

15 - SCHOOL PHYSICAL EDUCATION AS A MOTIVATOR FOR SCIENTIFIC RESEARCH

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INTRODUCTION

The Physical Education in Basic Education is a curricular component, which has specifics and contents to be explored and, why not, be used as a tool for research, as a mechanism to facilitate Scientific Initiation? Physical School Education as we conceive it today in Europe in the late eighteenth and early nineteenth century. With the creation of so-called National Systems of Education, Gymnastics, first appointment given to Physical Education and with a quite comprehensive character, took place as compulsory school content. The most well-known in Brazil were the French, German and Swedish Method, being the most publicized and that served as model for a national method of gymnastics in our country. This Gymnastics comprised individual exercises, in doubles, quartets; the act of lifting and transporting people and objects; fencing; dances; games and later, at the end of the 19th century, sports games; the music; singing and military exercises. Throughout the nineteenth century we will find this breadth and diversity of teaching content and, above all, a clear specificity. The sciences that support the studies and researches of this content are those of a physical and biological nature. And this is due to the fact that, at that moment, there is still no science of nature.

At first, Physical Education, when inserted in the school curriculum, was considered as a moment for the practice of gymnastics, in order to leave the body healthy.

Due to the sharing of the culture of the movement, either as an active practice or as information, a new appreciation of such content arises. Such social valorization of the corporal practices of movement legitimates the emergence of scientific and philosophical investigation around the exercise, the physical activity or the man in movement. Initially restricted to the field of Exercise Physiology, this field of research is present today in many scientific areas, such as History, Psychology and Sociology, as well as Philosophy.

This situation generates a questioning of the current pedagogical practice of the School Physical Education by the students themselves, who, seeing no more meaning in the discipline, disinterest and force situations of dispensation. However, they value corporal practices performed outside the school. The process of seeing the sport becomes perhaps more interesting than doing the sport.

The roles assigned to the discipline of physical education are broad, but it has not always been successful in its finalization to the target public: the student. Located in a school that is based on the scientific model, physical education has never been able to assert its true value in the training of children and young people, although it has never failed to fulfill its role, and its legitimation by the professionals involved is a priority. The school should present itself as a space that favors access to knowledge, the discussion of human relations based on the experience of corporeity.

As a curricular component, physical education should take on the role of training in order to introduce and integrate the student's culture of movement, making it possible to enjoy in a conscious, critical way, being able to position and visualize his body as part of a culture that was built throughout the history of mankind going through different stages and being seen, judged, manipulated in all these periods. Make broad use of the philosophical, sociological, anthropological, physiological, biomechanical, psychic aspects. It is up to the teacher as a culture educator to understand their correct participation and contribution in the construction of a body model that is truly integrated and that this body can enjoy its environment in a broad and above all healthy way. According to Betti (1992) "The integration that will allow the enjoyment of the body culture of movement is to be full - it is affective, social, cognitive and motor. That is to say, it is the integration of his personality."

It is the role of the teacher to provide the incorporation of principles that will not only favor the moments of the classes, but that allow a full motor development and growth, thus enabling the students' interests to be activated, valuing their progress, whether or not they are in a movement pattern culturally pre-established; to challenge the thought giving its full participation in tactical actions and decisions of the group thus allowing its insertion in the collective evidencing and if necessary questioning its contribution in the decisions made making clear the possibilities of correctness but identifying and permitting above all the error in this way sharpening its self-esteem, their confidence in actions and decisions, always respecting the positioning of their colleagues by installing enthusiasm and confidence in individual or group participation.

Body language presents itself as one of the main forms of communication along with language, writing should be presented as one of the pillars of school education. However, what is perceived is a big gap in this discussion and thought form among directors, pedagogues and incredible as it may seem among the teachers of Physical Education in schools.

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METHODOLOGY

This study was carried out using the qualitative research, of an applied nature, with exploratory objectives, through field research, using interviews, as a form of data collection.

According to Fonseca (2002),

Action research presupposes a planned participation of the researcher in the problematic situation to be investigated. The research process uses a systematic methodology, in the sense of transforming the observed realities, from their understanding, knowledge and commitment to the action of the elements involved in the research (p.34). The object of the action research is a social situation situated together and not a set of isolated variables that could be analyzed independently of the rest. The data collected in the course of the work do not have significant value in themselves, interested as elements of a process of social change. The researcher abandons the role of observer in the benefit of a participatory attitude and of a relation subject to subject with the other partners. The researcher when he participates in the action brings with him a series of knowledge that will be the substratum for the realization of his reflective analysis about the reality and the elements that integrate it. The reflection on the practice implies in modifications in the knowledge of the researcher (p.35).

This study was carried out with a group of students of the 9th year of primary education, in the city of Estância Velha, in Rio Grande do Sul. Students attend the Anita Garibaldi Municipal School, with an average age of 15 years. The group consists of 34 students, of both sexes.

DISCUSSION OF RESULTS

The study was carried out from the school proposal of the Institution of Education that seeks by means of the incentive to the research, to begin with the scientific methodology. Many students report difficulties in understanding the essence of research, both empirically and technically. Through the observation of the work carried out in the discipline of Physical Education, seeking to motivate students in scientific research, the classes offered to students of the 9th grade were modified, providing situations involving techniques about body culture, as well as technical knowledge involving sports.

The classes were organized in two parts, scientific technical knowledge and innovative practical situations.

After this work during the period from March to October 2018, a structured interview was conducted with the 34 students involved.

The interview was based on four questions, where the following results were obtained:

In the question "Do you consider scientific research an important resource in your school life?" 79.4% of the students agreed on the importance of the research in their academic life, with 20.6% of the students not agreeing that there are some kind of relevance in scientific doing.

In the question of methodological language, to the scientific terms, it was with all the students interviewed (100%) agreeing with the difficulty of interpreting and understanding the technical knowledge, mainly associated with scientific writing, terms such as: introduction, objectives, methodology, discussion results and conclusion.

As for the benefits that this technical writing provided to the school performance in the different disciplines, 52.9% of the students noticed some improvement, but 47.1% did not observe any improvement in their performance, mainly in their quarterly evaluations.

As to the relationship between the curricular component of Physical Education and the scientific making, 61.8% of the students were able to understand the discipline as a motivator of scientific research, as well as perceive singularities in the technical approach. Thus, 38.2% of the students interviewed did not perceive any similarity.

The production of knowledge does not only require mastery of rules, but of creativity and imagination, since research, as an educational principle, is one of the most profitable ways to learn (DEMO, 2010). The search for information favors student autonomy. Thus, the role of the teacher in this point is to establish relationships and comparisons that help them to make learning meaningful.

The process of building the scientific knowledge developed today, in various learning spaces, is also coming from the realization of science fairs. Science fairs have been creating moments of knowledge sharing for young researchers who, when experiencing scientific initiation research at school, are reflecting on social problems, thinking and creating possibilities to make discoveries for their locality, their municipality and, who you know, for the country, since science, over the years, has sought to improve life in society.

CONCLUSION

The student's interest in working with scientific research implies new ways of thinking and learning, having seen that having access to science and how the scientific method is learned and constructed in the school space provides important knowledge for its formation.

Therefore, it is fundamental that the practice of research becomes an activity that is integrated into the school curriculum as an educational principle and as a process in formation for both the teachers and the students. We understand by this that the scientific method materializes not only by knowing, but by doing science. More than a purely disciplinary field to be featured in the student's curriculum, science must be the basis for critical and creative decision-making.

In this way, the study concludes that the scope of the discipline of Physical Education contributes in the other disciplines and is related to the scientific doing, being associated in the development of creative abilities and, in the systematization of ideas in an innovative way, in an effective interaction and articulation with the different areas of knowledge.

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SCHOOL PHYSICAL EDUCATION AS A MOTIVATOR FOR SCIENTIFIC RESEARCH SUMMARY

The Physical Education in Basic Education is a curricular component, which has specifics and contents to be explored and, why not, be used as a tool for research, as a mechanism to facilitate Scientific Initiation? Physical Education has an educational advantage, since it is easily articulated among the different areas of knowledge, this fact allows an interdisciplinary work freedom that is beneficial to the general educational process of the student. Thus the objective of this research is to analyze the interference of the Curricular component of Physical Education as motivator of the scientific research in students who attend Elementary School. As methodology was adopted the quantitative approach, with an applied nature, with exploratory objectives, through field research. The study was carried out with students of the 9th grade of Elementary School, a school located in the municipality of Estância Velha, in Rio Grande do Sul. As a result, the difficulty of understanding scientific writing is recorded, and even though, 52.9% of the students interviewed observed improvements in school performance, as well as, they came to better understand the scientific work. In this way, the study concludes that the scope of the discipline of Physical Education contributes in the other disciplines and is related to the scientific doing, being associated in the development of creative abilities and, in the systematization of ideas in an innovative way, in an effective interaction and articulation with the different areas of knowledge.

KEYWORDS: Physical Education; Scientific research; School performance

L'ÉDUCATION PHYSIQUE SCOLAIRE COMME MOTIVATEUR DE LA RECHERCHE SCIENTIFIQUE Résumé

L'éducation physique dans l'éducation de base est une composante du programme d'études qui doit être explorée et qui, pourquoi pas, peut être utilisée comme un outil de recherche, comme un mécanisme facilitant l'initiation scientifique? L'éducation physique présente un avantage éducatif, puisqu'elle s'articule facilement entre les différents domaines de la connaissance, ce qui permet une liberté de travail interdisciplinaire bénéfique pour le processus général d'éducation de l'élève. Ainsi, l'objectif de cette recherche est d'analyser l'interférence de la composante curriculaire de l'éducation physique en tant que facteur de motivation de la recherche scientifique chez les élèves qui fréquentent l'école primaire. En tant que méthodologie a été adoptée, l'approche quantitative, de nature appliquée, avec des objectifs exploratoires, par le biais de recherches sur le terrain. L'étude a été réalisée avec des élèves de la 9e année du primaire, une école située dans la municipalité d'Estância Velha, dans le Rio Grande do Sul. En conséquence, la difficulté à comprendre la rédaction scientifique est enregistrée et, même si 52,9% des élèves interrogés ont constaté une amélioration des performances scolaires, ils ont mieux compris le travail scientifique. De cette manière, l'étude conclut que le champ de la discipline de l'éducation physique contribue aux autres disciplines et est lié au travail scientifique, étant associé au développement des capacités créatrices et à la systématisation des idées de manière innovante, à une interaction et une articulation efficaces avec les différents domaines de connaissance.

MOTS-CLÉS: éducation physique; Recherche scientifique; Performance scolaire.

LA EDUCACIÓN FÍSICA ESCOLAR COMO MOTIVADORA DE LA INVESTIGACIÓN CIENTÍFICA RESUMEN

La Educación Física en la Educación Básica es un componente curricular, que posee especificidades y contenidos a ser explorados y, por qué no, ser utilizada como herramienta para la investigación, como un mecanismo facilitador de la Iniciación Científica? La Educación Física tiene una ventaja educativa, pues es de fácil articulación entre las diferentes áreas del conocimiento, ese hecho permite una libertad de trabajo, interdisciplinaria, que es beneficiosa al proceso general educativo del alumno. Así el objetivo de esta investigación es analizar la interferencia del componente curricular de Educación Física como motivadora de la investigación científica en alumnos que frecuentan la Enseñanza Fundamental. Como metodología se adoptó el abordaje cuantitativo, con naturaleza aplicada, con objetivos exploratorios, a través de la investigación de campo. El estudio fue realizado con alumnos de 9º año de la Enseñanza Fundamental, de escuela ubicada en el municipio de Estancia Velha, en Rio Grande do Sul. Como resultados se registran la dificultad de comprensión de la escritura científica, y que aún así, el 52,9% de los alumnos entrevistados observaron mejoras en el rendimiento escolar, así como, pasaron a comprender mejor el hacer científico. De esta forma, el estudio concluye que el alcance de la disciplina de Educación Física contribuye en las demás disciplinas y se relaciona con el hacer científico, siendo asociada en el desarrollo de habilidades creativas y, en la sistematización de ideas de forma innovadora, en una efectiva interacción y articulación con las diferentes áreas del conocimiento.

PALABRAS CLAVES: Educación Física; Investigación científica; Desempeño escolar.

A EDUCAÇÃO FÍSICA ESCOLAR COMO MOTIVADORA DA PESQUISA CIENTÍFICA RESUMO

A Educação Física na Educação Básica é um componente curricular, que possui especificidades e conteúdos a serem explorados e, por que não, ser utilizada como ferramenta para a pesquisa, como um mecanismo facilitador da Iniciação Científica? A Educação Física tem uma vantagem educacional, pois é de fácil articulação entre as diferentes áreas do conhecimento, esse fato permite uma liberdade de trabalho, interdisciplinar, que é benéfica ao processo geral educacional do

aluno. Assim o objetivo desta pesquisa é analisar a interferência do componente curricular de Educação Física como motivadora da pesquisa científica em alunos que freqüentam o Ensino Fundamental. Como metodologia se adotou a abordagem quantitativa, com natureza aplicada, com objetivos exploratórios, através da pesquisa de campo. O estudo foi realizado com alunos de 9º ano do Ensino Fundamental, de escola localizada no município de Estância Velha, no Rio Grande do sul. Como resultados registram-se a dificuldade de compreensão da escrita científica, e que mesmo assim, 52,9% dos alunos entrevistados observaram melhoras no rendimento escolar, bem como, passaram a compreender melhor o fazer científico. Desta forma, o estudo conclui que a abrangência da disciplina de Educação Física contribui nas demais disciplinas e relaciona-se com o fazer científico, sendo associada no desenvolvimento de habilidades criativas e, na sistematização de ideias de forma inovadora, numa efetiva interação e articulação com as diferentes áreas do conhecimento.

PALAVRAS-CHAVES: Educação Física; Pesquisa científica; Desempenho escolar.