

An instrument to analyse the representation of socio-constructivist approach in Wallonian physical education teachers



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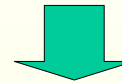
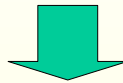
Statement of the problem

- ◆ Socio-constructivism is a learning process where people build their knowledge with help of interactions with others as well as with their milieu.
- ◆ The support to teaching strategies respecting the principles of socio-constructivist approaches is growing in the field of education (Azzarito & Ennis, 2003; Silverman & Ennis, 2003).
- ◆ PE teacher educators propose more and more this concept as a guide to their students. Interventions are also proposed to make inservice teachers sensitive to it.
- ◆ Through regular contacts with PE teachers, it appeared that most of them seemed lacking information on the basic knowledge about socio-constructivist educational theory.
- ◆ This observation founded support in recent data coming from a study focused on basketball teaching showing that strategies used by PE teachers in Wallonia can be considered as "traditional", meaning that educators present a "technicist" approach (Frédéric et al, 2009).
- ◆ We could hypothesise that many teachers are not yet aware about the existence of different pedagogy and/or how to modify their usual way of teaching to import progressively principles of socio-constructivism.

Goals of the study and Methods

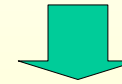
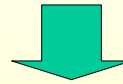
- ◆ To identify Wallonian PE teachers' representations about socio-constructivist approach.

- ◆ To develop an instrument aiming to investigate to what extent PE teachers use social-constructivist strategies.



- ◆ One four level scale
- ◆ One open ended question
- ◆ See Appendix 1

- ◆ Reference to the dimensions of socio-constructivism theory (Jonnaert & Vander Borgh, 2006; Parmentier & Paquay, 2002).
- ◆ 24 six-level scales (see Appendix 2).
- ◆ Questionnaire validated by 5 experts in teacher education.
- ◆ Pilot study with 10 PE teachers.

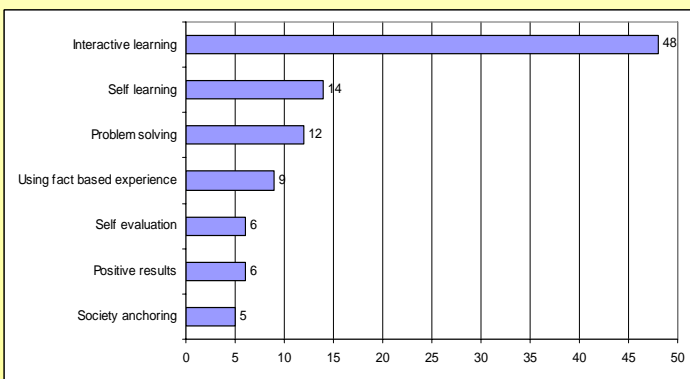


- ◆ Questionnaire on Internet (www.surveymonkey.com)
- ◆ Snowball sampling (Giannelloni et Vermette, 2001)
- ◆ Data collecting during 4 weeks (January 5 to February 5).
- ◆ N = 123

- ◆ Classification of the open ended answers in an inductive system of categories (inter observer agreement = 91%).
- ◆ The test of comparison of two proportions was used with a limit of .05 for significance (Statistica, 2006).

Results and discussion

- ◆ 41.1% of the teachers did not have an idea about what "socio-constructivism" is; 33.1% mentioned having vague idea; 23.1% had a global view while only 2.5% considered knowing exactly what it means.
- ◆ 56.5% of the teachers proposed one definition; it provided 100 items classified into 7 categories. Interactive learning represented almost one half of the items. This underlines the central place that PE teachers give to collaboration between students. Answers could correspond more to teachers' deductive reflection (semantic interpretation) than to a real knowledge about pedagogical concepts.
- ◆ Other categories are linked to the dimensions described by Jonnaert & Vander Borgh (2006): socio + constructivist + interactive. Socio-constructivism is a learning process where people build their knowledge with the help of interactions with others as well as with their milieu.
- ◆ Findings underline the weakness of the teachers' education process in awakening to "new" concepts. This is contradicting what official texts ask through defined teachers' competencies (Ministère de la Communauté française, 2001).



- ◆ No correlation between the number of items and teaching experience or days' number of inservice training. It could be linked to a lack of focus of teachers' instructors as well as to teachers' resistance to change.
- ◆ Analysis of the "usual" teaching approaches did not allow to identify clear trends in PE teachers but the latter seem to be more "traditional" than involved in "new" approaches: socio-constructivist items were "assessed" at a mean rate of 3.31/6 while traditional items scored at 4.22/6. This finding confirms data provided by Frédéric et al. (2009).
- ◆ Only 2 items out of 12 are better assessed in the socio-constructivist version than in the traditional version (interaction and synthesis). This would underline the central role that teachers consider that they have to play.

Interactive learning	Teacher underlines the existence of one group learning process, based on collaboration and confidence	To learn to act with others, to build together, interactions, community, group reflection, to work within a confidence climate ...
Self learning	Teacher points out the student central place in learning	Learning by one-self, student builds his/her new knowledge, self learning, to discover by one self, student as actor of his/her own learning ...
Problem solving	Teacher mentions idea that students are involved in problem solving	Students have to find answers to improve, looking for solutions to proposed situations, looking for objectives and pedagogical means ...
Using fact based experience	Teacher emphasizes the importance of experiential learning	Using ones' resources, learning through lived experiences, starting from ones experiences, using extra school experiences ...
Self evaluation	Physical educator points out students' opportunity to be involved in assessment process	Self evaluation, students are involved in assessment process, they are correcting their classmates, ...
Positive results	Teacher is focused on the positive impact of the approach	Good understanding within the class, higher participation of the students, reducing of the differences between students, involvement of all students, respect of the others, of the equipment as well as of teacher
Society anchoring	Teacher is referring to the relationship between the course and the extra school reality	To be able to manage on own in the real life, to prepare oneself for future life, to prepare citizen ...

Conclusion

- ◆ Interactions between students during learning is pointed as the main characteristic of socio-constructivism. Teachers consider that they emphasize this approach even if their global style is more traditional.
- ◆ Findings showed that it is needed to promote more student centred teaching approaches among Wallonian PE teachers. Additional data should be collected to confirm the quality of the instrument developed in this study and identify typical socio-constructivist activities.