

## Formative and shared assessment in primary school PE curriculum: Teachers' perceptions

### Evaluación formativa y compartida en el currículo de Educación Física en Primaria: percepción del profesorado

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## Abstract

Assessment is one of the processes that most signifies curriculum. The general purpose of this study was to find out the perception of Primary School Physical Education Teachers on the role of assessment in the curriculum in Spain. Experts validated an interview with two parts. In the first part, participants were asked questions about assessment in Physical Education and the links between assessment and the school curriculum (the first objective). Another specific part was aimed at finding out the PETE's opinion on the conclusions of the study by Otero-Saborido et al., (2021a) which analysed the treatment of assessment in the 17 regional curriculum in Spain (second objective). 17 PETE participated in the interviews conducted. A system of categories and subcategories was designed and validated. Atlas.ti software was used to analyse content the interviews. The results showed the importance that the participants attach to the official curriculum, although they pointed out improvements such as the need to reduce the number of evaluative references and increase the number of orientations. They also point out the importance of motor skills as the axis of assessment and the need for the cognitive, motor and socio-affective spheres to be integrated into the assessment references.

**Key words:** critical pedagogy, 'standard of assessment', neoliberalism, qualitative research.

## Resumen

La evaluación es uno de los procesos que más significa a los currículos. Por ello, el fin general de este trabajo fue conocer la percepción de los maestros de Educación Física (PETE) de Educación Primaria sobre el papel de la evaluación en el currículo en España. Un grupo de expertos validaron una entrevista con dos partes. Una primera parte general con preguntas sobre la evaluación en Educación Física (EF) y su vinculación con el currículo (primer objetivo). Otra parte específica estaba destinada a conocer la opinión de los PETE sobre las conclusiones del estudio de Otero et al., (2021a) que analizaba el tratamiento de la evaluación en los 17 currículos autonómicos en España. 17 PETE participaron en las entrevistas realizadas. Se diseñó, validó y confiabilizó un sistema de categorías y subcategorías para analizar el contenido de las entrevistas a través del software Atlas.ti. Los resultados mostraron la importancia que los participantes conceden al currículo oficial, aunque señalan mejoras como la necesidad de disminuir el número de referentes evaluativos y aumentar el número de orientaciones para realizar una evaluación formativa y compartida. Así mismo, señalan la importancia de integrar ámbitos cognitivo, motriz y socioafectivo en la evaluación.

**Palabras claves:** pedagogía crítica, estándar de evaluación, neoliberalismo, investigación cualitativa



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## Introduction

The recent period of the COVID-19 pandemic has highlighted two things. First, the tremendous social inequalities among public school students and, consequently, the importance of the right to education as a basic human right. However, the digital divide between students from different social classes and the existence of an encyclopaedic and standardised curriculum do not help to achieve an egalitarian and inclusive education (Díez & Spinoza, 2020). As far as the problem of such an overloaded curriculum is concerned, this is not only a technical issue. In this sense, as most experts in curriculum theory point out, we are faced with "technical" curriculum designed from above and not from the deliberation of the educational community (Apple, 1984; Gimeno Sacristán, 1988; Stenhouse et al., 1987). But the solution to this problem is not limited to a debate in the field of pedagogy. It is, above all, a cultural and democratic question (Biesta, 2015). From this cultural point of view, it seems that civil society has assumed that the exclusive function of the school is to submissively attend to the needs of the labour market and that the latter, in turn, bows to the demands of a market economy. Where did the school become a space for reflection and happiness? At what point did we forget the role of the school in educating critical citizens? Therefore, the problem of the curriculum, and therefore of assessment as an integral element of it, is above all a cultural problem. As Rudduck (1999) argues, it is necessary to raise this debate, i.e. the debate on the purposes of school and curriculum, before starting to design official programmes. In the case of assessment, as part of the curriculum to be studied in this research, there is also such a cultural debate. The educational community and society have assumed more often than necessary that the concept of assessment is synonymous exclusively with grading (López Pastor & Pérez Pueyo, 2017; Santos Guerra, 2003). The school has imported economic dictates and has minimised other functions that are more educational than grading, such as motivating, learning or diagnosing. As Biesta (2014) points out, the school has abandoned the paradigm of education to remain exclusively in the paradigm of learning. In the case of Spain, as the curriculum under analysis in this paper, in recent years there has been an involution in the curriculum map from the point of view of assessment. PETE have gone from having a curriculum with a reduced number of educational goals and assessment criteria to formulating an excessive number of learning standards expressed in a behaviourist way. According to Biesta (2014), this situation is known as moving from the paradigm of education to the paradigm of learning.

For this reason, formative and shared assessment (FSA) is necessary (López Pastor & Pérez Pueyo, 2017). By FSA we mean a learning-oriented assessment in which students participate.

### *Assessment in Primary PE curriculum*

Assessment in Primary School PE curriculum is aligned with the curriculum model described above. It could be

considered that the dominant assessment paradigm in PE is still based on the measurement of physical and sporting performance (Otero-Saborido et al., 2014). This model is based on the use of standardised tests and examinations which, as a non-educational feature, obviate student participation in the evaluation process. Although alternative assessment models have been emerging in both practice and theory for years (Bores-García et al., 2020; Otero-Saborido et al., 2021b; Pérez-Pueyo et al., 2020). It is disheartening to see how the curriculum designed by the Education Administrations are moving in the opposite direction to these assessment models based on student development and participation (López Pastor, 1999). The recent study carried out by Otero-Saborido et al. (2021a) on the 17 autonomous curriculum for PE in Spain resulted in alarming conclusions. Firstly, the almost absence of guidelines for carrying out FSA. This is understood as "the process of feedback between all educational agents" and without the need to include grading mechanisms (Hortigüela & Burgos, 2019). Secondly, the inclusion of a disproportionate number of assessment criteria in equally enormous curriculum. Thirdly, these criteria were expressed in behavioural terms that facilitated measurement. Therefore, very few (only 11%) of these benchmarks were global. In other words, few criteria were capable of integrating the cognitive, motor and socio-affective dimensions of PE at the same time. Given the qualitative vocation of these curriculum, most of the assessment references focused on more easily measurable aspects such as cognitive (61%) and, to a lesser extent, on motor and socio-affective aspects. Therefore, having described the situation of the Primary School PE curriculum, one of the aims of the present research was to ask teachers what they think of the results of this study. But before finding out the teachers' opinions, the following question should be asked: What alternatives exist to the curriculum situation described in PE? What is the opinion of teachers on research on assessment and curriculum in Physical Education?

### *Alternatives for assessment in PE curriculum*

The first essential alternative is to build a curriculum in a deliberative way. That is to say, the educational community must have a decisive participation in the design of the curriculum. It is not possible to build a curriculum 'for' the students 'without' their participation. This is the case of the PE curriculum of São Paulo, 43,000 students were asked about what contents they wished to include in the curriculum (Betti et al., 2015). Within this democratic and pluralistic design of curriculum, it is worth mentioning the novel concept of "open" source curriculum as outlined by Williamson (2019). Traditional curriculum have been exclusively "reading" documents. The proposal would be for a "reading and writing" curriculum that places teachers and learners on the same hierarchy as creators of curriculum content and assessment proposals.

Critical pedagogy approaches in PE are also valuable alternatives to other evaluative models in the curriculum

(Azzarito, 2010; Oliver & Kirk, 2016). Some topics such as gender equality, racism or activism in PE focus curriculum evaluation not on measuring behaviour but on student participation and development (Hay & Penney, 2009, 2012).

In the case of the Spanish curriculum model, we find a territorial organisation divided into 17 Autonomous Communities (AC). Therefore, there are 17 curriculum models in Primary Education. However, these 17 models are not a defence of the cultural diversity of a country of contrasts. Paradoxically, the key word in the 17 official documents has not been 'diversity' but 'standard of assessment'. In fact, many of the AC, despite having autonomy in education to design their own curriculum, replicate the 'standard of assessment' of the Spanish Ministry of Education. These and the above are some of the conclusions drawn from the exhaustive study carried out by Otero et. al, (2021a). For this reason, and reinforcing the idea of participation of the educational community in the curriculum, the general aim of this work is: To find out the perception of Physical Education teachers on the role of assessment in the curriculum. More specifically, two objectives were set out a) To determine the perception of Physical Education teachers on the role of assessment in the different levels of the curriculum b) To find out their opinion on the results of a research study on the analysis of assessment in the 17 PE curriculum.

## Methodology

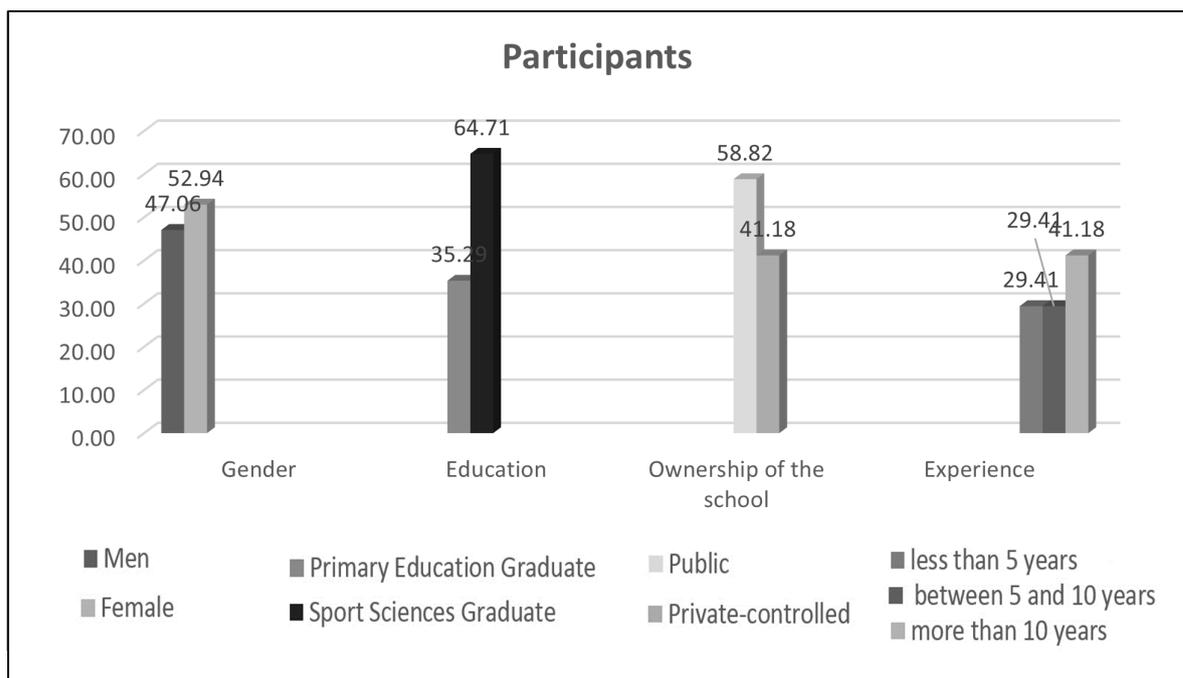
### Design

The present work is framed under a qualitative research approach by using the interview as a data collection instrument. In addition, the participants were asked about the results of a study (Otero-Saborido et al.,

2020) on the assessment in the PE curriculum of the 17 Autonomous Communities (AC) in the Primary PE stage. The methodology aims to find out the point of view of the PE teachers on the topic of the article. Therefore, the design is framed within an interpretative paradigm of qualitative research (Elida & Guillen, 2019).

### Participants

A total of 17 Primary School PE teachers participated in the research. All the Autonomous Communities were represented in this work. A public call for participation in the study was made via the Internet. A total of 48 teachers responded affirmatively to the call for participation. Candidates for participation in the study were informed of the aims of the study. Four variables were taken into account for the selection of the final participants: a) gender (Male/Female), b) education (Only Primary Education Graduate/Graduate in Primary Education or, in addition to the above, Graduate/Graduate in Physical Activity and Sport Sciences); c) ownership of the school (public/private-controlled) d) experience (less than 5 years / between 5 and 10 years / more than 10 years). Two criteria were taken into account for the selection of participants. Firstly, that the 17 Autonomous Communities had a voice in this research through a teacher from their Community. Secondly, that the categories of the above variables had a proportionate representation. With the above two criteria, the characteristics of the 17 participants are shown in Figure 1. Before conducting the interviews, each participant was informed a second time of the objectives of the study, guaranteeing their confidentiality and anonymity and complying with the ethical criteria of the Declaration of Helsinki (World Medical Association, 2017).



## Procedure

The procedure consisted of four phases.

### First phase

Three experts with extensive research experience in the field of FSA took part in this first phase. Based on the objectives of this research, the experts carried out a bibliographical review and an analysis of the study carried out on the analysis of assessment in the curriculum of the 17 Autonomous Communities of Spain. Some of the questions asked were based on the results of the aforementioned study.

### Second phase

This phase was devoted to the design by the experts of an interview as an instrument for data collection. The interview included a general part on issues related to assessment in the PE curriculum (first objective of this research), and a specific part on the findings of the study on PE curriculum in primary education (second objective) (Otero-Saborido et al., 2020). In the general part, participants were asked about the role of assessment in PE at the three levels of implementation: educational administration, school and classroom. In the specific part, they were asked about 4 conclusions of the study on assessment in the PE curriculum (Otero-Saborido et al., 2020):

- The low number of methodological orientations found in the 17 PE curriculum.
- The high number of evaluative references and their standardisation.
- The percentage in which the different dimensions of learning (cognitive, 39.42%; motor, 30.94%; socio-affective, 29.65%) were represented in the 3357 standards analysed.
- The lack of globality of the evaluative referents, understood as their capacity to integrate the different dimensions.

### Third phase

17 participants took part in the present study. Prior to the interviews, participants were shown a 5' video explaining the objectives of the study and the questions to be asked. The video serves as a tool to explain and understand our study from a broader perspective. During the interviews, participants were shown the study questions and graphs with some of the conclusions of the Otero-Saborido et al. research (2021a) that they were asked about. The interviews lasted between 30 and 45 minutes and were conducted and recorded on the Blackboard UltraCollaborate platform with the consent of the teachers in order to transcribe the data later.

**Table 1.** Codes and sub-codes derived from the data analysis

| Codes and sub-codes   | Description  | Abbreviations |
|---|--|---------------|
| 1. First level of concretion                                  | Aspects related to assessment in PE that are included in the official curriculum of the corresponding Autonomous Community | LE1           |
| 2. Second level of concretion                                 | School-led aspects of evaluation in PE   | LE2           |
| 3. Third level of concretion                                  | Aspects related to evaluation in PE linked to the teaching-learning process of the teacher with his or her class-group     | LE3           |
| Objective 1: Perception of curriculum evaluation              |  |               |
| Guidelines  | References to the existence of concrete guidelines for the application of the evaluative references within the curriculum. | GUI           |
| Evaluative references   | Criteria, indicators or standards for curriculum assessment  | RE            |
| 2.1 Targets   | Mention of the objectives of PE as an element of the curriculum.   | TA            |
| Dimensions of assessment                                      | Degree of inclusion of the dimensions (cognitive, motor and socio-affective) in each of the standards.                     | DIM           |
| Globality of references                                       | Degree of inclusion of the dimensions (cognitive, motor and socio-affective) in each of the standards.                     | GLO           |
| Objective 2: Feedback on the results of the evaluation survey |  |               |

## Fourth phase

Based on the research objectives and the interview questions, a first initial list of 10 codes was constructed corresponding to the textual categories with the highest frequency and linkage to the research objectives. Two of the researchers carried out a first pilot coding of 9 of the 17 interviews. From this first pilot coding, the researchers determined the existence of information that could be grouped into new codes and/or sub-codes that enriched the understanding of teachers' perceptions. These new codes were included in the category system. After this piloting, the category system consisted of a total of 7 codes and 1 sub-code (Table 1).

## Analysis and reliability

The NCH Express Scribe Professional software was used to transcribe the recorded interviews. Finally, for the content analysis of the data obtained in the research, the Atlas.ti 8 software was used. First, a map of codes by categories and subcategories was established, including the relationships between them. Once all the content of the interviews had been coded, different analysis techniques were applied to the codes and subcodes, such as the descriptive code-table and the analysis of co-occurrences both to the twelve participants and to groups formed within them, as has been done in research with analogous methodology (De-Juanas Oliva et al., 2020). The first technique consists of a quantitative collection of the frequency of codes. In the case of co-occurrence analysis, the frequency of associations between different subcategories and/or variables is established. To ensure the reliability of the analysis two independent coders coded 4 of the interviews. Both coders reached an agreement rate of 92%. Therefore, the coding could be considered as very reliable. For this calculation the Atlas.ti tool 'Inter-coder agreement' was used. Finally, within the analysis, the 'create groups' function of Atlas.ti was used to check if there were differences according to the different variables: a) gender; b) education; c) ownership of the school; and d) experience.

## Results

A first objective of the research was to determine the perceptions of PE teachers about the role of assessment in the curriculum. In order to achieve this objective, and after the content analysis described in the methodology, three codes (L1, L2, L3) were elaborated corresponding to the three levels of concreteness

### First level of concreteness: official curriculum (L1)

Regarding the perception of assessment within the official PE curriculum, most of the participants give it a very important role, although amendments or shortcomings are repeated:

"I think it is important that there is a qualification, but that it is not the whole curriculum. That is to say, that everything should not be focused on a final mark" (p2, Canarias). "It should play a very important role.... In the case of La Rioja, there are the criteria and the learning standards related to each criterion... but sometimes the problem is that they do not include many guidelines on the subject of assessment" (p2, La Rioja). "I think it is a very important part of learning, that is, for us to improve and for them to improve, if they know where they fail, but it still needs more clarity. It seems to me that the wording is so broad and so extensive that a small curriculum would be ideal to make it much simpler. (p12, Galicia)".

In the case of the participant from Castilla-La Mancha, he/she attaches less importance to the official curriculum because of its breadth:

"After almost 20 years of experience, I believe that it is not the most important thing to evaluate. What is important when evaluating is how to improve as a teacher. We are bombarded with, at least in the case of Castilla-La Mancha, with a lot of learning standards and in the end what you are doing is often being continuously assessed and it is an absolute mess" (p13, Castilla La Mancha).

### Second level of concreteness: the school (L2)

Regarding the role of the school in evaluation in PE, the majority consider that it could play a decisive role, but this leadership does not always occur for different reasons such as the lack of autonomy, the instability of the staff or the lack of prestige of the area of PE compared to other subjects:

"It could happen. But I think it depends on the people in a school. If there is no stable staff, it is very difficult to establish. This leadership needs a process of two, three years to be implemented in a correct way. The instability of the staff prevents it (P4, Cataluña)" "Yes, it is very difficult. The school has very little autonomy when it comes to making decisions about assessment, because really, assessment, as it is currently set up, is very much under the control of the administration. (P13, Castile-La Mancha). "I had the opportunity to get to know the reality of a foreign school, specifically in England. There are things that I am against, but I was struck by the fact that the headmaster led an educational project that was carried out in all, in all the classrooms and at all levels of the school. Perhaps this is the step we are missing in Spain, or at least in the reality I know in Cantabria (p9, Cantabria)". "The subject of Physical Education is one of the most neglected subjects in schools (p8, Asturias).

### Third level of concreteness: the classroom (L3)

Participants perceive assessment as the most decisive process in the design and implementation of their teaching units. They always plan on the basis of analysing assessment:

"Assessment is what serves to plan the subject. Well, depending on the objectives to be achieved and the didactic units we are teaching. Well, if in the end it is a planning of the course, depending on the didactic unit that you find yourself in, then of course, you are going to evaluate certain objectives, criteria, standards or others... (p10, Madrid) "I could say that I almost start thinking about evaluation before I think about what I am going to give.... Depending on what I want to evaluate... (p15, Castilla León) "There are a lot of people who start by maybe doing the didactic unit or programming what they are going to do and the last thing is how they are going to collect the information. And I think that this is where we lose a lot if we start doing it that way, because we start building the house from the roof up, the foundations are in the assessment, I think that together with the objectives, that is, the assessment together with the objectives of the foundations of your planning" (p2, Canarias)

After raising general questions about assessment and physical education, a second aim of the study was to find out their opinion on the results of a research study on assessment in the 17 PE curriculum of the CA of Spain (Otero-Saborido et al., 2020). To this end, they were specifically asked about four results of the study: (a) the low number of methodological orientations found in the PE curriculum (OR); (b) the high amount of evaluative referents and their standardisation (RE); (c) the percentage in which the different dimensions of learning (cognitive 39.42%; motor, 30.94%, socio-affective, 29.65%) were represented in the 3357 standards analysed (DIM); (d) the low globality of the evaluative referents understood as their capacity to integrate the different dimensions (GLO). Apart from the aforementioned codes, another sub-code appeared in relation to the disappearance of the curriculum area objectives (RE\_OBJ). Another sub-code appeared in relation to the experience of the participants in the distribution of the different dimensions of assessment (DIM\_EX).

### *Existence of guidelines for assessment in official curriculum (GUI)*

The participants rated very negatively the fact that the official curriculum offer so few guidelines for FSA or that the guidelines are so general. The majority of the participants from the different ACs consider that the existing published guidelines are of little help to them.

"In Asturias there is a regional order that talks about evaluation... but it stays there. It helps little. They are declarations of good intentions" (p8, Asturias). "Well, I think that more guidance should be given. After ten years teaching and now I've more or less reached a point where I think that the evaluation is more correct as I do it, but before I was very lost... Orientations in the curriculum on how to assess are very necessary" (p11, Navarre). "Indeed, I have always missed guidance, of course. In the end you do what you think, what you find.

You talk to your colleagues, you do research, but in the end it really has to be your own thing. There is no training of any kind" (p10, Madrid).

In the case of one of the three CAs which, in addition to the assessment references, details guidelines on assessment, the teachers' gratitude is expressed in seeing how the curriculum helps teachers:

"Here in Cataluña, we do have more or less concrete guidelines. And the truth is that teachers have been one of the things that have been most grateful to the administration, even if it is very brief, that it gives you everyday tools. Here it goes by dimensions of each thing that you had to evaluate, that gave you a tool and above all that gave you examples to know how to apply in a real way" (p4, Cataluña).

### *Evaluative referents (RE): learning standards and elimination of area objectives (TA)*

The unanimous opinion of the participants is that the number of AE as an assessment reference is excessive.

"How are you going to apply all 170 standards in one year? Maybe you can't apply them because they are so detailed that you can't? If it were a more global thing, if I reduced them, then maybe you could apply 40 or 50 if you want, but it's a lot more than 270 as we have. I think it's an outrage" (p6, Extremadura). "I think that it is a lot of EAs. If in my community it seems complicated to me to reach all of them, there are Autonomous Regions that have almost 400. You have to spend most of your time between papers. Qualifying that amount of standard EAs is practically impossible. They are cutting our wings" (p1, Islas Baleares).

Among the evaluative references, the interviewees were presented with a table showing that only five ACs retained the area objectives as elements of the curriculum. The rest of the Autonomous Regions had eliminated them and strengthened the AE. Regarding the elimination of the area objectives within the official curriculum, most of the participants were against this because of the guiding role they played and because of their vindication of motor competence within the curriculum.

"They disappeared and they should never have disappeared. Because then where do we leave motor competence, which nobody talks about? We talk about mathematical and scientific competence. But where is motor competence? Is there no motor competence, no motor competence anywhere? We can develop it in our area, but it is not recognised in any curriculum" (p13, Castilla La Mancha). "It seems to me that once again they leave us without a reference, without something to turn to when I have doubts about what exactly it will refer to, it's like you need more levels of concreteness to be able to understand the law better. I at least started working with the red boxes. I saw everything very clearly, very

well defined, very fine, very well spun. Then you had a lot of freedom to do whatever you wanted based on them, but it is true that it was more staggered, more detailed. It had a different progression to what I see now, although there are times when I don't see the progression. So, having disappeared, we are also left without being able to take reference points, without being able to read or go back. A bit alone" (p15, Castilla-León).

The participant from the CA of Andalucía is the only one who, although he would not have eliminated the area objectives, does not attach so much importance to them:

"Well, you have them there, they can serve as a guide, but in the end, the assessment criteria are the reference point from which you have to start to carry out your programming and planning. So yes, if you have the objective, well... you have them there also as a guide, as orientation, but in reality you go to the next level which are the criteria " (p17, Andalucía).

### **Dimensions: cognitive, motor and socio-affective (DIM)**

The participants were asked about the results of the study (Otero et al., 2020) reflecting the percentage in which the different dimensions of learning were represented by the evaluative referents (cognitive 39.42%; motor, 30.94%, socio-affective, 29.65%). They all disagree that the cognitive dimension is the one with the highest percentage of evaluation.

"These percentages are wrong. I don't think the cognitive component should have that percentage. I understand that it has to be present in our area, but it should not be given such a big weight. We have an affective component that should have much more weight than it has in this table, and the motor competence dimension should have... more too.... A lot of theory, but you have to know how to apply that theory (p4, Cataluña)". "I am surprised by these results, because I really thought that the motor section or the motor aspect would always have more weight than the other two... certainly much more weight than the cognitive dimension [...]. (p5, Murcia)".

The majority of participants advocate the integration of these dimensions.

"I think that at physical education level I see the dimensions integrated because they are always solving motor problems (p13, Galicia)". "It seems to me that the dimensions have to go together... and, therefore, they are evaluated together... Aren't we opting for a global curriculum? Well, global means integrating." (p7, País Vasco).

In this line of integrating the dimensions, the opinion of the teacher from the Islas Baleares who considers that it is difficult to separate the dimensions is noteworthy.

"It is true that the area of Physical Education and I think it is one of the most complicated to understand the dimensions separately... because when the child plays

a playful game, the three dimensions act together. I would find it quite difficult to separate one dimension from the other - affective, social and motor" (p1, Islas Baleares).

### **Globality of the referents of evaluation (GLO)**

The results of the study by Otero et al., (2020) showed three levels of globality. a) Maximum globality: when the referents integrate the three dimensions (cognitive, motor and socio-affective). b) Medium globality: when the referents integrate two dimensions. c) No globality: the AE or CE only include one dimension. Teachers were asked about the globality of the 3357 referents analysed in the 17 ACS curriculum: a) Maximum globality: 11%; b) Medium globality: 27%; c) No globality: 61%.

The content analysis of the responses reflects the teachers' surprise that only 11% of the 3357 evaluative references integrate all three dimensions.

"I completely disagree. I think they should be more global" (p8, Asturias). "I don't like that percentage at all. I don't like it at all. It is totally contrary to what I do every day. When I evaluate, I always go for globality. Of course, now I understand why I find it so hard to use the standards..." (p3, Valencia).

The lack of globality of the evaluative referents is related to curriculum that include an exorbitant number of standards.

"You are not thinking about how to improve your work as a teacher on a day-to-day basis, but you are thinking about what activities I can propose to assess this standard, this one and this one and this one". (P13, Castilla-La Mancha) "Well, it seems logical and worrying at the same time, It's a bit like what we were talking about before...When you develop a curriculum with 400 learning standards.... " (p9, Cantabria).

In line with globality, teachers are in favour of smaller curriculum in terms of assessment.

"Well, at the end of the day, with smaller curriculum, you have more time, so to speak, to carry out all the activities globally" (p10, Madrid). "I think that making the curriculum smaller also makes them easier to understand and to have more global references" (p4, Cataluña).

No differences were obtained according to the following variables: a) gender; b) education; c) ownership of the school; d) experience.

## **Discussion**

Before analyzing the specific objectives of the research, one of the general purposes of this study was to introduce the debate on whom the curriculum serves, as we argued above. In the case of assessment, as part of the curriculum to be studied in this research, there was also a cultural debate. As analyzed in the theoretical part of this paper,

the dominant paradigm in physical education has been based on physical and sports performance. Analyzing how physical education curricula are evaluated has led us to discuss this dominant paradigm. Likewise, this discussion allows us to address other alternative models of evaluation in Physical Education.

Subsequently, in order to achieve the research objectives, first of all, some very general questions were asked. Secondly, the questions were detailed by showing the teachers the results of a quantitative study that analysed the 3352 evaluation referents in PE in the 17 ACs. In the case of the general questions, a survey was carried out to determine the perception of PE teachers on the role of assessment at the three levels of curriculum development. The participants believe in the importance of the official curriculum (first level of concreteness), although they point out improvements such as the need to reduce the number of evaluative referents. This opinion coincides with the results of a recent systematic review which indicates that Curriculum specification is the major reasons PE teachers experience stress, ahead of other causes, such as lack of materials or equipment, students' lack of discipline or relations with their colleagues (von Haaren-Mack et al., 2020). It could be interpreted that this exhaustiveness of measurement serves the economic line of education that precepts that what is not quantified is not useful. Can children's creativity be quantified or measured, can we measure their curiosity to learn, how can we measure the resilience of our students, and how can we measure the resilience of our students? The answer is no. Are the above skills necessary in the 21st century school? The answer would be: it depends on what model of school we aim to achieve. In this regard, Biesta (2014) explains how supranational economic bodies (OECD, IMF, World Bank...) end up dictating education policies and therefore intervening in the education ministries of each country. These, in turn, and in the service of rankings such as PISA, end up designing mechanistic, closed curriculum with behaviourist learning standards that are easy to measure in PE (exclusively cognitive aspects, physical performance, etc.) but not very educational. This analysis is linked to the opinion of the participants in this study when they state that the second level of concreteness (the school) cannot lead changes in assessment in PE because, among other reasons, the first level allows little autonomy in its evaluative references. It seems necessary to address open curriculum models whose design is linked to the participation of the educational community: teachers, students and civil society. This is the case of the PE curriculum of São Paulo, 43,000 students were asked about what contents they wished to include in the curriculum (Secretaria Municipal de Educação, 2019). One of the ways to design a participatory curriculum is to avoid the traditional "read-only" curriculum. A 'reading and writing' curriculum would allow participants to modify their curriculum as they interact with it. The concept of the reading and writing curriculum was introduced by Williamson (2019).

The design of a PE curriculum, and therefore its evaluative references, with the participation of the community would result in smaller documents. In the same way, more participatory curriculum are also more pluralistic and, therefore, avoid discriminating against minorities. We have examples of minority PE models which are silenced by a Eurocentric dominant culture, as occurs with Indigenous games in New Zealand (Dagkas et al., 2011; Fitzpatrick, 2013; Flintoff, 2018; Pang & Macdonald, 2016; Williams, 2018) England. The study was commissioned by the local education authority because of the rising incidence of parental withdrawal of Muslim girls from physical education. The aim was to provide evidence-based guidance to schools on improving the inclusion of Muslim girls in physical education and school sport. In-depth interviews in eight case study schools provided a thick description of the lived realities for 19 head teachers and teachers, 109 young people and 32 of their parents. Four additional focus group interviews were held with 36 Muslim young people in community/supplementary schools. Questionnaires were sent to 402 city schools and 12 supplementary schools (50 of which were returned). Although the Spanish Ministry of Education has recently proposed the exclusion of PE learning AE (citing drafts) (Ministerio de Educación y Formación Profesional, 2021), there is a AC in Spain, as is the case of the Andalucía Secondary PE curriculum, which works in the opposite direction to its government by designing PE curriculum with more learning standards and less autonomy for teachers (Consejería de Educación y Deporte, 2021). In this respect, without mentioning the open curriculum and processual assessment culture of the Nordic countries, it is worth noting the case of New Zealand which since 2018, schools in New Zealand are no longer required to report National Standards annually to the Ministry of Education.

A second aim of the study was to ascertain teachers' views on very specific aspects of the above-mentioned study by Otero-Saborido (2021a). The first of these is the absence in the official curriculum of concrete guidelines for the application of FSA. Logically, the participants are against the scarcity of guidelines and are surprised that the curriculum "prescribe a lot with EA but give little guidance and help". Some of the teachers do not understand how curriculum incessantly repeat the litany of carrying out FSA without the official documents "explaining or giving guidance on how to carry out co-assessment or self-assessment or at least defining or some of these mechanisms for student participation".

Regarding the existence of guidelines, it is rare in the curriculum of the 17 Autonomous Communities (only three of them) to find a text that refers so explicitly to evaluation methods as is the case in this PE curriculum of the Autonomous Community of Murcia:

"The use of motor learning assessment as a formative element will make it possible for students to reflect

on their motor practice: self-assessment of their productions, creation of relevant items that can assess their quality, co-assessment, analysis, proposals for improvement, etc.”

In our view, the problem is not only that guidance such as this is infrequent in AC curriculum, but that it is superficial and should go much deeper than the example cited. A case of a curriculum that guides and helps PE teachers is the Ecuadorian PE curriculum (Subsecretaría de Fundamentos Educativos Directora Nacional de Currículo, 2018). In this curriculum we can find concrete examples to carry out a self-assessment in skills such as jumping to guidelines for conducting a PE session or cooperative learning proposals explaining principles such as positive interdependence. This pedagogical spirit, with tools for real concrete aids, is not the prescriptive and guiding vocation that the PE teachers interviewed found in most of the 17 regional curriculum. Regarding the number of referents to be assessed, only 4 (Andalucía, País Vasco, Cataluña and Canary Islands) out of the 17 Autonomous Regions resisted the measurement approach and introduced a moderate and global number of evaluative referents. Teachers express a unanimous opinion in this respect: “we need fewer assessment benchmarks”. In this respect, the phrase Stenhouse (1987) is almost a biblical sentence when he states that students can achieve the proposed standards but without being educated. The other two aspects that the PETE were asked about, dimensions (cognitive, motor and socio-affective) and the globality of the evaluative referents (capacity of a referent to contain several dimensions at the same time) are closely related to the size of the curriculum. That is, according to quantitative studies carried out on both Primary and Secondary PE curriculum (Otero-Saborido et al., 2020; Otero-Saborido et al., 2021a) official documents with few evaluative referents lead to more global referents, that is, with more capacity to integrate different dimensions. Likewise, it seems that these types of global curriculum contain a higher percentage of referents that include the motor dimension. The PE teachers interviewed in the present study are clearly aligned towards smaller, more global curriculum where the motor domain is more represented. More than a decade ago, the results of a study funded by the Andalusian Regional Ministry of Tourism and Sport on how 415 primary and secondary PE teachers assessed (Sicilia et al., 2006) coincide with the responses of the interviewees in the present study on the greater importance they attach to the assessment of motor and socio-affective aspects, rather than cognitive ones. As can be seen, almost 15 years later, PE curriculum is once again moving in the opposite direction to the reality of school PE. However, it should be remembered that the interviewees in this study also recognise the difficulty of grading when the dimensions coexist in an integrated manner. In this line, López-Pastor (1999) states that assessing the three dimensions at the same time is a real challenge for Physical Education. In this respect, it is important to point out the

importance of initial and ongoing training that helps to implement FSA strategies. Likewise, it is necessary to emphasise the dysfunction of curriculum, the educational community and society in general in terms of assessment by understanding this process as synonymous with grading and ignoring other more educational functions related to learning, motivation or interaction.

## Conclusions

In line with previous work (Otero-Saborido et al., 2020; Otero-Saborido et al., 2021a; Otero-Saborido & Vázquez-Ramos, 2019) and based on the opinion of the teachers interviewed, there are several aspects that should be considered with respect to assessment in the PE curriculum. Firstly, curriculum and, therefore, their evaluative references should not be standardised, as each social context has its own needs. Therefore, it is up to the educational community to build the PE curriculum and for PE teachers to have sufficient autonomy to build didactic indicators contextualised in their reality. Secondly, and as a consequence of the above, the learning standards are not an adequate reference for assessment according to PETE. Teachers would like the curriculum to include more specific guidelines and aids in assessment and, on the contrary, a smaller number of evaluative references. Finally, motor skills are the core of PE and, as such, should be the focus of the evaluative references which, in turn, should include all the dimensions of the human being.

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## Notes

<sup>1</sup> There are 17 autonomous communities in Spain. The autonomous communities constitute the highest level of territorial organisation in Spain. Each Autonomous Community (an administrative structure similar to a State in the USA or a Land in Germany) has the competences to elaborate its own PE curriculum, following minimum national level guidelines.

<sup>2</sup> In Spain, there are three levels of curriculum specification. The first level, the most general, corresponds

to the official curriculum of each education administration. At the second level, each educational centre, depending on its context, specifies what is prescribed at the previous level. Finally, teachers within their group of pupils personalise the previous levels in the so-called third level of specification