SYSTEMATIC MODEL OF THE QUALITY PHYSICAL EDUCATION CURRICULUM (CEFC)

A challenge for inclusive social developement and the promotion of intercultural dialogue



Public Policy Guidelines for Physical Education

Jesús Astolfo Romero García PhD Nelson Orlando Clavijo Gutiérrez PhD



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منظمة الأمم المتحدة
 للتربية والعلم والثقافة

联合国教育、· 科学及文化组织 .

The Assistant Director-General for Social and Human Sciences

Mr Jesús Astolfo Romero García Dean Facultad de Cultura Física, Deporte y Recreación University of Santo Tomás Bogota Republic of Colombia

9 April 2019

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Dear Mr Romero,

I wish to extend to you and the University Santo Tomás of Colombia, on behalf of UNESCO and in my own name, my sincere congratulations upon the publishing of the book "Systematic model of the curriculum of quality physical education".

As the United Nations' lead Agency on physical education and sport, UNESCO very much welcomes and encourages initiatives such as this, which have a concrete impact on the ground.

I would also like to express my appreciation to the University Santo Tomás, which, through this publication, contributes to the implementation of the Kazan Action Plan, adopted in 2017 by the Sixth Conference of Ministers and Senior Officials in charge of Physical Education and Sports (MINEPS VI), and particularly of its specific policy areas I.3 - Foster quality physical education and active schools - and II.3 - Provide quality education, and promote lifelong learning for all and skills development through sport.

Wishing you every success for your future work, I remain,

Yours sincerely,

Nada Al-Nashif

Contenido

SUMMARY	7
INTRODUCTION	8
CHAPTER I: TOWARDS A QUALITY PHYSICAL EDUCATION	11
1.1. The current role of the Physical Education	12
1.2. Sport: Essential means of the Quality Physical Education	13
1.3. Free time: a choice for the commitment to the physical activity and sport throughout life.	15
1.4. Game as a strategy for the Quality Physical Education	16
1.5. The UNESCO proposal for a Quality Physical Education	18
First indicator: To accomplish the basic rules	20
Second indicator: To promote a Quality Physical Education (QPE)	21
Third Indicator: To guarantee the Teachers training on the Quality Physical Education (TTQPE)	23
1.6. The Physical Literacy Trainig	25
CHAPTER II: SYSTEMATIC MODEL OF THE QUALITY PHYSICAL EDUCATION CEFC	27
2.1 Theoretical models: classification	28
2.1.1. The Systematic Model of Quality Physical Education: Conceptual framework	28
2.2 Systematic Model: concept and characteristics	29
2.3. Systematic model of the curriculum of the Quality Physical Education	30
2.4. Applied characteristics and postulates of the Systematic Model to a Quality Physical Education	31
2.5. The curricular realization in the Systematic model of the Quality Physical Education—CEFC	33
The systematic model for the Quality Physical Education: Levels and responder	34
2.6. The Macrocurriculum of the Quality Physical Educaction	38
The planning moment	39
The consolidation moment	39
Evaluative socialization moment	40
Adoption and disclosure moment	40
Pedagogical guidance moment	40
2.7. The Mesocurriculum of the quality Physical Education	40
2.8. The micro curriculum of the Quality Physical Education	42
2.8.1.Teaching strategies on the Quality Physical Education	47
2.8.2. Family importance at Physical Literacy	48
BIBLIOGRAPHY	50
About the authors	51

SUMMARY

This document is the result of several researches based on the Guide of Physical Education of Quality proposed by UNESCO (2015). From this perspective, the proposed model develops the reference indicators established in the Guide, through the determination of a systematic approach that counts with sequential stages to allow the relation between the elements of the different standards or aspects (governmental, institutional, academic space), identifying what and how they can achieve the promotion of a Quality Physical Education, in order to generate healthy habits and lifestyles, within the framework of the physical literacy of schoolchildren.

This model is considered as a complete process that guides the projection of public policies up to community and individual transformation, directed to consolidate a Quality Physical Education. That is how the model determines the elements established for each level, the functions or operations to be performed and the sequential order of the process. It establishes the permanent assessment and feedback as a fundamental aspect of the process, in order to make necessary adjustments or corrections, to achieve its optimization and recognition in different contexts.

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INTRODUCTION

The Medium Term Strategy Project 2014-2021 from United Nations Educational, Scientific, and Cultural Organization- UNESCO, defines the need to support the inclusive social development and to promotion of intercultural dialogue as one of its main objectives. In this context, it is established that Sport is one of the most helpful ways to disseminate essential messages related to Human Rights, development and peace, as well as understanding among nations. It is also the best way to reach out both young men and women.

UNESCO is committed to work on formulating inclusive policies and actions in Physical Education's area, Sport and the fight against doping. As an indicator of the result, it is established that the domestic frameworks and the Sport policies must be reviewed to guarantee Sport access to everyone, promoting the Gender Equality and improving the Physical Education at School.

The need to offer Sport access for all the people, in the Quality Physical Education's perspective, is posed from the Health field as a strategy focused on reducing the high levels of sedentarism and inactivity that prevall nowadays all around the world, since these are considered to be the main causes of non-communicable diseases- NCD among young people, which is now recognized as a public health problem.

The efforts to reduce the prevalence of NCDs in most of the countries are mainly focused on stopping the growth of cardiovascular diseases, diabetes, cancer and chronic pulmonary disease. The World Health Organization –WHO (2008), informs that the NCDs keep growing and nowadays represent the 82% of worldwide deaths. Therefore, this institution proposes a relative reduction of the insufficient physical activity on a 10% as a world goal for 2025.

In addition, UNESCO addresses the need of giving a new guidance to the area of Physical Education under a Quality perspective that takes the responsibility to promote the acquisition of psychomotor abilities in children and young people, also cognitive comprehension and socio emotional aptitudes that allow to reach an active physical life. In other words, a Physical Education that tends towards a physically literate person that acquires the aptitudes, confidence and comprehension to keep making physical activity throughout his/her life.

Hereunder, it is presented a proposal for a systematic model of the curriculum in the Quality Physical Education, which involves the different standards (governmental, institutional and academic field), taking as a reference the Quality Physical Activity guide proposed by UNESCO (2015), and the result of several researches; (Romero, J.A y Amador F (2007), N (2010), Clavijo, N y Colmenares, S. (2014), Clavijo, N y Espinosa, T. (2015), Clavijo, N (2016) Romero, J.A. y Clavijo, N (2018), among others).

This model is posed as a complete process that guides the projection of the public policies until the community and individual transformation, focused on consolidating a Quality Physical Education to achieve the Physical literacy of the population.

This document is composed of two chapters that address, in first instance, issues related to the current role of the Physical Education, the Sport as an essential mean of the Quality Physical Education, the UNESCO proposal, the education on the Physical literacy, as well as the concepts and characteristics of the systematic model, the classification of the theoretical models, the postulates and characteristics of the systematic model of the Quality Physical Education and the curricular application on a Quality Physical Education.



CHAPTER I: TOWARDS A QUALITY PHYSICAL EDUCATION



1.1. The current role of the Physical Education

Until the 90s, the Physical Education was framed exclusively in the educative and pedagogical field, so it was considered only as one of the subjects into the study plan throughout the different levels of schooling. Based on a deeper analysis it is necessary to highlight the evolution and social recognition that the Physical Education has reached throughout history.

Nowadays. It is attributed as one of the main purposes in the search of coservation and Health development, because it helps the human being to improve his/her biological, physical, psychological and social potential.

Physical Education is considered a very effective pedagogical instrument, mainly because it helps to develop human basic motor qualities as a bio-psycho-social unit (psychomotricity). Moreover, it contributes to the educational action with its fundamentals and its interdisciplinary links, mainly supported by philosophy, psychology, biology and physics. Romero and Amador (2007).

Physical Education is not a set of homogeneous knowledge with a defined disciplinary character, it is in fact the result of the pedagogical process or linked to the body expressions – games, sports, leisure, artistic and creative activities. It means that it is the disciplinary treatment of the motor expressions into the education system.

Motor skills refer to a way for building "behaviour", as a scientific object, providing a guiding thread and suggesting the relevance of studying the communication processes and the decision of the motor action.

(Amador, 1994)

Due to the notion of motor behaviour enables the analysis of the cognitive, emotional and relational components involved in the rigorous actions, this behaviour is a specific action of the human being dierent from other behaviours such as the oral ones, or from a dierent nature.

UNESCO (2015) invites governments to identify Physical Education as:

A curricular assignment

Its approach combines the corporal and physical competence With communication and learning based on values

For the deveopment of the necessary aptitudes to achieve sucess in the S. XXI

Illustration 1. Caliing for action. Source: UNESCO (2015)- Adaptation

1.2. Sport: Essential means of the Quality Physical Education

Sport is considered as a social phenomenon with a global impact, there is a huge number of concepts, among them we can highlight the expressed by Parlebas (1998), who defines it as "any kind of motor situation with a codified confrontation, it is called game or sport according to social instantes". Some years later Hernández, M. (1994), complements this definition. He understands it as any kind of "competitive, ruled motor situation with a ludic character and also institutionalized", that keeps defined characteristics among which they stand out: psychomotor or individual, of oposition, of cooperation, of collaboration-oposition.

Sport is conceived as an essential element to support the education system, health policies and in general, all the social requirements, acting as a determiner of the citizens' quality of life in the contemporary society

(Romero y Amador, 2007)

The next graphic points the way how Sport is presented as one of the greatest impact means for students and its contribution for the Quality Physical Education.

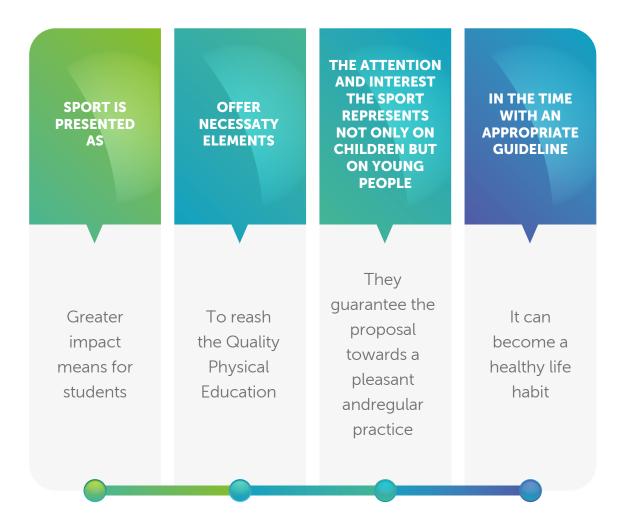


Illustration 2. Sport as an essential means.

Since the proclamation by UNESCO (1978), on the International Letter of Physical Education and Sport, this area is strongly included along the formal education processes. It has achieved a highlighted impact by the recognition of the importance of Sport as a fundamental element for the social and human development.

1.3. Free time: a choice for the commitment to the physical activity and sport throughout life.

When we refer to free time, it is concerned to a social category where the subject has the possibility to make a voluntary election and he is free to use it. It does not imply external restrictions, in other words, without any social, cultural or familiar coercion that aects on the individual's choice to use his free time.

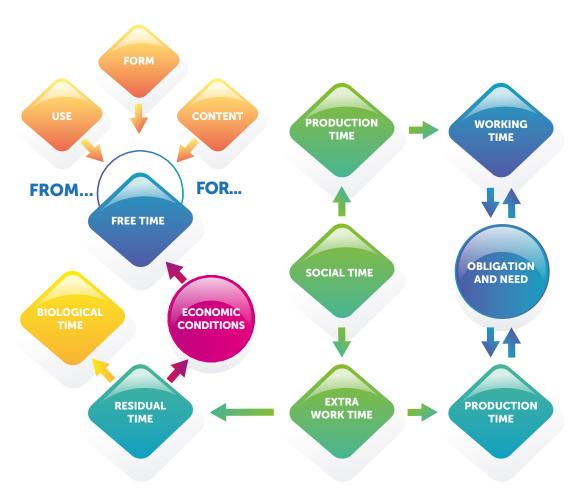


Illustration 3. Free time components.

Nowadays in our society, the reduction of both space and time corresponds to an undeniable reality, people have grounded his success throughout history thanks to coexistence with others. In addition, we face a divested reality because of the rise of working time and thus a minor quality and amount of time to build relations with other people. That is why the time parents dedicate to their children is steadily decreasing, causing important changes on the behavior of basic family relations.

In several publications, the UN has enunciated that it is a State's obligation to defend and to protect family, therefore, different kind of strategies have to be established. They might include the recognition of the proper use of free time, so the subject can make the decision to improve and maintain his health. This decision is related with how he/she can promote his own intelectual, emotional, physical and psychological development.

Educating for the free time implies educating to make decisions about what to do during the free time, therefore, this is a shared responsibility between family and institutions (education, sport, cultural), because they participate actively at children and young people learning processes and enable the choice and the organization of proper practices that will last throughout life.

1.4. Game as a strategy for the Quality Physical Education

Game, on his deepest essence, is the world where child's reality goes through. This world is a place that he can control and strengthen his self-esteem and his self-confidence, moreover he can create rules and fantasies. It is an inner trip not only on his own, it is also a trip with others. In this context, a game guided by a teacher searches for an holistic development of the human being. All of this through agreed, voluntary and accepted activities.

Including games in Physical Education is essential because it guarantees the upwelling of the ludic condition (which is natural on human beings), inhibited most of the times by "socially accepted rules", this sense of freedom, in turn, generates an environment where the child can feel and be how he really is and feels. Is is where the personality features emerge and they must be improved by the self-control.

Ludic is considered as the human being's capability to perceive and express his emotions. This condition is unique and it is predisposed genetically on each individual. It allows him to express his creative potencial, especially present in the game, as well as any other human activity.

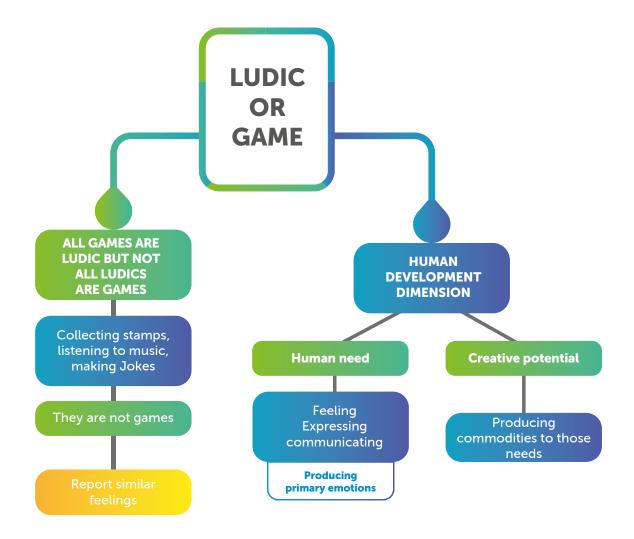


Illustration 4. Dierences betwenn game and ludic.

Game is a way of ludci expression and it can be developed by means of simple participation structures and social integration, with a variety of purposes that go from the teaching of a motor skill, to the learning acquisition as a way to develop social skills or to build up values.

It means that the game is considered as the main activity for a child and his biggest exploration scenario, that implies and supposes a very intense physical, social, emotional and spiritual experience. The game generates dierent states of satisfaction, interiorization and also a variety of chances for introspection.

1.5. The UNESCO proposal for a Quality Physical Education

UNESCO (2015) has proposed a resignification of the Physical Education concept to Quality Physical Education- QPE, based on three principles: Equality, protection and meaningful participation.



Illustration 5. EFC principles.

An equitable Quality Physical Education is defined as "the progressive, inclusive and planned learning experience that participates in the childhood education, primary and High School curriculum, acting as the first step to a commitment to the physical activity and sport throughout life". Association for Physical Education -AFPE (2008). It means that teaching must not be based on planning the methodological processes, the development and improvement of physical capabilities, but, it must prioritise the development and the comprehension of the cognitive elements, social and emotional atitudes as well as the cultural capital.

Therefore, the learning experience that is offered to both children and young people in the Physical Education classes, must be suitable to help them to acquire a cognitive comprehension, the necessary physical, social and emotional aptitudes to have a physically active life.

This means that the teacher in charge if guiding this subject must achieve a comprehension of heathy living habits through the physical literacy on his students, as a product of the learning process.¹

Physical literacy can be described as motivation, competence, physical competence, knowledge and understanding to maintain a physical activity throughout life and refers to necessary skills to obtain, understand and use information to make good decisions for health. (Whitehead, 2001)

The proposal for a Quality Physical Education (QPE), takes as a normative principle the exposed by The National Association for Sport and Physical Education – NASPE (2012), that defines these distinctive features:

- The Quality Physical Education comprises the learning of a variety of motor abilities designed to improve the physical, mental, social and emotional development on every child.
- The Quality Physical Education starts out from the recognition of the importance of educating a human being to move, exceeding the corporal and physical scenario, involving biological, psychological and social issues, in order to achieve the development of the educational, sport and healthy applications.
- The Quality Physical Education must support the development of the Physical literacy. This literacy can be described as the motivation, confidence, physical competente, knowledge and understanding to maintain a physical activity and refers to the necessary aptitudes to obtain, understand and use the use the information, in order to make good decisions to improve our health. Whitehead (2001).
- Physical Education must be recognized as the base for an inclusive and civic participation that lasts the whole life. The expected result is a young person physically literate. A person that has the aptitudes, confidence and understanding to keep making physical activity throughout life.

UNESCO (2015) presents three reference indicators interrelated for this area, based on the quantitive and qualitative analysis in more than 220 countries and autonomous regions, in organizations and institutions responsible for the Physical Education, with a view to strengthen the information base for the construction of reference frames that allow the consolidation of a Quality Physical Education:

- Comply with the basic rules
- Promote the implementation of a Quality Physical Education
- Guarantee the training for teachers for the Quality Physical Education.

First indicator:

To accomplish the basic rules

This benchmark has as main intention to describe the minimal quality conditions required to be able to provide Quality Physical Education (QPE). It is composed by six (6) search axes: The political one, the human resources, the physical and material resources, the previous training at the program development, the promotion, the monitoring and the evaluation.

TO ACCOMPLISH THE BASIC RULES

QUATILY CONDITION:

Describe the minimal contidtion to impart a basic QFE.

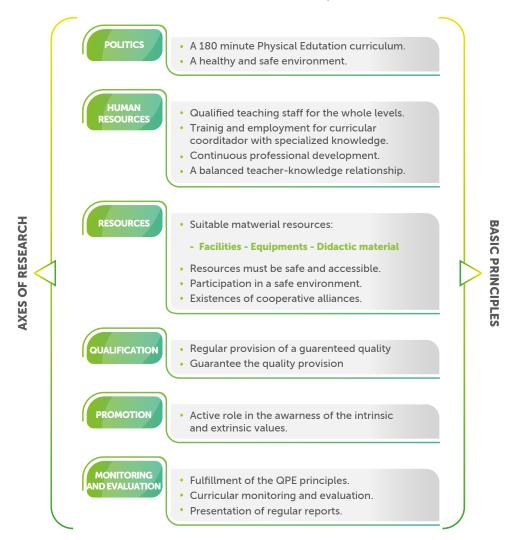


Illustration 6. Minimal conditions indicator to be able to impart a Quality Physical Education UNESCO (2015).

Second indicator:

To promote a Quality Physical Education (QPE)

This indicator corresponds to the main functioning of the elements on any program or strategy, with a great deal of influence on the first search axis that belongs to the curriculum development and the external transverse links made at the community frame, the training of students, evaluation and research.

OFFER A QUALITY PHYSICAL EDUCATION

QUALITY CONDITION:

That defines the requierements for a balanced QPE.

- · Integration of quality and inclusion, full of opportunities and and committed to certain programsn for people with special
- Formative/developer base, sequenced by objectives and defined learning results.
- · Continuous improvement of the knowledge and motor aptitudes on abroad range and balanced on the activities that promote the cultural heritage
- · That promotes the development of the Physical literacy.
- That promotes the cooperation and the healthy competition.
- · That recognizes the differences between students and provides relevant, diverse challenging activities to the students and the whole community.
- · That promotes the necessary Knowledge and aptitudes to keep an active and healthy lifestyle throughout life.
- · Promoter of all the of the knowledge domains with opportunities for every student in order to develop essential abilities such as leadership, communication and teamwork
- · Promoter of the basic values associated to physical education and sport such as respect, tolerance and fair play and also promoter of the world citizenship ideal accordingly to the Post 2015 agency.

- · Existence of intra and interscholastic opportunities, through school/community links.
- · A curriculum that links physical education to the environment and the community and promotes learning outside the classroom and among the diverse communities.
- Integration with other areas of the school curriculum as a whole through transversal links.

AXES OF RESEARCH

- · With self-confidence, competence, knowledge and understanding, in accordance with the curriculum.
- · Demonstrate physical competence, move in an ecient and ellective way
- · Able to transfer and adapt their skills to dillerent physical activity environments.
- · With capacity for participation, assuming roles and leadership among them.
- · With a positive attitude towards participation within physical education.
- · With knowledge of the benefits of adopting and maintaining a healthy and active lifestyle

EVALUATION

LEARNING PROCESS

1. QPE curriculum 2. QPE program

3. Teachers

4. Students

TEACHING PROCESS

A clear framework for the performance management that includes a regular observation and other strategies to inform and improve the practice and promotes a learning culture moreover, develops a positive environment

RESEARCH

Commitment with research networks and useful alliances to promote the physical evaluation's values to a broad audience. through different initiatives on media and promote the exchange of good practices of quality learning and teaching.

Illustration 7. Reference indicator for a balanced Physical Education program UNESCO (2015).

Most of the research process at the first stage is focused on this benchmark, seeking to provide an answer to the curriculum development axis. Therefore, four reference pillars are raised to build these objectives, to link them to the strengths and weaknesses matrix.

Table 1. Reference pillars to start searching for the Quality Physical Education concept. UNESCO (2015).

Where invest?	Why invest?	Objectives of the intervention
Physical literacy and civic participation	It is the only subject which its focus combines the corporal and the physical competente with communication and learning based on values.	To guarantee the leisure and the free time utilization in the knowledge based community and the sport practice.
Academic achievements	Regular participation in quality physical education and other forms of physical activity can improve a child's attention span, speed up their processing and cognitive control.	Acquire knowledge and abilities to learn that allow the correct use of free time throughout the lifecourse.
Inclusion	It is a wider inclusion platform in the society, especially in terms of challenge and stigma and the overcoming stereotypes.	To favour the inclusion, and its capacity to group dilerent motor manifestations that will be a way to promote habits and healthy lifestyles oriented to improve the quality of life on people.
Health	Physical education is the entry-point for lifelong participation in physical activity.	To develop interests, atitudes and sensivity towards the Quality Physical Education practice for a healthy life.

Each of these elements which are part of the defined instrument, correspond to possible questions that a group of experts could make when facing the task to outline the basic guidelines of the proposed curriculum for a Quality Physical Education program.

Third Indicator:

To guarantee the Teachers training on the Quality Physical Education (TTQPE)

It is the third and final indicator, which is also the clue for the Quality Physical Education realization. Moreover, it is oriented to the teacher's training, raising the major working areas and focusing on his professional profile. In this context, teacher's knowledge must include: the aptitudes, the practices, the qualification and the monitoring by a continuous evaluation of his performance.

TO GUARANTEE TO TEACHERS' TRAINING ON THE QUALITY PHYSICAL EDUCATION. (TTQPE)

BENCHMARKS:

That point the key training areas to enable and empower teachers.



- Recruitment of academically capable, motivated and committed trainees, who have positive attitudes and appropriate aptitudes for undertaking teacher education.
- · A programme of study that develops ethically and professionally sound values and behaviours, with a focus on equity and inclusion.
- A programme of study that ensures trainee teachers are aware of their role in terms of safeguarding and child protection, and which develops knowledge of the various forms of abuse, along with how to respond appropriately to suspected abuse.
- Provision for research and capacity-building in teacher education that contributes to development of positive professional attitudes of reflective and capable practitioners.
- Teachers engaging in research in order to improve teaching and learning, and promoting the dissemination and sharing of knowledge through professional networks.



- A programme of study that is formatively/developmentally based, progressively sequenced and links theory and practice, with clearly
 defined aims, learning outcomes and key concepts.
- A programme of study that provides opportunities and experiences for enhancement of knowledge, understanding and movement skills in the full range of fields of study.
- A programme of study that increases knowledge of individual development, and understanding of the rationale for individualized, child-centered approaches to teaching and learning.
- A programme of study that emphasizes the essential role of physical education in contributing to personal well-being and to a healthy, active lifestyle throughout the life course.
- A programme of study that develops an understanding of the needs of all pupils, including those with special educational needs; those of high ability; those from minority ethnic backgrounds; those with disabilities; and those from other minority groups, and that provides opportunity to use and evaluate distinctive teaching approaches to engage and support them.
- A programme of study that enables the trainee to accrue the knowledge, competence, and skills put forward by the EIPET framework, and meet the key areas, roles and functions identified on the EIPET functional map.
- A programme of study that supports trainee teachers in planning for the development of learners' skills across the full range of learning
 domains, and which enables trainee teachers to develop an understanding of how to facilitate the development of life skills, including,
 leadership, communication and teamwork.
- A programme of study which promotes the importance of physical education in promoting the core Values associated with physical
 education and sport, such as, respect, fair play and tolerance, and which supports the idea of global citizenship, in line with the Post-2015
 agency.



AXES OF RESEARCH

- A balanced and coherent programme of study that leads to the acquisition and application of a range of pedagogical and didactical
 processes and management techniques that guarantee appropriate differentiation of learning tasks and teaching styles, which are typical
 of a reflective teacher.
- A programme of study that develops techniques of observing, recording, classifying, analyzing, interpreting and presenting information and using this to inform and enhance teaching practice.
- A programme of study that fosters safe behaviours and management of risk-taking.



- A balance in the time for learning content knowledge, learning about pedagogy, pedagogical knowledge, and experience in learning to teach.
- · Opportunity for practical experience of inclusion and supporting children with different capacities in physical education.
- Supervision of teaching practices by appropriately qualified/experienced provider staff and co-operating school teacher mentors.



A standardized qualification structure and system along with a common understanding of the minimum requirements for the award of qualifications.



· A systematic plan in place for programme evaluation and quality assurance.

The understanding of the academic field in the Physical Education requires the professional teacher training. In contrast with other disciplines, this area requires the initial knowledge coming from the very basic teacher training. It allows him to determine the didactic and pedagogical model in order to organize the teaching process, and also it allows him to structure an applicable program according the the needs, interests and expectations of the students.

According to Grossman (2005),a teacher must have an appropriate knowledge that allows him to approach these ctegories: content knowledge, the substance and syntactic knowledge and the teacher beliefs about the subject. This is called the didacic knowledge of the content. (DKC).



Illustration 9. Didactic content knowledge.
Source: Grossman (2005)

1.6. The Physical Literacy Trainig

Physical literacy can be defined as a learning process composed of different competentes that allows that individual to guide a variety of actions such as: his knowledge and self –care, the correct practice of physical exercise, and also the acquisition and maintenance of healthy lifestyles.

According to Whitehead (2001), the Physical literacy is "the motivation, confidence, physical competence, knowledge and understanding to maintain a physical activity throughout the lifecourse and it refers to the necessary aptitudes to obtain, understand and use the information in order to make good decisions related to health".

The acquisition of the necessary skills to reach the optimum levels of Physical literacy, must be framed by a teaching strategy developed under the proposal of a Quality Physical Education. It is based on the established parameters and sequenced systems on an assertive curriculum that allow, not only to teach for the movement, but also to promote learning about self-care on each person, through the regular practice of the physical education.

The physical literacy is considered, by UNESCO (2015), as the basis of the Physical Education, because it is the final product of the education process and it does not come from a program or a content. It means that, the objective of a Quality Physical Education is the training to acquire habits for a regular physical practice throughout the lifecourse.



Illustration 10. Characteristics of a physically literate person Adapted from Whitehead (2010).





CHAPTER II: SYSTEMATIC MODEL OF THE QUALITY PHYSICAL EDUCATION CEFC



2.1 Theoretical models: classification

According to Latorre (2013), models can be classified in:

Deterministic models: It is oriented to achieve a high and deep relation between the obtained results and the determination of exact formulas, based on the supplied data and the studied phenomenon.

Stochastic and probabilistic models: these models do not assume what it was said above. They imply that there is not an exact result but probable one. Thus there is uncertainty.

Conceptual Model: It is based on the determination of categories that are organized and interrelated, to allow a greater understanding of the represented phenomenon.

The systematic model proposed is framed on the last category, because it is focused on living a schematic representation that determines the necessary conditions to reach the realization of a Quality Physical Education. This model, allows the approach of three simplified sub systems; the first one consolidates the consensus between policies and guiding principles emanated from the States, and has been labelled as macro curriculum. The second subsystem is labelled as meso curriculum and it corresponds to educational institutions; they embed the importance of the Physical Education to the Educational Project. The last sub system reflects the model through the teacher's classes and the academic spaces and it is called micro curriculum.

2.1.1. The Systematic Model of Quality Physical Education: Conceptual framework

The systematic model is born with Bertalany (1968), who writes the General Systems Theory (GST). At the beginning the general Systems theory was used to interpret the basic principles of the natural phenomena, later it was adjusted to be apllied on other fields of knowledge.

The most important are: ecology, environmental studies, social, psychological and technological phenomena. Hernández, 1989, 1993 and 1997; Castillejo and Colom, 1987 Cusinato, 1992; Campanini and Luppi, 1996; Rodríguez, 1997).

In order to determine a model that allows to attend multiple requirements involving several actors, the systematic approach applied to education is taken as a reference.

The model must include the connection between the individuals and the context, such as familiar, educational, with others, or in a wider context, social, politic, religious, cultural, etc. Taking into account their mutual interactions in a constant communication feedback.

(Compañ 2004)

2.2 Systematic Model: concept and characteristics

A model is a theoretical design that allows to explain a phenomenon through the representation of objects and knowledge areas and also their relations with certain precision by informing in detailed the processes, in order to define, to explain and to comprehend better the reality.

A systematic model in a Quality Physical Education has specific characteristics that perceive the object of study based on its principles and the competentes to be reached. In this specific case, it is expected that children and young people achieve a healthy and active life during their adulthood and old age. This is framed on the Physical literacy, proposed by UNESCO (2015).

The competences that are promoted at the Framework of the model CEFC, not only comprises the transmission and ownership of a theoretical knowledge, but also includes the practical knowledge. It is understood as a set of knowledge that orient the appropriate forms for the physical exercise and the correct use of the free time.

The practical knowledge is achieved from four specific forms of knowledge related to the self-awareness and self-care, the knowledge of the environment and the way to perform different motor expressions.

2.3. Systematic model of the curriculum of the Quality Physical Education

The CEFC is the result of the benchmarks development established in the Quality Physical Education's guide proposed by UNESCO (2015), based on several research studies. From these studies we use the content based analysis, case studies, action and etnographic research, applied observation techniques, interviews, discourse gropus and self biography.

The proposed model is presented as a theoretical outline which explains the key elements and the criteria to be considered in the macrocurricular, mesocurricular and microcurricular levels, determining the functions or operations to be done and the sequencial order of the process. In this context, the model is raised on a systematic approach developed by sequencial stages that allow to relate proper elements from dierent levels (governmental, institutional, academic field), and respond to the need of fosting a Quality Physical Education that leads to the acquisition of habits and healthy lifestyles.

The consolidation of the model establishes as a key point, the permanent feedback and the evaluation of the process, in order to identify the difficulties, to make adjustments or necessary corrective actions and searching for the optimization and the validation of the model in different contexts.

The model allows to address the objectives and the necessary educative phenomenons in order to consolidate the Quality Physical Education, through a comprehensive process, from the projection of public policies, to the community and individual transformation. Its operation is characterized by the correlated functioning and not by the sum of elements. Therefore, it is necessary to think of only one process structure and not of separated processes, because at the end, all kind of changes on the quality of life of an individual comes from his own decision to change. It must be provided by the institutions and the society in general.

2.4. Applied characteristics and postulates of the Systematic Model to a Quality Physical Education

According to Willet (1992), the conceptual model applied to the educational sphere is a description and a schematic representation consciously simplified of a part of the educational reality, meant by signs, symbols, geometric forms, graphics and words.

Then, the model provides a representation of the theories functioning on which the development of the necessary processes is based, in order to achieve the concretion of a Quality Physical Education and to facilitate its understanding. In addition, the model is approached from a systematic focus, which allows a coherent orientation and clear feedback.

The reason why the model to develop the curriculum of a Quality Physical Education is supported by a systematic approach comes from an identified need found on different researches, moreover it comes from consolidating clear basis that allow it to reach the proposed objectives on the physical literacy, the correct intervention to reduce the prevalence of chronic non-communicable diseases, from a preventive approach, and to reach high levels of inclusion and the gender equality.

Initially, this model raises the determination of actions that contextualize the reality on different contexts, and establishes a permanent feedback of the general theory of the Systems, which is underlied in the theoretical postulates proposed by Boulding (1964):

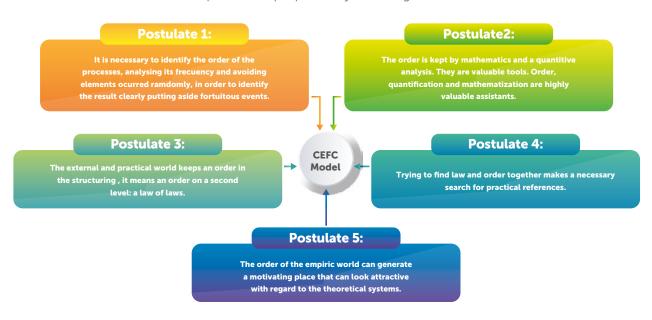


Illustration 11. Postulates general theory of systems. Source: Boulding (1964)

Schoderbek and other researchers (1993), add these characteristics to the general theory of the systems:

Interrelation

Between the elements of the system, taking into account each one of the elements individually. This system must interrelate getting and living information.

Totality

The appoach of the systems is already a type of approach. It tries to face eveything with all of its components in a interrelated way.

Search for Objectives Systems are composed by elements that must be considered. The interaction between elements makes possible to reach the outlined goals, a final situation and a balance position.

Inputs and products

They are important for the operation of the systems, generating activities that will cause the achievement of the goals.

Transformation

A system transforms entries and exits.

Entropia

It is directly related to a disorder state. Systems tend to disorder, if they are isolated they will lose its dynamism becoming inert systems. It means that all kind of systems tend to disorder and that is the signal to renew it.

Regulation

All the components that interact on a system must be regulated in order to comply with the expected objectives.

Hierarchy

There are systems which really are a set of sub systems.

Differentiation

All systems contain specialized units dedicated to specific functions.

The development of a Quality Physical Education comes from understanding that the model CEFC is central axis is the human being, and that the model links order processes:

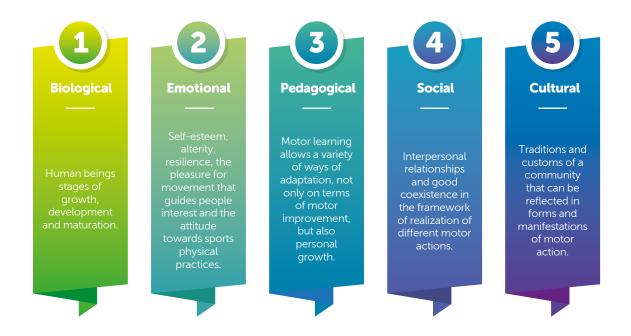


Illustration 13. Processes linked to the CEFC model.

Quality Physical Education makes sense in the development of values and the inclusion capability. It implies that these elements will be directed under flexible models, adaptable to dierent conditions of the child's social environment.

2.5. The curricular realization in the Systematic model of the Quality Physical Education—CEFC

The definition of the model CEFC comes from the identification of the inherent aspects to the curricular realization. It refers to the real implementation that guide the teaching and learning process, as an answer to the guidelines and policies adapted to the school context. Its objective is to fulfill the teacher's action in the academic space, (classromm). In this sense, the model covers three levels for the curricular realization: macrocurriculum, mesocurriculum and microcurriculum.

The systematic model for the Quality Physical Education: Levels and responder

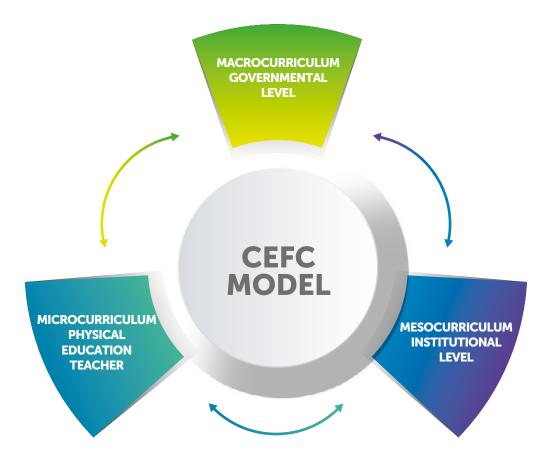


Illustration 14. Levels and responsible of the curricular model QPE.

This is why it is important that the model CEFC focuses on providing tools to the subjects to be able to acquire a commitment to the Physical Education and sport throughout the lifecourse. It means that the physical exercise must become an aware and systematic behaviour learned during the childhood and youth that lasts until the old age. This model must be developed by thinking that the human being learns and presents his behaviours in a particular environment, in this case, the School, and this is only one, therefore, it is not possible to restrict to the school curriculum, it is necessary to filter other scenarios that promote these practices.

The human being improves his motor, social, emotional and cognitive behaviours through a variety of possibilities on different environments. Physical education must be focused on contents and relapse on the motor factor, which is present in the motor capabilities and the teaching of the motor abilities.

That is how, capabilities are the motor predispositions given genetically that conform basic motor potentialities. On the other hand, motor abilities are forms of movement that the subject learns and tends to improve and automates through the experience and the systematic repetition of the same ability.

It means that the model comprehension starts by the understanding the close relation between the motor abilities and the motor capabilities, and they can increase through external and environmental simulations. It highlights the importance of this kind of development during the school age, moreover an appropriate stimulation of these abilities and capabilities (amount and quality), with the purpose to reach basic elements of the motor and sport development, no matter the limitations or potentialities of the subject.

The success of the inclusive processes is going to depend on the ability to address the separated approach of the abilities and capabilities, adjusted to the subject needs, within the framework of a program for a Quality Physical Education. Therefore, the role of the teacher is not going to be focused on the methodology to teach a gesture (ability), or on understanding the strength or Speedy (capabilities to himself), but to be able to adjust the motor abilities to be developed by all of them according to the level of ability that everyone has. In addition, the motor abilities or capabilities are represented by the model axis (Y), being able to change its execution and importance according to the possibilities of the subject.

Another basic element for the development of the model, corresponds to the age. This element must not be understood as a chronological data, the Physical education teacher must link the age concept to the growth process that are there during the different stages (posture stages, asymmetries, physiologic muscular curvaturas, musculoskeletal constitution, postural misalignments), of the development and maturation that implies the possibility to make them early or late. This is how the axis (X) of the model will be represented by the age that links these three previous elements (growth, development and maturation).

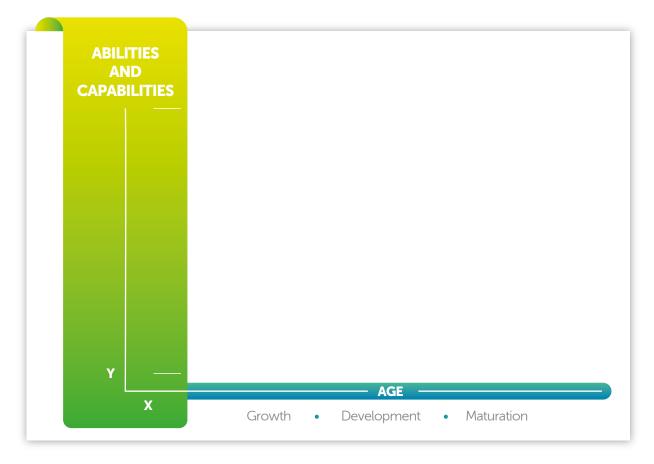


Illustration 15. CEFC model. Skills and abilities versus age.

According to the subject possibilities to participate on the designed activities for a Quality Physical Education program, it will be able to link different strategies (sports, games, physical exercise, among others), to live a progressive and rewarding learning experience, that allows the opportunity to be inclusive, as long as every motor task will be faced with a different difficulty level, they will have the growth and maturation process as a reference.

Consequently, the objective of any of the addressed stages from the perspective of the Quality Physical Education will not be focused on one ability or the capability to teach a motor skill, but its focus will be the generation of habits and healthy lifestyles. Therefore, there is a need to include actively in the different areas a basic training in order to consolidate the model. They are related to a social, emotional, cognitive and pedagogical order.

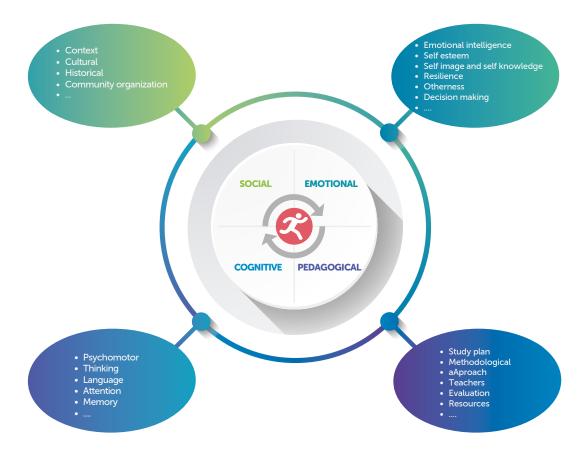


Illustration 16. Characteristics of the systematic model.

Based on the previous information, the systematic model will be represented by (Y) axis. The motor abilities and capabilities in the subject will be related to their execution level and importance by the (X) axis, and it is easy to observe the age of the subject set as the biological component of growth, development and maturation. The starting point for both axis will be the human being.

Therefore, the development guidance of the model CEFC, will be substantiated on four areas (social, emotional, cognitive and pedagogical). And each one of these will develop a series of processes that will be added according to the needs of every individual, or context in order to consolidate the structures of the macro curriculum, the meso curriculum and the micro curriculum.

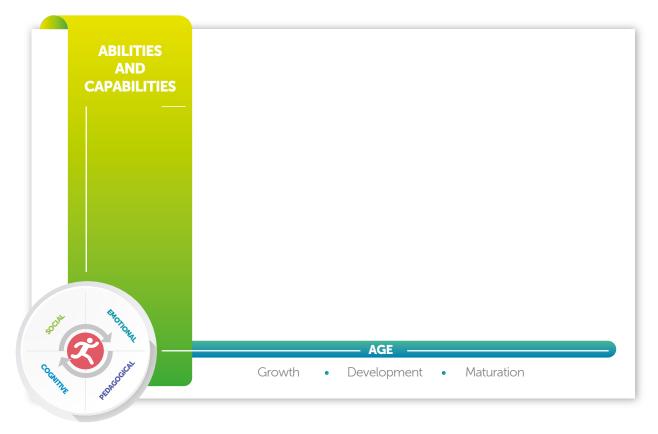


Illustration 17. The human being with an ocenter of the CEFC model.

2.6. The Macrocurriculum of the Quality Physical Educaction

It is the result of the agreed construction of policies and guidelines that determine the general criteria to consolidate a Quality Physical Education. It comes from the commitment and leadership of the highest governmental levels.

In order to define the concept of policy at the Quality Physical Education, it is necessary to generate the conditions for an active participation of the community in general, with the purpose to engage it and to receive contributions from different points of view, mainly from the particular features from each context.

It is suggested to follow a sequential logic to built normative projects. It guarantees their visibility and accessibility to all of the recipients (according to the principle of equality), avoiding the phenomenon of dispersion and normative proliferation. In the normative consolidation it is suggested the development of different moments in order to understand its context situation.

The planning moment

The construction of a project that impacts the whole country requires the establishment of organized guidelines, based on a methodical process that starts with the previous identification of the expected purposes and its recipients (students, teachers and institutions). Likewise, it is necessary to run different studies to measure the impact that regulations will have, not only on the subjects but also on the institutions.

It is suggested to start by making different questions about the scope that the guidelines must reach in order to consolidate the Quality Physical Education, such as, Who and which are the statements and the institutions implied in the studies? Which concrete statements must be taken? What impact will it have and in what sectors?



Illustration 18. Planning moment the model CEFC.

The consolidation moment

It is necessary to define the processes, following logical sequences that allow the regulation organization, in order to attend the demands of the Quality Physical Education; in other words, a generation of habits and healthy lifestyles. Therefore, it is required to establish an evaluation mechanism and a continuous feedback in order to consolidate this model.

Evaluative socialization moment

Once the processes are consolidated and the scope is established, it is necessary to develop an access route to analyse the knowledge that the different sectors of interest have. It will be useful in order to make a revision of its application in context. It is suggested to use the sectoral working table strategy to identify observations and impressions to make reviews, adjustments and additions.

Adoption and disclosure moment

This is the moment to identify and to work on the adoption of the guidelines and the development of strategies to the understanding of the content, requirements, scopes and the application schedule.

Pedagogical guidance moment

This moment is oriented to the operation of a training program to the dierent actors involved in the implementation of the regulations. This training will be focused specifically on showing the scope and function that each one of the implied institutions has along the process.

2.7. The Mesocurriculum of the quality Physical Education

The meso curriculum subscribes to a direct responsibility assigned to the institutions that have to make the necessary adjustments to the curricular guidelines proposed on the macro curriculum. It means that this level defines policies application according to the main objective, the needs and interests of the institutional context. All of the above, in order to respond to the social and cultural demands of the environment. In this context, the Quality Physical Education must be perceived as a "planned, progressive and inclusive learning experience", it implies to establish a formal relationship between the curricular guidelines at school and the physical and sport programs outside school, to promote children and young people on these participation on these practices.

This definition of meso curriculum foresees a collaborative planning through the establishment of pectoral tables. They are in charge of setting the guidelines that direct the implementation of the Quality Physical Education, not only on the curricular level at school, but on the

extracurricular one at governmental and private entities. Therefore, this sub system is a process that goes from the scholar sphere to the pectoral scenario.

The meso curriculum will have as a basic input, the information related to the students particular needs and interests, in order to organize a proposal that provides an active participation, especially along the choice of a preferred route, allowing to reach an effective physical literacy.

The meso curriculum of the Quality Physical Education must not be understood as a mechanical action of a unilateral curricular programming that is transmitted from one institution to the other. It demands the establishment of links with the community and physical education organizations in order to organize curricular and extracurricular activities. So that, it is possible to build only one educational action by organizing different components as phenotypic or genotypic, that interrelate with social, context and cultural elements, preserving the institutional autonomy.

The meso curriculum achieves its realization as the possibility to define the development plans, organizations and projects at school clearly. Moreover, the application of the regulations (macro curriculum), as an opportunity to improve and develop the Quality Physical Education. It means that it must integrate the institutional education project with the lines of work of the sport clubs, the sport schools, the cultural programs, health campaigns, among others, focusing on the construction of habits and healthy lifestyles. Based on the Physical Education, it is necessary to apply the following actions:

- **a.** To develop guidelines on the institutional policy that allows the construction of elements that promote Quality Physical Education.
- **b.** To engage the entire actors of the educational institution (not only the Physical Education teacher), in the reconfiguration of the Physical Education curriculum.
- **c.** To link actively the institutions and organizations in the local area, in order to achieve the curricular and extracurricular implementation of the Quality Physical Education.
- **d.** To motivate children and young people in the appropriation of the necessary tools to consolidate the knowledge given on Physical Education, and promoting the acquisition of habits and healthy lifestyles.

In order to achieve an effective integration of the Physical Education with the institutional curricular development, it is suggested to undertake these actions that allows the feedback on the sectoral tables by a continuing process evaluation:

- **a.** To diagnose the models and the practice of Physical Education on each institution and the guidelines the orient the institutional education projects.
- **b.** To establish and develop awareness processes with the different actors in the educational community.
- **c.** To identify competences, standards, basic learning rights, political guidelines and directions for the development of the Physical Education. They can be implemented on each one of the school grades.
- **d.** To design the curricular projection attending to the established guidelines on the sectoral tables, in order to reach the proposed goals.
- **e.** To evaluate periodically the program and to adjust and interact with different knowledge areas, basing on the results.

2.8. The micro curriculum of the Quality Physical Education

It refers to the pedagogical and curricular dimension that is developed in the classroom or in a sport scenario. It is based on the last two levels (macro curriculum and meso curriculum). The micro curriculum is known as a classroom plan, it trains the teacher based on the establishment of the objects, contents, methodologies, strategies, didactics and the evaluation process, that allows him to respond to the guidelines, the regulations and the institutional curriculum program, and specially, it attends to the needs, interests and expectations on each student in his social context.

Achieving the consolidation of a Quality Physical Education depends largely on the Physical literacy's principle, which considers the development process, the growth and maturation of the human being as an essential point. Then, the realization of the micro curriculum is promoted by three guiding axis:

First axis: It is focused on the development of the motor competentes, or done motor behaviours. For (Granada Vera y Alemary Arrebola, 2005) they correspond to a "coordinated motor sequence that depends on the individual variations, therefore, it is conditioned by the own characteristics of the subject such as the environment conditions and the context where

the action is made". They are related to the abilities and capabilities which are referenced in a parallel to them and correspond to an inner vertical axis.



Illustration 19. The mesocurriculum in the CEFC model.

That is how, the teacher directs the subject to reach a motor competence, taking into account the growth process, the development and the maturation, but this competente is going to depend on the individual abilities and capabilities.

Second axis: Its purpose is guided to reach the horizontal competences, based on the processes of physical-sport training. It promotes the values on at Sports and learning in the context of a healthy competition. On this axis that we called form and complexity, it is possible to refer the degree of difficulty that can be given by the motor experience (sport, game, physical exercise), and also the level of difficulty that the activity has, related to the elements of growth, development and maturation of the subject.

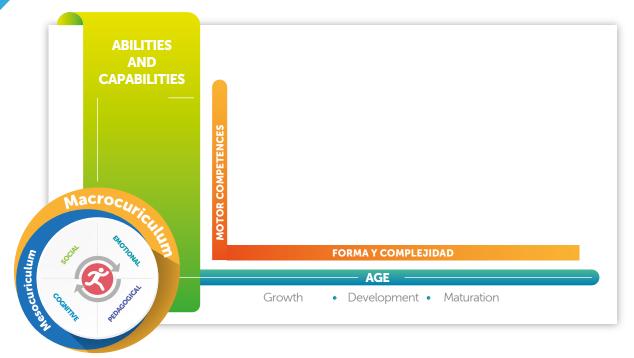


Illustration 20. The role of motor skills, their form and complexity in the CEFC model

Third axis: Promotes the acquisition of cross competences, that look for inclusion and the development of coexistence rules, the establishment of social relationships. cooperation and problem solving, otherness, self assessment, self esteem and self concept.

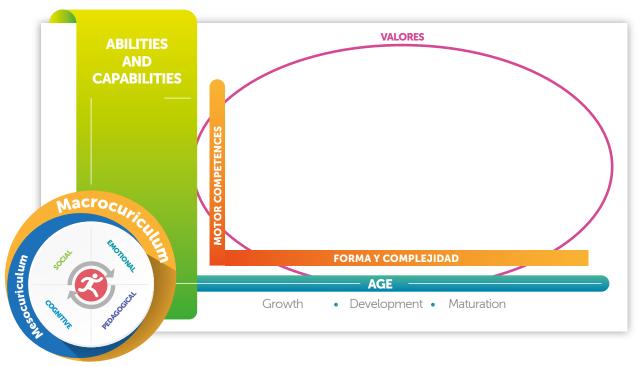


Ilustración 21. The values, transversal element of the CEFC model.

These axes can be used as a reference to the realization of the model CEFC. It must be implemented from the early childhood's educational levels, until the last levels of high school. As it was mentioned before, it is necessary to include extracurricular programs on physical activity and sport.

These guiding axes must focus on the development of physical and psychomotor competentes, the cognitive comprehension, the social and emotional aptitudes, and the needed citizen competentes to help the human being to have a physically active life, according to the UNESCO proposal (2015).

In order to fulfill the fundamental principles proposed on a Quality Physical Education, aspects such as equality, equity, protection and a significant participation must be guaranteed to each one of the participants. Moreover, it must come from the understanding of a cultural multiplurality, and the adaptation to environments that due to its conditions must be adapted to.

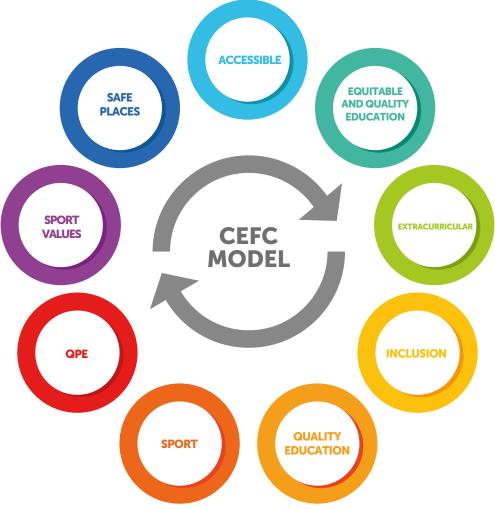


Illustration 22. Concept framework tha bases the Qualty Physsical Education proposed by UNESCO (2015).

It is important to highlight that the Quality Physical Education must be supported on the promotion of an inclusive education, and not an attached element. This reference framework is directed through different actions and processes that lead to the consolidation of the vision that each country could consider to reach it.

In the implementation of a Quality Physical Education at the school environment on the micro curricular level, the following moments are established which are carried out during the school year:

Moment I

Establishment of needs and characteristics of the students. Every year the Physical Education teacher develops a diagnostic exercise to his students to analyse their practical competentes, their needs and their real individual interests. It allows him to select the means to use in the academic space.

Moment II

Contents and primary activities Identification, proposed in the meso curriculum. The established recommendations are analyzed to each group and the diagnosis obtained in the first moment allows the search and the selection of the contents that are developed along the year.

Momento III

Environment preparation and methodology planning based on the contents and according to the individualization components (age and capability). In this moment, the teacher plans his methodological strategy to develop the program, proposing the operation of contents that reflect the students interest and allow him to recognize their learning levels.



2.8.1. Teaching strategies on the Quality Physical Education

Teaching strategies of the Quality Physical Education design requires the incorporation of the inclusion principles, the promotion of the development of a defined learning, provide the incorporation of cultural elements, favor the individualization of talents, the development of abilities for leadership and achieve that these lessons become everlasting. In the same way, the teaching process must be taken from the recognition of the conducting and regulation processes of the motor activity, because the main axis of the Physical Education is the movement.

Although the consolidation of the curricular guidelines will obey a factor that is managed within each educational institution, it is necessary to recognize the following phases that allow the institutions to progress in this objective:

Phase 1. For the development of the teaching process and the pedagogical moments, it is necessary to identify the central axes, either from the competences or from the motor requirements. This element was previously identified as a center for the learning development, it will be useful to take as a reference in the determination and implementation of the curricular proposal, contributing on the definition of the topics to work on and its distribution.

Phase 2. The teacher will have to recognize the intention of the teaching exercise, according to the formative objectives established in the micro curriculum.

Phase 3. To recognize the program target by identifying the age, the interests and the capability of each one of the participants.

Phase 4. To become the learning objectives more explicit.

Phase 5. To initiate a research process guided to the search and selection of motor forms and techniques, in which to perform an appropriate methodological process, depending on the needs and interests of the participants.

Phase 6. To establish order and interpretation criteria of each form or motor technic employed.

Phase 7. To promote a methodological process that allows the student to raise his difficulties, and to recognize the ways to solve them.

Fase 8. To recognize the reached knowledge by the student based on evaluation mechanisms and feedback of the process.

On the model CEFC, the micro curriculum is made like a matrix in the axes (X) age and (Y) capabilities, including the form and technique axes. In this sense, the forms can be adapted to work on abilities and capabilities according to the age, and the technics correspond to the object that the form is used with. Then, as it was said before, the teacher defines the different ways that are going to be used and its context, in order to reach the proposed objective depending on his intention.

2.8.2. Family importance at Physical Literacy

Family is considered to be the most important generator in the promotion of healthy habits and lifestyles, mainly affecting during the first years, in the consolidation of behaviors that will be with the human being throughout life.

In the search for physical literacy, the family commitment and active participation, especially the mother, during the early stages of human development (prenatal, childhood and childhood) is considered fundamental. The representation of mother's image during the first years of life has a fundamental influence on the choice and adherence of her children to future physical-sporting practices. It means that the mother becomes a model and a reference to follow.

On that way, during the first years, family gets to generate the interest towards a regular practice of physical activity; this also happens at the stage of adolescence with the influence of friends.

In addition, an active family participation is expected in the process that is carried out both curricular and extracurricularly, with the purpose of generating physical literacy. In other words, the activities carried out in the educational center, the sports school or the club should be reinforced within the framework of independent work, which will be carried out by children and young people with the participation of family and friends.

The physical educator will have the responsibility of involving the family in the program that he carries out each year, initially by inviting him to participate in meetings where they will approach subjects on the physical exercise, the suitable feeding, the benefits of the regular practice of the physical activity, hygiene, among others. Later, he will link the family so that he can carry out reinforcement activities at home with his children, in order to achieve a commitment to physical literacy.



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