Active methodologies, Education and Knowledge Production: Alternatives and the Pedagogical Perspective Lecturer

Samuel Gonçalves Pinto

Faculdade Presidente Antônio Carlos de Ponte Nova-Ponte Nova – Minas Gerais-Brazil samuel.pto@gmail.com

Fernando de Sousa Santana,

Faculdade Presidente Antônio Carlos de Ponte Nova-Ponte Nova – Minas Gerais-Brazil professor.santana@yahoo.com.br

Geovani Felipe Venades

Faculdade Presidente Antônio Carlos de Ponte Nova-Ponte Nova – Minas Gerais-Brazil agenciacriatividade@yahoo.com.br

Valdilene Aline Nogueira

Faculdade Sudamerica – Minas Gerais-Brazil valdilenenogueira@yahoo.com.br

Abstract

Man is a being eminently social and with the passage of time brings with it the marks of culture that are expressed in your body, on your way to live. The issue of education has been a generator of debates, surveys and various interventions, and articulates and builds on proposals and establish strategies that contribute to the change in values, understandings and attitudes. Objective of this study is to realize the existing level of knowledge on the Active methodologies in a superior. O educational institution teacher should be organized so that the Active methodologies are an efficient process in the formation of their students. Also, an interesting challenge is the records of the ways the experiences of students and teachers carried out with these methods and their effects to the students, in order to expand the reflections and the evidence of their pedagogical benefits.

1. Introduction

Active Methodologies can understand as a methodological alternative in dealing with knowledge, which is linked to the issue of autonomy, questioning, approach and involvement. The use of these methodologies can arouse curiosity, stimulating taken of individual and collective decisions, connected to core activities of social practice and student contexts. Discuss, investigate, examine, reflect and position themselves critically are traits present in this approach. It is essential that the teacher participates in the process of rethinking the construction of knowledge, in which mediation and interaction are essential prerequisites for learning to occur.

Education is seen as the process of development of skills, attitudes and other forms of conduct required by society. Global process that aims at the integral formation of a person, to meet the needs and aspirations of personal and social nature (BRAZIL, 1981).

According Nérici (1990), education is understood as a process that aims to guide the student to a state of maturity that enables it to meet constantly with reality, so that it can act efficiently and responsibly in order to be observing the individual and collective needs.

Duarte (1986) says that the general education concepts give greater emphasis to its subjective dimension, ie those aspects of your practice linked exclusively to the subject of education, their individual improvement and the achievement of certain moral ideals and taken intellectuals like higher, irrespective of time and place.

Online-ISSN 2411-2933, Print-ISSN 2411-3123

The aim of this study is to realize the existing level of knowledge on the above methodology of work in a higher education institution, with teachers involved with higher education as a group of such studies. It is hoped that this research establish action strategies involving the theme.

2 Methodologies Live, Education and Transformation

According to Coll (2000) there are two conditions for the construction of meaningful learning: the existence of a potentially significant content and the adoption of a positive attitude to learning, ie the own of the student posture for establishing associations between new elements and those already present in their cognitive structure. Unlike in rote learning, you cannot establish relationships between the new and previously learned. Moreover, meaningful learning is structured, complexly, in a move of continuity / rupture. The follow-up process is one in which the student is able to relate the contents seized to previous knowledge that is, the new content must be based on existing cognitive structures.

The process of breaking, on the other hand, is established as from the emergence of new challenges, which must be worked out by the review, taking the learner to overcome their experiences - preconceptions, previous syntheses and others stress that ends up enabling the expansion of its knowledge possibilities.

For Freire (2007, p.20), the respect for the autonomy and dignity of each is an ethical imperative and not a favor we can or not to grant each other. For him the teacher who disrespects the curiosity of the student, their anxiety and their language, transgress the fundamental ethical principles of our existence.

To Faria (1974 cited by Oliveira et al, 1988) every social group in a given historical period, has a collective consciousness, life values and education, which are expressed in the abstract and generally, through the purpose or purposes of education, which express, ultimately, the fundamental needs of the company concerned.

Man is a being eminently social and with the passage of time brings with it the marks of culture that are expressed in your body, on your way to live.

It can be seen as well the great relationship between education and culture. Education as a social phenomenon, has shown a conservative formation on the one hand, and a refreshing function on the other. In today's society it is noted a dichotomy between education and culture, the way it is transmitted.

Placing Azevedo (1964 cited by Oliveira et al, 1988) the conservative function of education becomes evident, consisting of a process of transmission of traditions or culture of a group, from one generation to another. As historical expression, Chagas (1980) considered the conservative function of education as to transmit to new generations the values, ways of life and the previous generation modes of behavior.

To Cyrino and Torrales (2004), the active methodologies use the questioning as a teaching and learning strategy in order to reach and motivate the student as to the problem, it stops, examines, reflects, relates their story and passes to reframe his findings. The questioning can take you to the contact information and the production of knowledge, mainly for the purpose of resolving the impasse and promote their own development. Realizing that new learning is a necessary and significant tool to enlarge its possibilities and paths that can exercise freedom and autonomy in making choices and decision-making

The issue of education has been a generator of debates, surveys and various interventions, and articulates and builds on proposals and establish strategies that contribute to the change in values, understandings and attitudes.

Through education man becomes more aware and responsible for their actions, to meet the needs and personal and collective aspirations.

Ferreira (. 1999, p 1822) indicates nine different meanings for the word education, some of which are shown below:

"Act or effect of educating (if) ...; Process of development of physical, intellectual and moral of children and human beings in general, aiming at their better individual and social integration ...; Knowledge or skill

resulting from this process, preparation ...; Level or type of education ... improvement of all human faculties ... ".

According to Santos (2000) all humans are involved in a process of interaction, social interaction and education, formal and informal. The same author described below as well:

For formal education means that occurs in the school, including the political and social preparation of the individual, providing it with conditions that make it possible to understand, analyze and interpret your reality and allow you to participate in the historic building society. It is their training as citizens. Only the school can accomplish this task, universally, egalitarian and democratic. Formal education follows a pre-established and systematic plan, has intentions and goals set.

By informal or non-formal education, it is understood that is processed outside the school system. In this type of education there is no systematic plan, it corresponds to the process of acquiring knowledge, experience, ideas, values and practices that are not focused, or specifically linked to educational institutions, although they have a very strong influence importance in educational training as a whole.

The changes occurring in education caused in humans able to adapt in their midst, understanding and participating actively in the surrounding.

Ponce (1986 cited by SOARES, p.34, 2004) says that education:

[...] Is a process by which the ruling classes prepare the mentality and behavior of children the basic conditions of their own existence [...] education is not an accidental phenomenon in a class society.

Education and culture are closely linked. It is through them that traditions and customs are shown and reevaluated constantly.

In terms of a restorative function, Saviani (1982) emphasized that education aims to promote human and so are their needs that determine educational goals, needs should be specifically considered as the educational activity is always within a framework existential. According to Chagas (1980), renewing the function of education is related to the modification and enrichment of the culture of the previous generation, due to the influx of other realities and needs.

The changes currently occurring in society are a way to innovate and enrich the legacy left to future generations.

The relationship between education and social transformation is clearly evidenced by Gadotti (1984 cited by Oliveira et al 1988, p. 4) while emphasizing that:

It is false to claim that nothing can be done in education until there is a transformation of society, because education is dependent on the society. Education is certainly not the lever of social transformation. But if she cannot do alone transformation, this transformation will not be consolidated without it.

Following this line of thought, Cunha (. 1984, p 10), to argue in favor of education as more product than factor of society, mentioned that:

"Think that education is the mobile social transformation is a naive position ... The relationship between society and education is so strict that, in the same way that education cannot be responsible for social change, no change can occur without it".

There is a perfect interaction between education and social transformation, change is only achieved when both are connected.

Some considerations were made by Freire (1984 cited by Oliveira et al, 1988) on the relationship between levels of education, knowledge and ignorance; among them, that the wisdom of ignorance. There is no absolute ignorant ... What they lack is the systematic knowledge; it is understood that schools have most of the guidance for the systematic knowledge.

It is up to school the systematization of knowledge. The literacy capacity is linked to the condition of building and assimilate new skills within or outside the school environment.

Rodrigues (. 1985 cited by Oliveira et al, 1988, p 5) described the school evolutionary process:

"The oldest history of education groups indicates that in the exercise of an act of freedom, created transmission instruments of his conception of the world to other groups of individuals. In primitive societies, this occurred informally. In historical societies, this occurred in an organized and regular way. The invention of writing and later the press finally broke the cycle of oral transmission in literary societies, generating the need to create production institutions, organization and dissemination of culture, under the édige more prepared individuals for the exercise of this function: intellectuals. This has increased the importance of circles documenting the values and intellectual achievements considered superior and should be preserved both by the accumulation of these records as for its diffusion. So begins to rise school, due to the need to preserve and reproduce beliefs, values and social achievements, conceptions of life and world groups or classes. She stood and modernized, as it was able to become powerful tool in the production of new values and beliefs, in the dissemination and socialization of social achievements, economic and cultural of these groups or classes".

The school's mission from the beginning was to impart knowledge to all who were part. With the innovations through the laws and resolutions, applied more diversity of teaching and learning.

Lenhard (. 1978 cited by Oliveira et al, 1988, p 6) characterized the school's emergence as a social institution summarized as follows:

"by socialization, man becomes truly human; the adult generations of all societies strive for driving the socialization of new by what we call education; social differentiation is accompanied by the institutionalization of education as a distinct social activity; with the emergence of teaching as a specialized occupation appears to school and, with it, the institution acquires sharp contours; school activity isolates certain learning for the segregated treatment of "real life"; such treatment basically takes the instructional features, is systematic transfer of knowledge".

With the institutionalization of education and the emergence of teaching, the school is seen as a form of transmission of specific knowledge with the purpose of improving the knowledge and lead the students to a life of success and professionalism, thus treating education in a perspective transformation.

Given these evolutionary aspects and activities developed at school today, it has to be the systematization, intentionality and organization, directly related to the contents and methods of transmission of knowledge, are constant and indispensable elements in the characterization of schooling.

Mitri et al. (2008) explain that the active methods use questioning as a teaching / learning strategy in order to reach and motivate the student as to the problem, he stops, examines, reflects, relates their story and begins to reframe their discoveries. According to the authors, the questioning can lead the student to the contact information and the production of knowledge, mainly for the purpose of resolving the impasse and promote their own development. Learning through questioning and / or resolution of problems in their area, so it's one of the possibilities active involvement of students in their own training process.

The school is a key institution in contemporary society. As Lenhard (1978 cited by Oliveira et al, 1988) its central function is to transmit a part of the cultural heritage from one generation to another and there is a direct correlation between a nation's level of development, well-being of its people, and parameters school.

The theory of social reproduction has exerted considerable influence on contemporary Brazilian educational thought. Thomaz (1984 cited by OLIVEIRA, 1988), ranks the school as an ideological apparatus

International Journal for Innovation Education and Research

of the state in the service of the ruling class, which uses it to maintain its power. Although regarded as partially autonomous institution which carries out the function of forming the student's attitude about the technical and social division of labor and obedience to the social order.

Bourdieu and Passeron (1975 cited by Oliveira et al, 1988) attributed to the school playing political function of social structure, particularly the relations of domination of one class over the other, in capitalist society. Thomaz (. 1984 cited by Oliveira et al, 1988, p 7) summarized what are, in the opinion of theorists of social reproduction, the school functions:

Teach students the physical and intellectual abilities necessary to carry out different functions in the workforce; inculcate rules of behavior, order, obedience and discipline appropriate to the efficiency of social relations.

From the brief consideration of social reproduction function of school, some issues deserve special attention by those involved with the school. Especially in a structurally unequal and unjust society like Brazil, which is the ability of the school to exercise a refreshing function? If no such possibility, to what extent there is a direct correlation between school and social transformation? (Oliveira et al, 1988).

Mello (1983, p. 72) to critically review the reproductivist theory, it considered the fact that a good education allows to acquire a world view less mystical and folk, which can be a starting point for a critical understanding of society as well the school can find its role in social transformation so defined:

"...in very simple terms, it would be taught, and well, to read, write, calculate, speak, think, know the physical and social world, that school education could play for the majority of the population layers that promotes role of non - equality, since society is structurally unlike - but improving the quality of life."

The important role played by contemporary school requires, however, effective participation in society. According to Cunha (1984) the educational institution will always be a place of conflict, debate, criticism, transformation, because, in this view, those who seek their lives, those living, those who aspire to a better life, are always unhappy. These conflicts, debates and criticism are indispensable for transforming school and depend greatly on the degree of involvement of society, represented by all its segments.

This school will only become possible if it is assumed by the various segments of the population as an indispensable tool for the design of a project of society where the value of the human being is above all ideological, partisan or religious differences; a pluralistic society that will get with wisdom, fertility speech, alternative, not only for survival, but above all of living well, for those who participate in it.

Experience indicates that learning is more meaningful with active learning methodologies. In addition, students who experience this method acquire more confidence in their decisions and application of knowledge in practical situations; improve relationships with colleagues, learn to better express orally and in writing, acquire like to solve problems and experience situations that require decisions on their own, reinforcing autonomy in thinking and acting (Ribeiro, 2005).

3. Talking With Teachers: The Methodologies Live As Process

After applying the research instrument, data were categorized in the way shown below:

Adoption of difficulties of working methods in the face of teacher education

For the group studied the work with this type of methodology can will require changes in educational curricula, because You determine skills need to be addressed so that the procedures can be adapted and really

bring about change. So the teaching action may be guided by the process units and general and specific knowledge can be secured as well as the assimilation of same by students...

These new skills demonstrate the need to change the perception and how to relate to the surrounding world by modifying the mechanistic approach, fragmented, competitive and hegemonic approach to a systemic, holistic, co-operator and integrator. And understand that the problems facing humanity today can no longer be understood separately, but rather an interconnected, interdependent and contextualized way.

Importantly, active learning refers to strategies to enable the student. The teacher, in principle, is (or should be) in an active role in teaching as it has to resort to his studies, selecting information, choose proper terminology, explain knowledge in different ways, making relationships, comparisons, analogies etc. Subtends is that if the teacher applies the same lesson plan dozens of times without innovations, it is likely that in this case, their exposure becomes routine, automatic and, of course, have a passive and not active character.

The process of autonomy and power structures

The study group believes that the teacher should take the facilitator roles, advisor, moderator and observer and student the protagonist of their learning and the classroom should be the stage of discussions on the deepening of the contents under the guidance of teacher the time the teacher is dedicated to measuring the learning evaluation, the clarification of conflicting points of understanding and ownership of the anticipated content. Teachers have raised employment opportunities for the student to be placed in front of problems and challenges that mobilize their intellectual potential, while studying to understand them and or overcome them. Students need information but are especially encouraged to work with them, elaborate them and reworks them depending on what need to respond or equate. In this way, it is possible that, gradually, the development of the scientific spirit, critical thinking, reflective thinking, ethical values, among other achievements of this nature, through education at different levels, contributing to the development of autonomy in training of the human being and of future professionals.

4 Final

Map and draw conclusions about the opinion of individuals is a complex task because it involves data that are not easily measured in this way, to make this check, this study used statistical techniques of multivariate analysis. Among these techniques, we can cite the principal component analysis (PCA) and factor analysis (FA), which were chosen because the data are very extensive and require short, without that occurred great loss of important information.

Data analysis began with the ACP, which allowed an overview of the variance and covariance structure before being eliminated some variables. Then, several AF were tested, in order to synthesize a better fit the data, and set to aid the visualization and interpretation of the results of the AF applied, the better this adjustment, the orthogonal varimax rotation technique.

From the above in this paper, we found that the multivariate analysis, above, proved to be important tools for the study of data not readily measurable, confirming the potential of these techniques in support of research that involves a lot of variables.

From the analysis of the interviews, it was found that most respondents had the course of Directors as a first career choice. In the case of this image undergraduate degree at the University in question, we can see a concern on the part of students, with the credibility of this institution and the remuneration of these professionals in the labor market. The participants of this research consider it important that the institution has different evaluation systems and believe it is essential to have good relationships among professionals of the

institution and its students. Finally, we see the importance of the institution has an appropriate framework, both in its physical part, as investments in laboratories and computer equipment.

Given the above factors and based on the information obtained, it is suggested that improvement targets are set so that the image of this institution can become the best possible before its main target audience, their students.

In this study, it is clear that in relation to the perceptions and concepts methodologies and population teaching processes under study, there is a way of working already established between teachers, which for some is consolidated on the tripod: lecture prepared by the teacher, fixing the content by the student and evaluation process.

Regarding the teaching planning, analysis of the reports makes it possible to perceive the importance that is attributed to the teacher as facilitator of the teaching process, as a prerequisite to achieving the proposed educational objectives.

The student participation in decision-making and mediation striking feature in Live methodologies, appear as point it lacks didactic and methodological instrumentation for future interventions. Channels and processes need to be established for the acquisition of knowledge becomes significant.

For the Active Methodologies can have an effect on the direction of intentionality in which they are established or elected, it will need to process participants to assimilate, to understand them, believe in their educational potential and include a good deal of intellectual availability and affective (appreciation) to work as proposed, as are many of the teacher's own conditions, pupils and school routine that can hinder or even prevent this intent.

The interaction with their teachers is a major source of motivation to improve quality. Empathy with the teacher facilitates personal identification with what he presents in the classroom, enabling the enhancement of proposed activities and content and the internalization of external demands or requirements. On the latter, students endorse or start to realize how their demands to carry out quality work, which contributes to the promotion of autonomous motivation that is associated with deep processing of information, creativity, persistence, preference for challenges, among other positive results.

The teacher should be organized so that the Active methodologies are an efficient process in the formation of their students. Also, an interesting challenge is the records of the ways the experiences of students and teachers carried out with these methods and their effects to the students, in order to expand the reflections and the evidence of their pedagogical benefits.

5 Bibliographic References:

AUSUBEL D, Novak JD, Hanesian H. *Educational Psychology, a Cognitive View*. New York: Holt, Reinhart and Winston; 1978.

BRASIL. Ministério da Educação e Cultura. Serviço de estatística educacional. Cuiabá: SEC/MT; Rio de Janeiro: Fename, 1981.

CHAGAS, V. Educação brasileira: o ensino de 1º e 2º graus, antes, agora e depois? Belo Horizonte: Saraiva, 1980.

CHAUÍ, M. Convite à filosofia. São Paulo: Ática, 1997.

COLL C. *Psicologia e currículo: uma aproximação psicopedagógica a elaboração do currículo escolar*. São Paulo: Ática; 2000.

CYRINO EG, Toralles-Pereira ML. Trabalhando com estratégias de ensino-aprendizado por descoberta na área da saúde: a problematização e a aprendizagem baseada em problemas. *Cad Saúde Pública* 2004;20(3):780-788.

DIÁRIOS. **Projetos de trabalho**. Brasília. Ministério da Educação e do Desporto, Secretaria de Educação à distância, Cadernos da TV na Escola. PCN na Escola, 1998.

DUARTE, S. G. Dicionário brasileiro de educação. Rio de Janeiro: Edições Antares, Nobel, 1986.

FERREIRA, A. B. de H. Novo Aurélio: dicionário da língua portuguesa. 3. ed. Rio de Janeiro: Nova Fronteira, 1999.

FREIRE, P. Pedagogia da Autonomia. São Paulo, Editora Paz e Terra, 2007.

MIRA, C.M. **O declínio de um paradigma:** ensaio crítico sobre a relação de causalidade entre exercício físico e saúde. 2000. Tese (Doutorado em Educação Física) – Faculdade de Educação Física, Universidade Gama Filho, Rio de Janeiro. 2000.

MITRE, S. M.i; SIQUEIRA-BATISTA, R.; GIRARDIDE MENDONÇA, J. M.; MORAIS-PINTO, N. M.; MEIRELLES, C.A.B.; PINTO-PORTO, C.; MOREIRA, T.; HOFFMANN, L. M. Al. Metodologias ativas de ensino-aprendizagem na formação profissional em saúde: debates atuais. Ciência e Saúde Coletiva, Rio de Janeiro, v. 13, 2008.

NÉRICI, I. G. Introdução à supervisão escolar. 5. ed. São Paulo: Atlas, 1990.

OLIVEIRA, J. M. de; BETTI, M. ; OLIVEIRA, W. M. de. Educação física e o ensino de 1º grau: uma abordagem crítica. São Paulo: EPU – Editora da Universidade de São Paulo, 1988.

PALMA, A. Atividade física, processo saúde doença e condições sócio-econômicas: uma revisão de literatura. **Revista Paulista de Educação Física**, São Paulo: v. 14, n. 1, p. 97-106, jan/jun, 2000.

RAMOS, G. N. S; FERREIRA, L. A. Parâmetros curriculares nacionais: educação física e saúde. **Corpoconsciência**, Santo André: v. 5, p. 55-63, 2000.

RIBEIRO, R. de C. A aprendizagem baseada em problemas (PBL): uma implementação na educação em engenharia. Tese (Doutorado) – UFSC, Florianópolis, 2005.

SAVIANI, D. Educação: do senso comum à consciência filosófica. São Paulo: Cortez e Autores Associados, 1982.

SILVA, R. A. **Concurso publico magistério, auxiliar da educação, auxiliar de secretaria II**. Secretaria de Estado da Educação, Secretaria de Estado de Recursos Humanos e Administração, 2001.

YUS, R. Temas transversais: em busca de uma nova escola. Porto Alegre: Artmed, 1998.