33 - THE ERROR IN THE CLASSES OF PHYSICAL EDUCATION MAKES POSSIBLE THE LEARNING?

ANA CLAUDIA SALADINI[1];
ORLANDO MENDES FOGAÇA JÚNIOR[2].
1. UNITOLEDO - Araçatuba - São Paulo - Brasil
2. UNINORTE - Londrina - Paraná - Brasil
anaclas@terra.com.br

In the history of the education the error always was placed as something to be prevented in the learning process. The search for the success is the main objective of the systemize education, that would be materialize by means of the learning. The process of evaluation frequently in the sample that we evaluate the student for what it does not know instead of evaluating what it really knows.

Although in this work we to relating the manifestation of the error in the process of systemize education, this vision of the error while something undesirable is present in our culture, either in the familiar or professional environment.

In the systemize education, when the student to make a mistake, generally is established a punishment that can vary since the low note attribution until the repetition of the exercise, for the studant, in the way that if imagines “correct”. He desires yourself that the studants always present the waited result, that is, the rightness, the success. This would represent a successful learning. Still victims of a conception maken a mistake on the learning, many professors believe that a citizen learns when it is capable to reproduce (error-free) what it was taught to it, that is, maker of examined copy. Thus the test functions, that is, the studant of the tests to the teacher of what it supposedly “learned”. Being thus, in this process of search of the learning the rightness, decorated with good notes in the test, would be to the result of the pertaining to school learning, whereas the error would be the expression of not the learning. This vision leaves to be transparent a learning understanding that if occupies with the final result: it made right or not? Contrary to this, we believe that the learning is a other dimension of process and that, to ignore the error is to think that we can always make right. We know that this does not correspond to the reality.

Considering to the manifestation of the error, we initiate this walked believing that the error is one of the factors that the learning process constitutes. Therefore it will not be understood here as an imperfection of the studant who needs a reinforcement or correction, guaranteeing the repetition of the model offered for the teather. To understand the error as one of the elements that constitute the learning process demands of the teather deeper a ampler understanding and at the same time regarding the phenomenon “error”. We believe that, when the teather supports a knowledge adjusted regarding the education process and learning, it will be able to be used of the error to provide cognitivos conflicts to its studants, contributing with the taking of conscience of its action.

Development

With the objective to analyze the contribution of the error in the learning process, we will make a story of experience in classes of Physical Education, with six children the twelve years of age, in which the occured situations of error in the class had been used as instrument in the process of taking of conscience of the motor action.

We are sages who the human movement is the object of study of the Physical Education while it disciplines pertaining to school, and for one better understanding of what it represents this discipline in the school, a small historical summary.

The Physical Education in the Brazilian school had its beginning as practical pedagogical it enters the end of century XIX and beginning of century XX. It suffered to fort influence from the professional performance of the doctors and the military. The first ones, considering the changes politics, economic and social that the just fond capitalism would bring, had a perspective to promote the hygienic cleaning social (GHIRALDELLI Jr, 1991). For this they had been worried about the education for the health, by means of implanted programs of corporal exercitation in the schools, with the objective to exempt the undesirable society of habits as the lack of hygiene and laziness, among others.

The military, worried about the protection of our country, adaptam for the pertaining to school environment, the routines of the quarter, assisted still for the doctors. They had as main objective to form contingent for one future necessity to defend the native land.

Subsequent to the influence of the doctors and military, we attend a Sport Physical Education that had as objective main the athletical-esportive income, taking advantage the profit of physical form, searching the increase of the muscular force, corporal resistance and other physical capacities. In this period the sport training and the gymnastics were the way to promote the aptitude physical. This concern with the income certainly was being placed the service of the effective politics, therefore the athletical results that a country presented in international championships and olimpíadas, mainly, would allow to confer a “status” politician to this nation. This form of conduction politics of the Physical Education possesss repercussion until the present. This new form to approach this disciplines - search of results - made with that the pedagogy of the Physical Education incorporated the sport in its classes in the intention to prepare the new generations to represent the country in international competitions. Appears then new of the Physical Education while it disciplines pertaining to school: to prepare the great mass of studants that was understood as the base of a pyramid. The studants who if detached would go for a center of represented regional training, in the pyramid for the center. Leaving from there, the ones that more were distinguished would be the athletical elite of the country, the peak of the pyramid. As we can see historyti Brazil did not become a nation with olímpica tradition, showing how much it was maken a mistake this perspective forcibly adopted by it disciplines of Physical Education.

From years 70, it is construct more clearly an academic field to it for this disciplines, and this estruturation starts for the universities, where the Physical Education starts to incorporate practical the scientific ones in the search of the qualification of the faculty. In this search of qualification the field of the Physical Education starts to incorporate the pedagogical quarrels influenced by sciences human beings. In years 80, still influenced for the reproductive character of the school, a new debate was initiated on the practical one of this disciplines. The psicomotricidade deserved prominence, that still becomes gift in the speech and the practical one of the Physical Education. This theory it was given credit to educate the citizen through the movement, despite for this it needed to be repeated by diverse times. For this, the development of psicomotoras structures of base searched as the coordination, laterality, balance, among others, what it would guarantee the learning of cognitivos contents of others you discipline, as the Portuguese and the Mathematics. It did not have, on the part of the professionals, a concern with the reflection processes and of education of the specific contents of it disciplines of Physical Education, remaining this without especificity, becoming to assist of others disciplines.

It was also in the decade of 80 that the thought of the Portuguese philosopher, Manuel Sérgio, exerted influence on the

Brazilian Physical Education when considering a more radical analysis of this area. Concerns as the object of study of the Physical Education and as if of scientific practical its had taken the author to consider one epistemológic cut by means of the change of the paradigm that supported this area until then: of the duality the body and mind. When recognizing as exceeded this thought, it defended the estruturation of the science of the motricity human being, having this as study object the intentional movement in the transformation of the human being, that if manifest in the dance, gymnastics, sport, game, ergonomics, special education, whitewashing. For this it adopted the paradigm of the complexity as the cloth of deep for the established dialogs and defended the Motor Education as pedagogical branch of the science of the motricity human being.

We believe that the Sérgio concern (1996) either to consider a Motor Education that exceeds the mere practical activity until then predominant in it disciplines of Physical Education. One is about making e, moreover, to understand what he is being made one to know to be of the citizen, therefore that we are unfinished citizens. In this perspective, the movement is understood as the expression of the motricity (and this mediating in the process to know), refuting any structuralized simple form explanation only in the physical dimension. When demanding, in its thought, epistemológics boardings, suggest that the movement is the space of integration between automatic processes, sensorial, adaptatives or cognitives - to understand that is of basic importance to explain our cognitives processes.

How much to the task of the Motor Education, (SÉRGIO 1996, P. 166) believes that "he inhabits in the fact to provide to space and time to the movement of the transformation to a conscientious being and its limitations and that when surpassing he finds them the direction of the life."

So that the Motor Education contributes in the process of transformation (overcoming) of the citizen, (SALADINI, 2006) believes that it is indispensable that, in this it disciplines, the pupil finds space for the construction and understanding of its motricidade being indispensable for this the process of conscience taking.

With intention to detach this in the classes of Physical Education, we retake now from some experiences that we have lived deeply in our pedagogical action.

In our lessons, we have observed that when the studants execute a motor action and obtain success in this execution and them he is requested to explain what they had made to have obtained the success, generally the answers are evasions, the studants present a difficulty in mentally remaking all the process of the executed action. However, when they do not reach the success, the story of the process of its action is richer in details. They obtain, in its majority, to tell the process in detail and still to create hypotheses for a new execution. These two told examples more frequently happen when an anticipation of the explanation before the action is not asked for to them, valley to stand out that these comments in class had occurred parallel to the development of the content that already previously was systemize.

In this simple story he is evidenced the occurrence of the taking of conscience in acts and the taking of conscience properly said.

The taking of conscience in acts in them presents the following situation: the child knows that she is capable to make the action, however, she presents difficulty in telling as she made. It of the account of the execution, that is, gets the success, however, most of the time, she does not obtain to remake its action mentally, therefore she presents answers deformed if compared evasions and with what really she made. Example, when we ask for to the students who make right one determined target with a ball to one determined distance, them catch the ball they launch and they make right the target. When questioned what they had needed to make to make right the target, they do not obtain, in its majority, to describe the action executed for them or describe it partially.

When they execute the same action and it does not get success, that is, they erram the target, the process of conscience taking is presented with more easiness. We are not affirming that the success does not produce learning, we are showing one of the aspects of the learning process (error) that generally it is relegated and most of the time he is white of punishment, mainly in discipline of Physical Education, where the income still is seen as object to be obtained during the class, what it strengthens the determinative seen descriptions previously.

In our experiences we observe that when the students do not get the success in its action, the process of description of its action is presented more complete, they obtain, in its majority, to present the possible reasons had led that them to the error, and generally present a hypothesis so that when repeating its action obtains to reach the longed for objective.

When it is asked for to the studants whom they tell what they find necessary to be executed to get success in its action (anticipation), and does not happen the error, in this in case that, the description process is accepted for the studant as the correct one or the most adjusted. However when the error happens the majority of the carried through descriptions previously (anticipation) is reviewed in details and folloied of modifications in the action to be executed.

As we can observe in this story, the error, when he is recognized for the teather as an important moment in the learning process can contribute for the taking of conscience of the actions of its pupils, making possible, thus, a construction and more significant understanding of its motricity.

Piaget (1977), in the sample that the conscience taking is a dynamic system in permanent activity. Therefore, it is not reduced to a process of preexisting illumination of something. Taking of conscience is to internalizar, in thought, the action carried through for the citizen, that is, in the words of Piaget apud Bringuier (1978, P. 127):

In the proper action, the understanding is centered on the object and not on the mechanisms that allow to atingiz it… the action, it only tends for a target and it she is satisfied when the target is reached. It is dominated for what I would call success… the conscience taking I hold more the understanding: she treats yourself to know as if she has success.

This passing of the unconscious one to the conscientious one must it the fact of that the conscience taking is subsequent to the successes of the action. The conscience taking appears, almost always, after this knowing taken initial that is the action or of conscience in acts and walks in the direction of the understanding. Therefore, the studant is collated with not the success or "error", and a chance is offered to it so that it thinks on the action that carried through and analyzes which had been the mechanisms used in this action and which others could have been used or not. This chance can be provoked by the professor when questioning its pupils, when making that they reflect on its action, provoking a causing cognitivo conflict of a disequilibrium in the knowledge that the pupil dominated until that moment. Palma and Palma (1999, P. 62) had affirmed that: "It is indispensable that the professor, in its teaching action, excites the conflict, that disturbs, and that above all it promotes the cognitivo disequilibrium in the children, taking them it hypotheses to elaborate, so that, actively, they search regulations compensatory".

Being thus, the studant finds space to compare action projects and to anticipate them, to command its thought, to classify its action, to apply them and to organize them. In this perspective, the error that previously were unthinkable and to look at as something that disqualified the learning passes to be thought as one of the primordial moments of learning, being able to provide to the individual the taking of conscience of its actions.

During our classes, when the studants are questioned and obtain to tell to all its action, them they are in showing its conceptualization. They obtain to point the possible reasons had taken that them to the success or not the success.

Being thus, the process of conscience taking if does not summarize the successive associations that ahead go being done of the new necessities faced for the citizen. The conscience taking is presented in temporary character, therefore to the measure that the projects suffer influence from the lived experiences, the same ones are changedded, making possible the rework of the conscience taking. If it does not deal with something guaranteed simply for the process of maturation of percipient structures that ahead go associating of the necessities; for the opposite, the process of conscience taking is in constant process of reorganization and is guaranteed thanks to the experiences lived in the way and its implications on the cognitivas structures.

This guarantees to the citizen more complex cognitivas structures each time, more enriched. Ahead of this reorganization new possible actions are e, when being placed in exercise, are come across (the citizen) with new challenges and consequently new necessities are found. Thus, the search for the knowledge is continuous and takes form of sucessividade and provisoriedade, exceeding the imediate of the reality, therefore we are ahead of something dynamic, infinite and endogenous.

Therefore it is not treated to think the action of mechanical, automatic the citizen as something and tax exterior it for the interior subject it. One understands that, in accordance with Piaget (1978, P. 207), the action constitutes:

[…] one to know, autonomous worker of a considerable effectiveness already, because, even so if it deals with only savoir faire of a constant knowledge in the direction of an appraised understanding, it constitutes, however, the source of this last one, a time who the conscience taking if finds sensible very, in relation to this to know initial that is, therefore, of an efficiency notable, conquanto he himself if does not know.

It is this action, initially practical, that makes possible the construction of elaborated knowledge more each time thanks to cognitivas structures organized of form each more complex time. However for more elaborated than either the conceptualization that a citizen can reach, all its gênese is, in last analysis, the functioning of the consequences and the construction of the motor projects. They are who provide to the linking between the citizen and the object and walk in the direction of the conceptualization. As Becker (1997, p.93), this to make and to understand happens:

Of an action rigidamente limited and atomized by the perception, it is transferred an action co-ordinated for the thought or to an operation whose mobility if enriches to the thought measure that goes surpassing the dependence of the real concrete and if approaching to the possible one; to the measure that if advances in this process, it is extended an infinite overcoming of the percipient intuition and to a correlative growth of operatória mobility or of a mobile balance.

In such a way, he is this to know initial that, in functioning to the measure that the citizen becomes related with the world, it will go to guarantee the internalization of these same actions and, gradual, the formal operations, on which new operations will be able to be become fullfilled. This in the sample an inversion if to consider the initial situation: at the beginning of our lives the workmanship of Piaget in the sample that the success of an action precedes its concept, therefore the citizen not yet occupies of the mechanisms make possible that it. Later, it has the possibility of anticipation of the action, therefore the knowledge of the mechanisms is given to the citizen that guarantee or not it success of its action. Therefore, the concept modifies the action, therefore it supplies the data the future action. From now on, the plans more provisory or are not carried through by attempts to perhaps, the actions now pass to be reviewed, adjusted and present a programming, that is, the conscience taking inverted the previous order, where the acts were supplying of a delayed conceptualization, now the conceptualization supplies the facts the action. One is about reaprender in the plan of the thought what already it learns in the plan of the action, therefore has a reorganization of the knowledge that the citizen constructs until there. The more the conscience taking will be complete greater will be the understanding in the plan of the internal representation (thought) of the things that happen in the plan of the action.

Final Consideration

Our intention in this work was to detach the “error” as one of the moments of the process of learning that does not have to be neglected, but yes used to advantage as a constructive component of the learning in the systemize education, in special in the Physical Education.

Specifically in the classes of Physical Education, to think the “error” as a learning possibility is to allow the citizen to take conscience of its motricity, exceeding itself while human being. Theam, we will continue to repeat what history already showed in them to be exceeded.

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R: Afonso Pena, 2000 - Apt. 12 Bl 3
Araçatuba - São Paulo
Cep: 16060-040
(18) 3608-7963

THE MISTAKE IN THE CLASSES OF PHYSICAL EDUCATION MAKES POSSIBLE THE LEARNING?

ABSTRACT

Historically we observe that the search for the success is the main objective of the systemize education. The error was placed as something to be prevented, therefore it is seen as an imperfection of the pupil. It is about one of the elements of the learning process. In this text, by means of the comment of children between six and eight years old, in lessons of Physical Education we consider a reflection concerning the error. During much time this disciplines was oriented exclusively for Biological

Sciences, occupying with the questions of the hygiene, the physical preparation and the income technician of the pupils so that they took care of to the standards of the sport of high level. Considering such objectives, the error he was something to be prevented. Currently the Physical Education occupies with the construction and understanding of the motricity of its pupils. Thus, it becomes imperative to investigate the process of conscience taking, therefore the error has decisive participation, helping the pupil the understand his motor action. It fits to the professor to use it to provoke, together the pupils, cognitve conflicts, taking them to elaborate it and to test hypotheses regarding the situation faced during the lesson. This process will be able to provide the taking of conscience of the actions of the pupils and, in the specific case of the Physical Education, of its motor action. It is treated then, the conscience taking, of relearning, in the plan of the thought, what already it learns in the plan of the action. Therefore, the error does not have to be neglected, but really understood as one of the components of the learning in the education systemize and specially in the Physical Education.

L'ERREUR DANS LES LEÇONS D'ÉDUCATION PHYSIQUE REND POSSIBLE L'APPRENTISSAGE?
RESUMÉ

Historiquement nous observons que la recherche par le succès est l'objectif principal de l'éducation systématisée. L'erreur a été placée comme quelque chose à être évité, donc est vu comme une imperfection de l'élève. Il s'agit d'un des éléments composante du processus d'apprentissage. Dans ce texte, au moyen du commentaire d'enfants entre six et huit ans d'âge, dans des leçons d'Éducation Physique nous proposons une réflexion concernant l'erreur. Pendant beaucoup de temps cette discipline s'est guidée exclusivement par les Sciences Biologiques, s'occupant avec les questions de l'hygiène, de la préparation physique et du revenu technique des élèves pour ils lesquels fassent attention aux normes du sport de haut niveau. En considérant tels objectifs, l'erreur était quelque chose à être évité. Actuellement la discipline d'Éducation Physique s'occupe avec la construction et la compréhension de la motricité de leurs élèves. Ainsi, se rend impératif enquêter le processus de prise de conscience, donc l'erreur a de la participation décisive, oportunizando à l'élève la compréhension de son action motrice. Il contient à l'enseignant l'utiliser pour provoquer, près des élèves, des conflits plus cognitifs, les prenant à élaborer et expérimenter des hypothèses concernant la situation affrontée pendant la leçon. Ce processus pourra fournir à prise de conscience des actions des élèves et, dans le cas spécifique de l'Éducation Physique, de son action motrice. Il se traite alors, à prise de conscience, de reaprender, dans le plan de la pensée, ce qui déjà a appris dans le plan de l'action. Donc, l'erreur ne doit pas être négligée, mais considéré comme une des composantes de l'apprentissage dans l'éducation systématisée et en particulier dans l'Éducation Physique.

EL ERROR EN LAS CLASES DE EDUCACIÓN FÍSICA HACE POSIBLE LA APRENDIZAJE?
RESUMEN

Observamos históricamente que la búsqueda para el éxito es el objetivo principal de la educación sistematizada. El error fue puesto como algo ser prevenido, por lo tanto se ve como imperfección de lo sujecto. Es uno de los elementos del proceso de aprendizaje. En este texto, por medio del comentario de niños entre seis y ocho años, en lecciones de la educación física consideramos una reflexión referente al error. Durante much tiempo la disciplina foi orientada exclusivamente para las ciencias biológicas, ocupando con las cuestiones de la higiene, de la preparación física y del técnico de la renta de los sujectos de modo que llevaran cuidado de los estándares del deporte de de alto nivel. En vista de tales objetivos, el error era algo ser prevenido. La educación física ocupa actual con la construcción y la comprensión del motricidade de sus alunos. Así, llega a ser imprescindible investigar el proceso de la toma conciencia, por lo tanto el error tiene participación decisiva, ayudando a lo sujecto la comprensión su acción de motor. Cabe al profesor utilizarlo para provocar, junto los sujectos, conflicto cognitve, tomándolos para elaborar y para probar hipótesis con respecto a la situación hecha durante la lección. Este proceso podrá proporcionar toma de la conciencia de las acciones de los sujectos y, en el caso específico de la educación física, de su acción motor. Entonces se trata, la toma conciencia, de volver a aprender, en el plan del pensamiento, qué aprende ya en el plan de la acción. Por lo tanto, el error no tiene que ser descuidado, pero entendido realmente como uno de los componentes del aprendizaje en la educación sistematizada y especialmente en la educación física.

O ERRO NAS AULAS DE EDUCAÇÃO FÍSICA POSSIBILITA A APRENDIZAGEM?
RESUMO

Historicamente observamos que a busca pelo êxito é o objetivo principal da educação sistematizada. O erro foi colocado como algo a ser evitado, pois é visto como uma falha do aluno. Trata-se de um dos elementos componentes do processo de aprendizagem. Neste texto, por meio da observação de crianças entre seis e oito anos de idade, em aulas de Educação Física propomos uma reflexão acerca do erro. Durante muito tempo esta disciplina orientou-se exclusivamente pelas Ciências Biológicas, ocupando-se com as questões da higiene, da preparação física e do rendimento técnico dos alunos para que atendessem aos padrões do esporte de alto nível. Considerando tais objetivos, o erro era algo a ser evitado. Atualmente a disciplina de Educação Física ocupa-se com a construção e compreensão da motricidade de seus alunos. Assim, torna-se imperativo investigar o processo de tomada de consciência, pois o erro tem participação decisiva, oportunizando ao aluno a compreensão de sua ação motora. Cabe ao professor utilizá-lo para provocar, junto aos alunos, conflitos cognitivos, levando-os a elaborar e testar hipóteses a respeito da situação enfrentada durante a aula. Este processo poderá proporcionar a tomada de consciência das ações dos alunos e, no caso específico da Educação Física, da sua ação motora. Trata-se então, a tomada de consciência, de reaprender, no plano do pensamento, o que já aprendera no plano da ação. Portanto, o erro não deve ser negligenciado, mas sim entendido como um dos componentes da aprendizagem na educação sistematizada e em especial na Educação Física.