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Original article

Meaningful Physical Education: proposal for the contextualization of curricular contents

Educación Física significativa: propuesta para la contextualización de contenidos curriculares

Educação Física significativa: proposta para a contextualização de conteúdos curriculares

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ABSTRACT

The adjustment of Ecuador's national Physical Education 2016 curriculum requires teachers to have a new professional profile in line with the new approaches and curricular content. The objective of this research was to present a proposal for contextualization in order to foster meaningful learning among students; it was based on the evaluation of teachers' assessments of the contents and the adaptation of active methodologies. The research was developed under the qualitative descriptive model. The population was 22 physical education teachers from seven private schools in Quito. The interview technique was applied with an instrument validated by the judgment of seven experts in a single circulation. The items of the questionnaire referred to the need to contextualize curricular content, the adaptation of active methodological strategies, and teacher alignment to curricular adjustment in order for learning to be meaningful. This work contributed with a curricular proposal developed with the intention of contextualizing and interpreting the elements of the



skills with performance criteria of the Physical Education curriculum, which will facilitate the application of active methodologies that guarantee that learning is meaningful and that the exit profile of the Ecuadorian high school graduate is reached, generating in the student a high degree of autonomy, which allows him/her to replicate the practice of physical activity at any time in his/her life.

Keyword: learning; Physical Education; context; content; meaningful.

RESUMEN

El ajuste del currículo nacional de Educación Física del Ecuador 2016, demanda que el docente posea un nuevo perfil profesional alineado a los nuevos enfoques y contenidos curriculares. El objetivo de esta investigación fue presentar una propuesta de contextualización para el fomento del aprendizaje significativo en los estudiantes; esta se basó en la valoración de las apreciaciones que tuvieron los docentes sobre los contenidos y la adaptación de metodologías activas. La investigación se desarrolló bajo el modelo cualitativo descriptivo. La población fue 22 docentes de Educación Física pertenecientes a siete instituciones educativas particulares de Quito, por lo que se definió una muestra censal. Se aplicó la técnica de la entrevista con un instrumento validado por juicio de siete expertos en una sola circulación; los ítems del cuestionario se refirieron a las necesidades de contextualizar los contenidos curriculares, la adaptación de estrategias metodológicas activas y la alineación docente al ajuste curricular para que los aprendizajes sean significativos. Este trabajo contribuyó con una propuesta curricular desarrollada con la intención de contextualizar e interpretar los elementos de las destrezas con criterio de desempeño del currículo de Educación Física, lo que facilitará la aplicación de metodologías activas que garanticen que el aprendizaje sea significativo y se alcance el perfil de salida del bachiller ecuatoriano, generando en el estudiante un alto grado de autonomía, que permita replicar en cualquier momento de su vida la práctica de actividad física.

Palabra clave: aprendizaje; Educación Física; contexto; contenidos; significativo.

RESUMO

A adaptação do currículo nacional de Educação Física do Equador para 2016 exige que os professores tenham um novo perfil profissional em conformidade com as novas abordagens e conteúdos curriculares. O objetivo desta investigação foi apresentar uma proposta de contextualização de modo a promover uma aprendizagem significativa entre os estudantes. A investigação foi desenvolvida no âmbito do modelo descritivo qualitativo. A população era constituída por 22 professores de educação física de sete escolas privadas de Quito, definindo a amostra censitária. A técnica da entrevista foi aplicada com um instrumento validado pelo julgamento de sete peritos numa única circulação. Os itens do questionário referiam-se à necessidade de contextualizar o conteúdo curricular, à adaptação de estratégias metodológicas ativas e ao alinhamento dos professores para que a aprendizagem fosse significativa. Este trabalho contribuiu com uma proposta curricular desenvolvida com a intenção de contextualizar e interpretar os elementos das competências com critérios de desempenho do currículo de Educação Física, o que facilitará a aplicação de metodologias ativas que garantem que a aprendizagem seja significativa e que se atinja o perfil de saída do graduado do ensino médio equatoriano, gerando no aluno um alto grau de autonomia, o que lhe permite replicar a prática da atividade física em qualquer momento da sua vida.

Palavra-chave: aprendizagem; Educação Física; contexto; conteúdo; significado.



INTRODUCTION

The Ecuadorian curriculum is based on reflections on the volume and breadth of curricular content or skills with performance criteria, constructed from the intentions, needs, and demands of education in society; in this sense, Physical Education, like other subjects, proposes an open and flexible curriculum, allowing learning to be meaningful for both students and teachers (Ministry of Education, 2017), through new learning experiences that are articulated with skills with performance criteria that are disaggregated, graduated, and contextualized, as proposed by Williamson and Hidalgo (2015, p. 5) when they mention that learning should be articulated to different cultures and to the solution of problems in a constructivist manner within the framework of the teaching-learning process.

Giraldo, Cadavid and Flórez (2019) state that flexibility in curricular content means having the possibility of modifying it in accordance with the spaces, interests and needs that guarantee the acquisition of learning. In other words, curricular flexibility depends on the contextualization that teachers give to curricular content in order to contribute to the quality of education

The contextualization according to Zabalza (2012) is,

"a process through which curricular proposals are adjusted to the particular parameters of the various environments, institutions and groups where they will be applied".

This is in line with the idea that contextualization is an important aspect in the execution of performance-based skills because it allows for adaptation to social, cultural, economic, environmental and educational conditions; Posso (2018) mentions that performance-based skills have four elements: skill, curricular content, level of complexity and context.

In this sense, the contextualization of the 181 skills with performance criteria of the Ecuadorian Physical Education curriculum guides teachers in the implementation of active methodologies in the area; Posso, Barba, Castro, Nuñez and Marcillo (2018) mention that the recreational, inclusive and physical education curricular approaches facilitate the contextualization of the curricular content, due to which different active methodologies must be applied.

There is no doubt that Physical Education teachers must know and interpret the elements of the skills with performance criteria, especially the curricular contents and their contextualization in order to determine the methodological strategy to be used in their classes. Cargua, Posso, Cargua and Rodríguez (2019) mention that teachers must be protagonists in the teaching-learning process and to this end they must research and innovate scientifically in order to respond to changing educational problems and ensure that learning is meaningful.

For this reason, Physical Education teachers in Ecuador must be in line with the curriculum, that is, classes must cooperatively construct contextualized content in which curricular approaches and active methodologies are applied so that learning is meaningful for students and can be replicated at any time in their lives; In other words, meaningful learning in Physical Education is the result of contextualizing skills with the social environment, in which students can develop effectively, efficiently and effectively throughout their lives.



Ausubel (2002) mentions that significant learning is a product of "new ideas expressed in a symbolic way and related in a non-arbitrary and non-literal way to those known to the student, and that the product of this active and integrative interaction is the emergence of new meaning", completing this idea Almeida (2007) says that the student must have a positive attitude for this learning, the resources must also have a high degree of significance that develops the knowledge and this has been previously contextualized to reality.

This antecedent has led to the formulation of a proposal for the decontextualization of curricular content, aimed at resolving the low level of curricular interpretation of Physical Education teachers, which will improve learning results and, at the same time, generate autonomy in the practice of physical exercise.

MATERIALS AND METHODS

The qualitative descriptive method was applied in this research, in which 22 physical education teachers from seven private educational institutions in the city of Quito participated, for which a census sample was made, that is, the entire population is the sample, in accordance with what Hurtado and Toro (2001) stated

"in small or finite populations no sample is selected so as not to affect the validity of the results" (p. 77).

During the compilation of the information, the technique of the interview with open questions was applied, which made it possible to know, from their perspective, the need to contextualize the curricular contents and the adaptation of active methodological strategies so that the learning is significant, and the need to align to the new curricular adjustment. This questionnaire was validated with the judgment of seven experts who were selected because they are university professors, who master the area of this research, and because they have several publications that are indexed, supporting the opinion of Robles and Rojas (2015) when they say that the judgment of experts guarantees that the process can have elements of exclusion or modification of aspects without value and the inclusion of relevant aspects. Only one circulation was made because the experts did not issue corrections and agreed with the contents. In this process, each question was analyzed using four criteria: sufficiency, clarity, coherence and relevance (Table 1).

Table 1. - Circulation validation

Objective	Dimension	Significance	Criteria	Item
Validate the ten-question bank through expert judgment	Questions bank	The content is in line with the objective of the study. The instrument facilitates the collection of transcendental information.	Sufficiency, clarity, coherence and relevance.	Simple



For the statistical analysis of the first circulation, it has been proposed to use the qualitative analysis by the nature of the validation, in which the values of the mean and the standard deviation are highlighted; the following table shows the results of the consultation of the seven experts (Table 2).

Table 2. - Expert validation results

Dimension	Criterion	Yes	No	Mean	Desviation
Question bank	The questions are in a logical order	7	0	1	0
	The questions are easily understood	7	0	1	0
	The questions are repetitive	7	0	1	0
	The questions are very technical	7	0	1	0
	Would you change a question?	0	7	2	0
	Would you add any questions?	0	7	2	0
	Would you exclude any questions?	0	7	2	0

The table 2 shows the coincidence that exists on the part of the seven experts, due to the fact that the standard deviation is zero; therefore, there is no variation in the data, that is to say, there is no dispersion.

The 22 interviews were applied in the last quarter of 2019 to Physical Education teachers from the seven private educational institutions in the city of Quito, who were informed about the objective of the research and the ethical standards of the [American Psychological Association \(2010\)](#) that would be followed.

The six authors of this research, prior to the collection of data had two meetings to establish guidelines to avoid dispersion at the time of the interview, once collected and recorded in writing the recordings were categorized into dimensions and criteria. In the first stage, the researchers formed three pairs to analyze the information separately, as established by [Coffey and Atkinson \(2005\)](#) when they mentioned that researchers at the time of analyzing the data can expand them and fall into subjectivities. In a second stage, in order to guarantee reliability, the results obtained by the three pairs of researchers were triangulated, comparing in consensus the coincidences and interpretations that are transcendental for this research, as stated by [Amezcuá and Gálvez \(2002\)](#) when they state that different data obtained from various researchers must be triangulated in order to explain a problem.



RESULTS AND DISCUSSION

After triangulating the results obtained from the three pairs of researchers, the data described were obtained (Table 3).

Table 3. - Triangulation of interview results

Dimensions	Criteria	Subcriteria	No. answers	% answers
Need to contextualize curricular content and methodologies so that learning is meaningful	Student's reality	He improves the learning process.	18	81,8
		He develops metacognition	14	63,6
	Student's social environment	He generates transdisciplinary processes	13	59
		He generates entrepreneurs and innovators	14	63,6
		He contributes positively to social environments and realities	12	54,5
	Student's Needs and Interests.	He improves the interest to know	17	77,2
		He improves school performance	21	95,4
Need to adjust to the 2016 curricular adjustment to make learning meaningful	Teacher's educational environment	He improves interpersonal relations	19	86,3
		He improves positive interactions	15	68,1
	Teacher's Professional Profile	Mastery in contextualization of curricular content	22	100
		Mastery of adaptation of active methodologies in the area	18	81,8
		Mastery of the evaluation process	15	68,1
		Researcher and innovator.	17	77,2

The triangulation made it possible to fully assess teachers' appreciation in two dimensions, the first as a need to contextualize curricular content and methodologies; and, the second, the need to align with the current curricular adjustment, both aimed at ensuring that learning is meaningful.



Need to contextualize the curricular contents and methodologies

This dimension states that learning can become significant in students if the curricular content and methodologies are contextualized from three criteria. The first is that for contextualization, the student's reality must be known, that is, how he or she learns; this will significantly improve his or her learning and meta-cognition process. The second is based on the student's social environment because learning acquires a transdisciplinary character, generating possibilities of intervention and contribution in society, orienting them to be researchers, innovators and entrepreneurs, integrating themselves positively in their immediate surroundings and in society in general. The third is that this contextualization should be based on the needs and interests of students to increase their interest in learning, and at the same time, improve academic performance and attitude, i.e. the teacher must know the purpose of learning for each student and this in common with the whole class, to contextualize the content and methodologies.

As a result of the analysis of the interviews with the Physical Education teachers, it can be said that the student comes to obtain significant learning of all the contents set out in the curriculum, and if they are significant it can be thought that the autonomy of physical activity can be maintained throughout his life.

Need to be in line with the 2016 curricular adjustment

This dimension states that if teachers are in line with the curricular adjustment, student learning can be significant. It is based on two criteria, the first states that the curriculum allows for an excellent educational environment in which teachers establish good interpersonal relations and improve the teaching process by applying positive interactions in class, the second states that in order to develop the curriculum, teachers must adapt to the new changes proposed in methodology, in the application of curricular approaches, and that the contents must be contextualized, that is, they must be oriented towards a new professional profile in which they complement innovation and research.

When analyzing the triangulation of the results, it can be seen that the teachers interviewed, pronounce 100 % that having mastery over the contextualization of curricular content, 95 % that contextualizing the content improves school performance and 86 % that the educational environment of the students improves the interpersonal relations of the entire educational community, allowing the learning to be meaningful for the students.

Similarly, the triangulation of results was analyzed with low percentages, 54 % of which showed that the social environment contributes positively to the social realities of students and 59 % of which showed that students apply their knowledge across disciplines, thus making a significant contribution to society.

With the above mentioned, it can be said that in this research it was fully assessed the appreciation that the Physical Education teachers had, on the contextualization of the contents and the adaptation of methodologies for the promotion of meaningful learning in the students, defining the following results.

- In order to develop the contents of the Ecuadorian curriculum adjustment, it is necessary to contextualize it to the immediate reality of the student and the social environment.



- Contextualization depends on the mastery of the curricular content and the innovative capacity of the teacher.
- For Physical Education to be meaningful, contextualized content must be transferred to everyday situations through the adaptation of active methodological strategies.
- The teacher must be in line with current curricular requirements and have a new professional profile.

In conclusion, it is stated that this work contributed to understanding the need to interpret and contextualize the skills with performance criteria, as well as the importance of applying active methodologies to guarantee meaningful learning and student autonomy in the practice of physical activity; this study will make it possible to establish a different perspective of physical education in Ecuador, establishing the basis for future research to determine the promotion of the reduction of school sedentarism.

Proposal for the contextualization of curricular content

The analysis of the criteria and sub-criteria of the dimensions: the need to contextualize curricular content and active methodologies; and the need for alignment with curricular adjustment 2016 so that learning is meaningful; justify and support the proposal for contextualizing and interpreting skills with performance criteria of the Ecuadorian National Physical Education Curriculum.

In order for skills to be contextualized and interpreted according to performance criteria or curricular content, they should be incorporated into the home focus, since that is where students spend the most time, interacting constantly with family members, with the physical environment, and with the various elements that make up the curriculum. To this end, several strategies are considered that physical education teachers will use in their microcurricular plans, with the aim of acquiring prior knowledge in the home so that the learning is meaningful (Table 4).

Table 4. - Strategies for contextualizing prior knowledge

Approach	Strategies	Technical	Means
Home	Search to acquire previous knowledge.	Ask, observe and read.	Family, technological means, bibliography.
	Discuss to acquire previous knowledge.	Ask, dialog and debate.	Family and friends.
	Experience previous knowledge.	To experience.	Actions in the home.
	Remember previous knowledge.	Remember, read, ask and observe.	Family, technological means, school texts.

There is no doubt that the home-based approach allows for a link with the strategies for acquiring prior knowledge, and these in turn facilitate the application of techniques for generating learning, which, when articulated with different means or elements of the home-based approach, make learning meaningful, guaranteeing that it remains with the student over time and enabling him or her to replicate and apply it to his or her advantage.



The generation of this previous knowledge in the student, becomes the first step for the contextualization of the curricular contents. The second step is that the teacher can interpret the 181 skills with performance criteria of the Physical Education curriculum, from the students' learning objective, the exit profile by educational sublevel and their theoretical and practical knowledge (Table 5).

Table 5. - Interpretation of the skill with performance criteria or curricular content

Elements	Description	Interpretation	Contextualization
Skill	Generator and guide of the development of activities.	Cognitive, procedural or attitudinal.	Determine motor, cognitive, social and affective activities.
Contents of the curricular blocks	Intellectual and motor skills of the curriculum by educational sub-level.	Adjustment to the purpose of learning and the age of the student.	Disaggregation, gradation, selection and exclusion of content by educational year
Level of complexity	Degree of difficulty and deepening of the content and activity.	Desirable learnings that contribute to the output profile	Disaggregation, gradation of activities and exercises.
Context	Adjustment of the content and level of complexity to the educational reality.	Activities and exercises adapted to educational reality.	Adaptation of the exercises and activities to the educational reality.

The skill with performance criteria is a true statement that guides the teacher on how to reach the quality of learning development, it is divided into four elements: skill, content, level of complexity and context; these have different characteristics that are articulated into a whole to achieve different learning outcomes. Each of these elements must comply with a process of interpretation and contextualization depending on the purpose of learning previously established by the teachers of the different educational levels, following a sequential logic and a behavioral thread for constructivist teaching.



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Conflict of interests:

The authors declare not to have any interest conflicts.

Authors' contribution:

The authors have participated in the writing of the work and analysis of the documents.



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