we had to make decisions and this is one of the most difficult things in life.” (Pedro, 22)

“Self-management is a way of realising that things in life are not ready made for you. You have to work for it and when you achieve it, you feel much better because you worked for it.” (Toni, 22)

Thirdly, it is important to highlight that the students appreciated the variety and creativity of the lessons. This matches the results shown by the research about accessible and motivating learning activities (Bandura, 1997). This was a repeated opinion throughout schooling when students were asked to describe their ideal P.E. lesson:

“I remember self-management lessons. I learnt that physical activity is not only about press-ups and running, there are other ways which are more fun and enjoyable.” (Paula, 21)

Applications of this type of learning and the transference to new situations

According to Reboul (1989), only a teaching process in which its acquisitions can be used with no monitoring from the teacher and outside the learning environment allows a truly liberation of the subject. Through the students' opinion, we could corroborate the perception they had about the reasons for learning a particular subject, its potential applications, and the transference of this learning to other situations. We compared the reasons given by the students while they were under the influence of the teacher, with the actual application of that knowledge in their everyday life. We found out that there were connections between the two; however, there were also some applications which had not been considered before.

During school, some students said that what they had learnt would be useful for when they start teaching others. In fact, this could be observed in some cases. For instance, one of the students said that he puts into practice aspects from self-management and from the teacher-student relationship with his hockey players:

“I am studying to be a teacher and a degree in Geography. I am also a hockey coach and everything I learnt – with something else from my own – I have been using it with my players. So, a good level of concentration and a positive attitude towards the game, whether individually or in the team, is achieved by talking and sharing some constructive comments... similar to what we used to do with teacher K. Our mentality as individuals, from my viewpoint, it developed and became more mature. I believe that this is a goal that I always try to achieve by analysis, change and optimisation of possibilities...” (Juan, 21)

Also, another student believed the model shown by the teacher, particularly regarding the teacher-student relationship. She thought it would be the most appropriate model if one day she becomes a teacher:

“I have studied social education and having learnt the way this teacher has dealt with us has given me a role model for when I become a teacher someday.” (María, 21)

The students found another useful aspect while they were still in school which was to consider P.E. in a more positive way than before as a result of changing the concept, something that repeatedly appeared in the interviews and that it is directly associated with other positive appreciations such as the enjoyment, keeping a healthy life and developing your mind.

“It has helped me in several ways. I have learned to know that sport is a part of P.E. and not the only thing in P.E.; so, P.E. turned out to be a good subject and one of the most important subjects to me. I have learnt to know what is good and bad for my body. I have learnt to be more social and to have a healthy life. I run out of words when it comes to express what P.E. meant to me in my life.” (Eduardo, 22)

“Yes. I changed my mind. I changed the idea I had about P.E. I still have K's lessons in my mind which have been very important, as the day we played bowling. I never thought that we could relate P.E. to bowling! Also, the good sense of humour. I changed a lot my idea about P.E. and my own practice. It has helped me appreciate more the meaning and importance that P.E. brings into my life, since it helps me take care of my health and enjoy it.” (Toni, 21)

The students, who have already completed their studies, talked about other useful aspects, which by 1999 were only expectations but now these were facts such as increasing self-confidence and learning from mistakes.

“It has helped me to learn that when I set myself a goal, I can achieve it and that I can always learn something –good or bad - from mistakes.” (Montse, 21)

Also they found other useful aspects which they could not foresee while they were in school, such as time management, i.e. managing free time and obligations.

“It has helped me to learn how to organise my time in terms of studying and free time. For example, the time for studying can be split into three parts: 1) something similar to a warm up session would be reading about a topic, 2) proper study and then 3) slowing down and relaxation. About my free time, now I get bored and I am always thinking about what I could do.” (Rosa, 22)

The impact on autonomous practice of physical activity

This research was also designed to find out whether these people had been able to manage their own physical activities in their everyday life since this had been one of the main goals of the self-management in P.E. lessons. It is important to take into account that believing that you can do something it is different from actually doing it, since there may be multiple reasons that prevent the action. In the same way, there may be many variables which may have had an influence on the decision of practicing physical activities. Therefore, it is important to be careful when stating that current habits are a result of previous experience in physical education. In any case, in the general context of the interviews, they attributed the fact that they currently practice physical activities to their physical education in school.

Out of the nine former students interviewed, only one said to practice physical activities on his own -bike or running-, in addition to an organized activity also. From these nine, seven students used to practice some kind of regular physical activity in an organized way, and two did not practice any at the time due to lack of time since they were studying a degree, though they had practiced P.E. during schooling. We wanted to find out whether they were able to practice a non-organised physical activity. Most said yes, but not any kind of activity. Also it should be considered that five former students had some experience in working with groups, which would make it easier to make them feel ready for it.

In the light of this information, we see that the majority preferred an organised activity, for two reasons: they had the obligation and they could practice it with colleagues or friends [in 4 cases this was a collective activity whereas in 2 cases it was individual] According to what they said, this physical activity allowed them to relieve tensions and improve endurance as well as have fun, socialise with friends, and make new friends. In addition, it also allowed them to unwind, feel good about themselves, burn calories and keep their weight.

Most claimed to having good habits, which allowed them to lead healthy lives, except one who acknowledged having some bad habits, but nevertheless, as soon as his fitness declined, he decided to go to the gym. This person admitted that his habits regarding physical activity had changed when the habits of his group of friends had changed, which could be an indicator of a lack of habit.

In 2007, twelve years after the first experience, one of the former students, who had taken part in the experience, was contacted to participate in an in-depth interview. During this interview we could corroborate that her memories about this experience were still quite vivid. She stated that the experience had had an impact on many aspects of her life, which confirmed what was already mentioned in the results of the previous interviews.

“Yes, I myself have learnt to accept that I need to exercise otherwise I feel tired for no reason and as the years go by my body feels worse. Despite being young, we must be aware of the importance of exercise or physical activity and get rid off the myth of the gym, since there are many physical activities which do not require a close space and you exercise in the same way.” (María, 25)

Furthermore, we want to highlight that the teacher who had a stronger impact on her life during school has been her P.E. teacher. As she mentions, there were several reasons for this but particularly it was the close teacher-student relationship based on respect and empathy and also his teaching style which was democratic and it was based on autonomy and responsibility.

“I am not mistaken if I say out loud that my P.E. teacher in the last years of school was the one who had the strongest impact on me. The reason why... it is difficult to mention one reason only, since there are many things that I could point out such as when K asked us to call the teacher by the name and not as Mr or Mrs... I believe that at some point every student is afraid of doing something wrong and of asking the teacher when they have doubts, but our teacher had a different way of teaching lessons which, I think, was the secret to have had such a nice atmosphere during lessons. The teacher was not on any higher platform though we were aware of the difference between the teacher and us. We could give our opinions and share ideas as well as propose activities, which was something no one had asked us to do before. It wasn't just about a nice personality, but it was about a new way of teaching. The fact that K could teach us something and we had the possibility to teach something too, was very important and we can recognise this years later.”

Discussion

As we mentioned at the beginning of this paper, there is a great consensus among P.E. professionals in schools in considering P.E. as a subject which must have an important impact on habits and active lifestyles in adulthood. However, there is also evidence indicating that up until now P.E. has failed in attaining this goal (Engstrom, 2009; Kirk, 2010). Some authors claim that many current curricular models in P.E. do not provide children and young people the skills to keep them involved in sports (MacNamara, Collins, Bailey, Toms, Ford and Pearce, 2011). If so, the challenge is to research the conditions or features that physical education should have if it aspires to achieve this goal.

In fact, there is increasing evidence which suggests that the intentions of being physically active and actually exercising are positively related to intrinsic motivation, where demotivation and external regulation would represent a negative aspect (MacNamara et al, 2011; Standage, Duda and Ntoumanis, 2003). This intrinsic motivation or self-determined behaviour takes place when a person performs an activity with the intention of having a pleasant experience, learning something new and/or developing a skill (Yli-Piipari, Watt, Jaakkola, Liukkonen and Nurmi, 2009). According to this, it would be evident to conclude that a teacher's role is to develop this

intrinsic motivation in the students so that they can keep an interest in physical education once they have finished school and they are away from the teacher's influence, i.e. in adulthood. Nonetheless, this is just one purpose which requires definition and a precise action plan to be able to be materialised in practice.

In this way, we find some explicit guidance in Peter Hastie's words (2010) when he defends that to develop a notion of 'me as a mover' we need to promote positive experiences, a good perception of one's own competence and opportunities to engage in physical activity and, in researching it, matching these characteristics with outside engagement, perceptions of success, motivation, and the probability of continuous engagement. Also, we find guidance in the words of David Kirk (2011) who says that to face the challenges of the 21st century we need student-centred models in P.E. which stress two fundamental concepts which are inclusion and intrinsic motivation, and the latter begins by having a good perception of one's own competence.

Sharing some of these ideas as guidance, the case study led us to consider the autonomy and self-determination of students stressing the methodology rather than the contents. Nonetheless, the results show these contents had a significant impact since these were different from what the interviewees were used to do in previous years, and also overcame stereotypes about physical education. This shows that everything including physical education has suffered important changes in recent years. There are still some models in our cultural heritage which will require longer than desired by teachers to be changed. In short, unfortunately 30 years after, we still need to challenge the so-called Commonsense Consensus, which was mentioned by authors such as Hargreaves (1997) or Whitehead and Hendry (1976).

Based on this research, we believe that a methodology which considers the student's voice enables students to make decisions and to take ownership of their learning process, will benefit self-confidence and intrinsic motivation, which are needed to consolidate and keep the behaviour we seek, i.e. positively appreciating physical activity and adopting physical activities as a habit throughout their lives.

We hope that the results of this longitudinal study will suggest some action plans. As it has already been mentioned, this research intends to find out the effect or impact of a student-centred teaching, which focuses on autonomy and personal and social responsibility, on the self-regulation of the learning process and on the regular practice of physical activity.

We found out that there is a clear increase in awareness and motivation regarding physical activity. There is greater autonomy to choose the kind of activity and greater confidence in oneself to self-regulate behaviour when it deviates from the desirable. These findings are consistent with other research carried out with similar models in different cultural contexts (Cardon, G. M., Haerens, L. E., Verstraete, S., & de Bourdeaudhuij, I., 2009; Dowda, M. C., Sallis, J. F., McKenzie, T. L., Rosengard, P. R. & Kohl, H. W., 2005).

Yet, we still think that it is difficult to answer the question of what kind of physical education or what pedagogical models can develop the necessary skills to maintain a self-determined physically active lifestyle. The evidence in this research shows that the learning environments, the personality of the teacher, the teacher-student relationship, the strategies and the contents have had a significant impact. This impact exceeded any expectations related to concepts of physically active lifestyles and it included aspects of social awareness, responsibility, respect, empathy and recognition of the importance of physical education in their lives. Some of the interviewees were confident and knew what they wanted though some could not put it into practice. Some also expressed a clear stance relating integration into social activities and P.E. lessons.

Finally, we believe that the greater difficulty lies in finding out whether the students achieved the necessary self-esteem, self-direction and self-determination to participating in today's changing society in an effective way, beyond the results of our research. More

longitudinal studies are necessary to be able to assess the benefits of pedagogical models in the long term. In this way, we will only be able to find out or obtain a closer answer. In the worst-case scenario, needs will have changed by then and the models will have become obsolete. Yet, we are convinced that the attempt is worthwhile.

References

- Aebli, H. (1991). *Factores de la enseñanza que favorecen el aprendizaje autónomo*. Madrid: Narcea.
- Ayuste, A., Flecha, R., López, F., y Lleras, J. (1994). *Planteamientos de la pedagogía crítica. Comunicar y transformar*. Barcelona: Graó.
- Bain, L. (1985). The hidden curriculum re-examined. *Quest*, 37, 145-153.
- Bandura, A. (1997). *Self-efficacy: the exercici of control*. New York: Freeman.
- Blanchard, J. (2009). *Teaching, Learning and Assessment*. Mc Graw Hill. Open University Press.
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Englewood Cliff NJ: Prentice Hall.
- Bodgan, R. C., & Biklen, S. K. (1982). *Qualitative Research for education: an introduction to theory and methods*. London: Allyn and Bacon.
- Cardon, G. M., Haerens, L. L., Verstraete, S., & Bourdeaudhuij, I. de (2009). Perceptions of a school-based self management program promoting an active lifestyle among elementary schoolchildren, teachers and parents. *Journal of Teaching in Physical Education*, 28, 141-154.
- Carr, M. (2004). *Assessment in Early Childhood Settings: Learning Stories*. London: Paul Chapman.
- Ceccini, J. A., Montero, J., & Peña, J. V. (2003). Repercusiones del Programa de Intervención para Desarrollar la Responsabilidad Personal y Social de Hellison sobre los comportamientos de fair-play y el auto-control. *Psicotema*, 15(4), 631-637.
- Crum, B. J. (1994) A Critical Review of Competing Physical Education Concepts. In: J. MESTER (Ed.), *Sport Sciences in Europe 1993 - Current and Future Perspectives* (pp. 516-533). Aachen: Meyer & Meyer.
- De Busk, M. & Hellison, D. (1989). Implementing a PE self-responsibility model for delinquency-prone youth. *Journal of Teaching in Physical Education*, 8, 104-112.
- Dowda, M. C., Sallis, J. F., McKenzie, T. L., Rosengard, P. R., & Kohl, H. W. (2005). Evaluating the sustainability of SPARK physical education: A case study of translating research into practice. *Research Quarterly for Exercise and Sport*, 76, 11-19.
- Engström, L. M. (2009). Who is physically active? Cultural capital and sports participation from adolescence to middle age: A 38-year follow-up study. *Physical Education & Sport Pedagogy*, 13(4), 319-343.
- Escartí, A., Gutiérrez, M., Pascual, C., Marín, D., Martínez, C., & Chacón, Y. (2006). Enseñando responsabilidad personal y social a un grupo de adolescentes de riesgo: un estudio observacional. *Revista de Educación*, 341, Septiembre-diciembre, 373-396.
- Fernández-Balboa, J. M. (1993). Sociocultural characteristics of the hidden curriculum in Physical Education. *Quest*, 45, 230-254.

- Fernández-Balboa, J. M. (2002). Pedagogía crítica y educación física en la escuela secundaria. *Quaderns digitals*.
- Florence, J., Brunelle, J., y Carlier, G. H. (2000). *Enseñar Educación Física en Secundaria*. Barcelona: Inde.
- Freire, P. (1998). *Pedagogía de la autonomía: saberes necesarios para la práctica educativa*. México D.F.: Siglo XXI editores.
- Goetz, J. P. y Lecompte, M. D. (1988). *Etnografía y diseño cualitativo en investigación educativa*. Madrid: Morata.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in Qualitative Research. In N. K. Denzin & Y. S. Lincoln (Eds.) *Handbook of Qualitative Research* (pp. 105-117). Thousands Oaks, CA: Sage Publications.
- Hargreaves, A. (1997). *Rethinking Educational Change with Heart and Mind*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Hastie, P. (2010). Putting pedagogy back into sport pedagogy research: A case for more applied research in physical education. Paper presented in the SIG BERA. Invisible College. U.Warwick.
- Hastie, P., Martínez de Ojeda, D., Luquin Calderon, A. (2011). A review of research on Sport Education: 2004 to the present. *Physical Education and Sport Pedagogy*, 16(2), 103-132.
- Hellison, D. R. (1985). *Goals and Strategies for Teaching Physical Education*, Champaign, IL: Human Kinetics Publishers.
- Hellison, D. & Walsh, D. (2002). Responsibility-based Youth Programs evaluation: investigating the investigations. *Quest*, 54, 292-307.
- Kesten, C. (1987). *Independent learning: a common essential learning : a study completed for the Saskatchewan Department of Education, Core Curriculum Investigation Project*. University of Regina, Faculty of Education, Saskatchewan.
- Kirk, D. (1990). *Educación Física y curriculum*. Valencia: Universitat de València.
- Kirk, D., & MacPhail, A. (2002). Teaching Games for Understanding and Situated Learning: Rethinking the Bunker-Thorp Model. *Journal of Teaching in Physical Education*, 21(2), 177-192.
- Kirk, D. (2010). *Physical Education Futures*. London: Routledge.
- Kirk, D. (2011). Physical Education for the 21st Century (to be published in S.Capel and M. Whitehead (eds.) *Debates in Physical Education*. London: Routledge.
- Lapassade, G. (1986). *Autogestión pedagógica: un sistema en el cual los educandos deciden en que consiste su formación y la dirigen*. Barcelona: Gedisa.
- Lincoln, Y. & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills: Sage Publications.
- Lobrot, M. (1980). *Pedagogía Institucional. La escuela hacia la autogestión*. Buenos Aires: Humanitas.
- Lorente, E. (2005). *Autogestión en Educación Física. Un estudio de caso en Secundaria*. Universidad de Barcelona Tesis Doctoral. Publicación digital.
- Lorente, E. (2008). Estimular la responsabilidad y la iniciativa: autogestión en Educación Física. *Apunts Educació física i esport*, 92, 2nd trimestre, 26-34.
- Lorente, E. & Joven, A. (2009). Autogestión: Una investigación etnográfica. *Cultura & Educación*, 21, 67-69.

- Manifiesto del Parlamento Europeo en defensa de la Educación Física y el Deporte.* (2007).
- Marcoux, M., Sallis, J. F., McKenzie, T. L., Marshall, S., Armstrong, C. A., & Goggin, K. J. (1999). Process evaluation of a physical activity self-management program for children: SPARK. *Psychology & Health, 14*, 659–677.
- Martinek, T., Schilling, T., Johnson, D. (2001). Transferring personal and social responsibility of underserved youth to the classroom. *The Urban Review, 33*(1), 29-45.
- Martínez-Martín, M. y Bujons., C.(coords); Fleck, M. y Prats, E. (2001). *Un lugar llamado escuela. En la sociedad de la información y de la diversidad.* Barcelona: Ariel.
- MacNamara, A, Collins, D., Bayley, R., Toms, M., Ford, P., & Pearce, G. (2011). Promoting lifelong physical activity and high performance; realising an achievable aim for physical education. *Physical Education and Sport Pedagogy, 16*(3), 265-278.
- Meirieu, P. (1998). *Frankenstein Educador.* Barcelona: Laertes.
- Orientacions per al desplegament curricular d'Educació Física* (2010) Generalitat de Catalunya.
- Puig, J. M. y Martínez, M. (1989). *Educación moral y democracia.* Barcelona: Laertes.
- Reboul, O. (1972). *¿Transformar la sociedad? ¿Transformar la educación?* Madrid: Narcea.
- Reboul, O. (1989). *La philosophie de l'éducation.* Paris: PUF.
- Reboul, O. (1999). *Los valores de la educación.* Barcelona: Idea Books.
- Rodríguez, G., Gil, J. y García, E. (1996). *Metodología de la investigación cualitativa.* Málaga: Ediciones Aljibe.
- Rodríguez Moreno, M. L. (2003). *Como orientar hacia la construcción del proyecto profesional. Autonomía individual, sistema de valores e identidad laboral de los jóvenes.* Bilbao: Desclée de Brouwer.
- Rogers, C. (1986). *Libertad y creatividad en educación en la década de los ochenta.* Barcelona: Paidós.
- Santos Guerra, M. A. (1995). *La evaluación: un proceso de diálogo, comprensión y mejora.* Málaga: Akal.
- Savater, F. (1997). *El valor de educar.* Barcelona: Ariel.
- Spindler, G. (1982). *Doing the Ethnography of Schooling: Educational Anthropology in Action.* New York: Holt, Rinehart.
- Spindler, G., & Spindler, L. (1992). Cultural process and ethnography: an anthropological perspective. In M.D. LeCompte, W.L. Millroy and J. Preissle (Eds.) *The handbook of qualitative research in education* (pp. 53-92). New York: Academic Press.
- Standage, M., Duda, J. L. and Ntoumanis, N. (2003). A model of contextual motivation in physical education: An Integration of self-determination and goal perspective theories in predicting leisure-time exercici intentions. *Journal of Educational Psychology, 95*, 97-110.
- Siedentop, D. (2002). Sport Education: A Retrospective. *Journal of Teaching in Physical Education, 21*, 409-418.
- Silverman, S., & Ennis, C. (2003) *Student learning in physical education: Applying research to enhance instruction.* Champaign, IL: Human Kinetics.

- Sparkes, A. C. (1991). *Perspectivas del curriculum de Educación Física: una exploración del poder, del control y de la ubicación del problema*. Comunicación presentada en el VIII Congreso Nacional de Educación Física de E.U. de Formación del Profesorado de EGB., Cuenca.
- Stake, R. E. (1998). *Investigación con estudio de casos*. Madrid: Morata.
- Stenhouse, L. (1987). *Investigación y desarrollo del curriculum*. Madrid: Morata.
- Taylor S. J. y Bodgan, R. (1886). *Introducción a los métodos cualitativos de investigación. La búsqueda de significados*. Buenos Aires: Paidós.
- Tinning, R. (1992). *Educación física: la escuela y sus profesores*. Valencia: Universidad de Valencia. Edición inglesa Deaking University.
- Van Manen, M. (1998). *El tacto en la enseñanza. El significado de la sensibilidad pedagógica*. Barcelona: Paidós.
- Whitehead, N. J., & Hendry, L. B. (1976). *Teaching Physical Education in England: Description and Analysis*. London: Lepus Book.
- Woods, P. (1998). *Investigar el arte de la enseñanza. El uso de la etnografía en la educación*. Barcelona: Paidós.
- Yli-Piipari, S., Watt, A., Jaakkola, T., Liukkonen, J., & Nurmi, J. (2009). Relationships between physical education students' motivational profiles, enjoyment, state anxiety, and self-reported physical activity. *Journal of Sport Science and Medicine*, 8, 327-336.

Acknowledgements

We would like to thank the school, the teacher (K.L.) and all the students involved in this research for their collaboration and support.

Submitted November 8, 2011

Accepted December 15, 2011