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How are rubrics used for the assessment of Final Year Projects in Physical Education? The predominance of the marking function

¿Cómo se utilizan las rúbricas para la evaluación de los Trabajos de Fin de Grado en Educación Física? El predominio de la función calificadora

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Abstract

Since the implementation of the European Higher Education Area, the reliable assessment of Final Year Projects (FYP) has become a problem to be solved in many countries. This paper analyses the use of rubrics for the assessment of FYP in the Physical Education teaching degree. A case study was conducted, using in-depth interviews and a focus group, with four lecturers and eight students. The results show that the assessment rubrics of the FYP are public from the beginning of the course (transparent assessment) but that most students are not aware of them and that tutors do not usually work with them. Both are aware that they could be used with a more formative approach throughout the FYP elaboration process. The use given to rubrics is mainly for marking, on both sides. The article provides relevant information on an under-researched topic. More research seems urgent on how to encourage a formative use of rubrics during the whole process of writing FYP, which promotes self-regulation of learning, and not only the final mark.

Keywords: European Higher Education Area; Formative assessment; Self-regulation; Instruments; Mark.

Resumen

Desde la implantación del Espacio Europeo de Educación Superior la evaluación fiable de los Trabajos de Fin de Grado (TFG) se ha convertido en un problema a resolver en muchos países. Este artículo analiza el uso de las rúbricas de evaluación de los TFG en el grado de maestro en Educación Física. Se realiza un estudio de caso, utilizando entrevistas en profundidad y un grupo focal, con cuatro profesores participantes en el proceso de creación de las rúbricas y ocho alumnos. Los resultados muestran que las rúbricas de evaluación de los TFG son públicas desde el principio del curso (evaluación trasparente) pero que la mayoría de los estudiantes no las conocen y que los tutores no las suelen trabajar con ellos. Ambos son conscientes de que podrían aprovecharse con un enfoque más formativo, a lo largo del proceso de elaboración de los TFG. El uso que se da a las rúbricas es mayoritariamente calificador, por ambas partes. El artículo aporta información relevante sobre una temática poco investigada. Parece urgente más investigación sobre como fomentar un uso formativo de las rúbricas durante todo el proceso de elaboración de los TFG, que potencie la autorregulación del aprendizaje, y no solo la calificación final.

Palabras clave: Espacio Europeo de Educación Superior; Evaluación formativa; Autorregulación; Instrumentos; Calificación.

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Introduction

In 1999 the "Bologna Plan" was approved, proposing the creation of a homogeneous university system in Europe and the development of general and specific competencies in students within a professional framework (Royal Decree 1393/2007). This legislation states that all undergraduate studies will be concluded after preparing and defending Final Year Projects (FYP). Mut-Amengual et al. (2023) define the FYP as the final academic step in the degree course where its quality can be an indicator of the knowledge acquired. Medina et al. (2020) state that the FYP contributes to the development of skills and competencies acquired throughout the degree.

From a practical point of view, assessing the achievement of all the general competencies of the degree from the completion of a FYP is complex and is far removed from actual practice. Competency-based assessment figures largely in studies that address the assessment of FYP (Hashim & Hashim, 2018; Medina et al., 2020). Specifically, Granero-Gallegos (2020) is committed to a formative assessment model focused on student learning as a system to promote the acquisition of specific teaching competencies in Physical Education (PE) (Cañadas et al. 2019). De Sande et al. (2011) state that it is complex to evaluate all the competencies in each FYP, since there are projects that do not address all of them. These authors approach the assessment of competencies as the acquisition of skills to develop within the acquired training shown in a FYP, for example: competency for analysis and synthesis, and competency to address the basic knowledge of the area, among others. In fact, Medina et al. (2020) clarify that the FYP contribute to the assessment of the degree competencies, but this does not mean that all the competencies have to be assessed in every study, but rather its contribution to their achievement. Romero and Chivite (2021) indicate that generic teaching competencies predominate in the FYP and master's degree theses, and not specific ones.

Before the implementation of the Bologna Plan, many university lecturers assessed the FYP without specific criteria, with a great variability of results among departments; moreover, Gargallo et al. (2020) indicate that each university adapted what was indicated by the Ministry to its own context. Different studies that carry out analyses on the assessment of FYP (Colmenero et al., 2020; Reyes-García and Díaz-Megolla, 2017) conclude that formative assessment is determinant for improving the teaching-learning process. Specifically, Colmenero et al. (2020) indicate that in most universities the assessment of the FYP is summative through the defence of the work, and only formative on the part of the tutor, but without an objective criterion. López-Pastor and Pérez-Pueyo (2017) present a synthesis of why the obsession with marking in education continues to prevail, concluding that the terms "assessment" and "marking" are confused. Thus, different studies put forward proposals to solve this subjectivity in the assessment of the FYP, related to the design of rubrics with closed and transparent criteria, monitoring and formative assessment of the FYP process (De Sande et al., 2011; Sharef et al., 2014). Fernández-Garcimartín et al. (2023a) show the use of rubrics for the assessment of PE FYPs during the COVID-19 pandemic, showing their strengths and weaknesses within the process, but also that they represent a transparent and publicly available instrument for the students.

Panadero and Alonso-Tapia (2013) and López-Pastor and Pérez-Pueyo (2017) define rubrics as assessment instruments that contain evaluation criteria described in levels, allowing self-assessment and task marking. These authors affirm the effectiveness of rubrics as the main assessment tool; although it can be questioned whether this effectiveness depends on whether rubrics are used with a formative and transparent approach. Reyes-García and Díaz-Megolla (2017) indicate that it is in self-assessment where student reflection favours the self-regulation of their learning; for example, from the analysis of their FYP with rubrics. For their part, Medina et al. (2020) and Panadero & Jonsson (2013) explain that for the rubric to have a formative utility, the teacher must inform students about their progress and provide options for improvement through feedback. Specifically, Zubillaga-Olague & Cañadas (2021) analyse the most valued purposes of the PE teacher during their training and highlight formative assessment throughout their training.

Panadero and Alonso-Tapia (2017) and Sharef et al. (2014) show that the formative use of rubrics for self-assessment improves students' task development if they are worked with throughout the learning process; moreover, they minimise differences in student expectations regarding the learning

outcome. They add that this instrument can be useful to focus teachers on the aspects and criteria to be evaluated and marked. Furthermore, Pascual-Arias et al. (2022) show that education teachers consider that student participation in assessment, at any educational stage, positively influences their learning. Pascual-Arias et al. (2023) and Molina-Soria et al. (2023) agree on the need to carry out formative and shared assessment processes, involving students in their assessment throughout initial teacher training. Specifically, Fernández-Garcimartín et al. (2023b) show how to carry out these formative and shared assessment processes in the FYP of initial teacher training in PE.

There is scarce literature on rubrics as a tool for assessment of FYP in higher education and, especially, in initial teacher training in PE. Therefore, more research seems to be necessary on how the assessment of FYP is carried out in the undergraduate programmes on PE.

In order to try to fill this gap, the objectives of this study are:

- (a) To analyse the use of rubrics as instruments of assessment of the FYP by the agents that participate in its elaboration process in the PE teachers' degree.
- b) To analyse the use of rubrics by the assessment board during the final assessment process of the FYP.

Method

Study Design

This research was approached within an interpretive paradigm, where a given context is analysed and questioned from a case study, giving voice to the participants of the same. In this study, four lecturers from the Spanish Faculty of Education and eight students from the last year of the Dual Degree in Early Childhood and Primary Education, with a minor in PE, participated.

-Lecturers: they had between 15 and 25 years of teaching experience and are 3 men and 1 woman. Selection criteria: (1) participation in the process of creating the instruments; (2) participation in assessment boards of the PE FYP since the creation of the instruments (2015); (3) they teach subjects in the degree of Primary Teacher, minor "Physical Education". The total population of lecturers meeting these criteria was eight.

-Students: selection criteria: (1) completion of the PE FYP in the previous year and currently the FYP of the Early Childhood Education degree; (2) academic record ("high": average of outstanding; "average": average of good; "low": average of pass); (3) personal assessment of the FYP and its evaluation instruments (satisfied or not satisfied with the tutoring and assessment process of their FYP). Students with different academic records were selected, as well as students with different evaluations of the tutoring and assessment process of their FYP, forming a heterogeneous sample. The total population of students meeting the criteria was 16.

Table 1Description of the rubrics used by the faculty of education to assess the FYP.

INSTRUMENT DESCRIPTION		% MARK	
	Instrument that the tutor completes and assesses		
Rubric 1. Tutor	aspects related to the process of development of the	-	
	FYP and the student's learning and evolution.		
Rubric 2. Assessment of the final document	Instrument completed by the members of the		
	assessment board. It evaluates aspects related to the	80%	
	final document.		
Rubric 3. Assessment of the oral presentation	Instrument completed by the members of the		
	assessment board. It evaluates aspects related to the	20%	
	oral presentation of the project.		

Note. Own elaboration.

A single case study was carried out, analysing a particular and detailed case from different points of view, to understand it and generate knowledge about what was investigated (Stake, 1995; Simons, 2014).

In 2015, the lecturers of the faculty organised themselves to develop an assessment procedure for the FYP that was as homogeneous as possible. They created three assessment instruments (Table 1) and established uniform assessment criteria.

These are analytical rubrics with four levels of achievement related to assessment criteria (A, B, C, D) (see Annex 1). Table 2 describes the FYP assessment process in this faculty.

Table 2
Assessment and marking process of the FYP

1 st PHASE 2 nd PHASE		3 rd PHASE		
-FYP development.	-The student finalises the	-The tutor completes the rubric and submits it to the		
-The tutor assesses	FYP and the presentation of	assessment board.		
the process and gives	the oral defence.	-The assessment board reads the FYP, evaluates it and		
feedback to the	-The tutor reviews and	marks it with rubric 2.		
student (both of the approves the project and the		-The student presents his/her project.		
project and of the student delivers the work to		-The assessment board evaluates and marks this		
presentation when it the secretary's office.		presentation on the spot with rubric 3.		
is finished).	-The student uploads the	-They ask the student questions.		
	FYP to 'Turnitín' (anti-	-They discuss the mark.		
	plagiarism).	-They share the mark with the student and the tutor.		

Note. Own elaboration.

Instruments

The techniques used were: in-depth interviews and focus groups. Oliver-Hoyo & Allen (2006) indicate that these are the two most widely used techniques in qualitative research because they offer triangulation to the research process and, in addition, they offer valuable qualitative information that is difficult to obtain with other techniques.

- -Semi-structured interviews with four faculty members, each lasting approximately one hour.
- -Focus group with eight students after the in-depth interviews: duration of one hour and eight minutes. Use of the "Cisco Webex" software.

A digital audio recorder, the computer's voice recorder, pen and paper were used for data collection. The questions are closely related to the research objectives and the categories that structure the results (see Table 3).

Table 3Sample of questions asked in the in-depth interview and in the focus group.

TECHNIQUE	QUESTIONS
In-depth interview	-Do the students have access to the three assessment rubrics? Does anyone inform them that
	the rubrics are available and how useful they are?
	-What is your perception of the students' interpretation of the rubric?
	-Do you think that they take into account this instrument to develop their FYP well?
	-Do you think it can be a formative instrument for students?
Focus group	-Did you know the rubrics before doing the FYP?
	-Did the tutors work with you on the assessment instruments during the FYP?
	-Did you know where your mark came from?
	-What was your experience with the assessment board like?
	-You say that the rubric guides you for marking?
	-What would be the use of rubrics if you had them from the beginning?

Note. Own elaboration.

Procedure and Analysis

The interviews and the focus group lasted approximately one hour and one and a half hours, respectively. The interviews were conducted at the faculty, in a classroom; and the focus group was conducted by video call to facilitate the participation of all interviewees. They were recorded with a telephone recorder and with the computer recorder, while notes were taken by hand with pen and paper. Once the interviews and the focus group were completed, the information was transcribed verbatim. Each participant was sent the verbatim transcript of his or her interview and had the opportunity to modify and/or delete any information given. Likewise, the research objectives were presented to each participant.

A category analysis was carried out in relation to the objectives of the study, in order to facilitate the analysis and the obtaining of concrete results (Vaismoradi et al., 2016). First, a literal transcription of each interview and the focus group was made. After reading them, the information was analysed and categorised through a deductive analysis of the information. Finally, the data were analysed with the "Atlas.ti" computer programme. Table 4 shows the system of categories used.

Table 4Selected categories and subcategories

CATEGORIES	DEVELOPMENT	SUBCATEGORIES
1-Use of the rubrics	The use that students and tutors make	1.1 Knowledge of rubrics.
during the FYP	of the rubrics from the beginning of the	1.2 Poor use of rubrics and type of
development process.	FYP development is addressed.	approach: summative vs. formative.
2-Use of the rubric by the assessment board.	The use made by the members of the assessment board of the rubrics to evaluate and mark the FYP is discussed.	2.1- Appropriate uses of rubrics.2.2- Inappropriate uses of rubrics.2.3-The obsession with marking.

Note. Own elaboration.

Each literal quotation will consist of a code indicating the subject. The interviewer will be coded with an "I". Lecturers (L) will have the following codes: L1-L4. Student quotes will have the code "S" (Student) followed by a number: S1...-S8. Anonymity has been maintained at all times, eliminating any bias on the part of the authors.

This study was prepared in compliance with Guba's (1989) criteria of quality and scientific rigour for qualitative research:

- a) Credibility: carrying out the analysis process starting with the transcription and analysis of qualitative data as collected, together with the consent of each participant and the validation process of the interviews and the focus group.
- b) Transferability: the analysis procedure followed has been described.
- c) Dependence: the data collection techniques (interview and focus group) have been triangulated to ensure the stability, consistency of the analysis and replicability of the study.
- d) Confirmability: the data have been rigorously analysed, working and exposing textual quotations from the participants and the validation process of the interview drafts and the focus group. Researcher's opinion bias is avoided.

Results

The results obtained are presented divided into the two categories of analysis (Table 4).

Use of rubrics during the FYP development process

Knowledge of the rubrics

The lecturers explained that the assessment instruments are public and, supposedly, known by the students from the beginning of the FYP course. However, the consultation and/or use of the instruments depends on the students themselves and on the tutors. One lecturer considered that the students who work with the rubrics are familiar with them and will probably use them in the future as teachers:

"First the notice arrives through the Virtual Campus, where the FYP documents are. [...] They should (go to the instrument), but, as always, everyone is different. [...] The information is available; you can make efforts to make the information visible and transparent; but it depends on the student" (L2).

"From the beginning, since it is in the Virtual Campus. The coordinators upload all the information that the students are going to need to present or to defend the project; then the tutor is the one who can inform or not, or work with this instrument, but they know it from the first moment" (L1).

"We trust that an education student has seen at some point or worked with a rubric and, if not, it is that something is being done wrong. And that this is a familiar element that, in addition, is probably going to be used in schools" (L2).

The results from the students are different. Three of the students were aware of them and two of them commented that they received notice by mail that they had the documents. In two cases they were not aware of the rubrics and had not seen them before:

"(Rubrics) I hadn't seen them before. So, it seems that, if you see them before you are going to be marked, they can help you a lot" (S3).

"Well, neither in the first FYP, nor in the second one. I just saw them now, I read them this morning when you sent them to us" (S5).

"But this year the degree coordinators sent them, didn't they...? By mail, a few days ago" (S4).

"The documents had been sent to me. [...] I have never seen them filled out" (S1).

"In my case, [...] I had seen them. What I have never seen are those documents filled out, with the assessment they give you" (S7).

Low use of rubrics and type of approach: summative vs. formative

There was a debate among the students about the use that tutors make of the assessment instruments. Different experiences emerged: tutors who guide the student a lot and others who hardly pay attention to him/her during the process. The students affirmed that no tutor had worked with them on the assessment instruments during the development of the FYP:

"There are tutors who act just like in everyday life: you get on with it or I guide you 100%. Last year I had a tutor who guided me a lot [...]. This year I have a tutor who [...] as long as you don't write to him, he won't call you to see how you are doing. He is even less likely to send you that rubric if you don't know about it, don't find out about it or don't ask him for it. I think it is also a bit of being adults; it is true that I did not know anything, perhaps we have not been informed much about the subject, but I do believe that we have been too conformist " (S2).

"The one who has to do the job of transmitting the information to you is your tutor. It is the same as in the Practicum. In the Practicum, the one who explains the guide for the report, or the diary: your tutor" (S1).

For their part, the lecturers considered that students make a predominantly summative use of the instruments, only focused on the final assessment process by the board and the mark. They stated that, in many cases, students use the rubrics at the end, to check the quality of their work, and not to obtain more or less learning, or to do work according to the criteria:

"If students are smart, they look at what they are going to be assessed on and tend to do work adjusted to this" (L4).

"Those who take it into account, most of the time it is to get a good mark and, in addition, most of them usually look at it at the end, not as a learning tool. They do not think about the help they can have with this instrument in their FYP, what I have to look at as learning, but more what is going to allow me to pass" (L1).

On the other hand, the results show that on some occasions a formative use of the rubrics is also made, knowing the criteria with which they are going to be assessed and working according to it (through self-assessments, feedback, etc.). The lecturers considered that the assessment instruments have little formative character in themselves; this would only be the case if the tutor works with the students from the very beginning:

"If it is simply published, it only serves as a tool for assessment, for transparency, based on certain criteria. If, in addition, those who tutor the students help to interpret the indicators and give clues as to what is understood by quality in each section, it would be a formative element" (L2).

"Yes, those who use it are aware that they have to pay attention to these aspects" (L1).

"You use it and, as a tutor and assessment board, you should use it. Now, if you have a student, the formative nature of this rubric is if you work on it with him". (I) "But nobody works on it, I don't think. I don't work on it. I tell them, "There you have the rubric.' But I don't do any more" (L4).

The students also offered some possible formative uses of the instrument if the tutor works on the instruments with them:

"Yes, it can enrich you if your tutor says you're too low on this part or whatever. In our case, for the next FYP, we can get our act together on that. It's just that, if not, it's useless" (S11).

"Another thing is that your tutor works on it with you and tells you a little bit how you are doing: 'Based on the rubric we could improve...'" (S7).

"With the tutor, who is the one with whom we have had more contact throughout the whole FYP, if in the middle or before finishing he says to you: 'Look, these are the items on which I am going to assess you, in this you are low'. [...] If you know that before finishing, I think it is very good" (S3).

Use of the rubric by the assessment board

Appropriate uses of rubrics

In relation to the appropriate uses of rubrics, lecturers stated positive characteristics about the usefulness of rubrics: (1) their objectivity; (2) they serve to reach a consensus on the mark, as long as the rubric is used correctly; (3) they are elements of help and support in the assessment:

"It helps us because it forces you to focus on concrete aspects. It is an objective instrument that has helped us to fix and specify some elements and has focused us" (L1).

"In the assessment boards I was on, the rubric did help us to reach a consensus on the mark [...], as long as we are careful with the number it is. I fill it in without thinking about numbers, which is much simpler, from the indicators, and then I translate into numbers. [...] Once the number comes out, plus the first reading of the FYP [...] it's a case of: What idea did I have with the global vision? What do the indicators show and what value comes out as a number? Then, if more or less everything fits, we are done. And if it doesn't fit, that number can be adjusted; or maybe the indicators can be reviewed" (L2).

Students also added perceptions about the correct use of the instruments by lecturers. Several students affirmed that lecturers have to focus on the importance of formal aspects in the assessment of the FYP, because they recognise that the objective of the subject is to complete an academic project:

"I guess that, when they send the document, they already have the rubric completed. The only thing they will complete there are the items of the presentation" (S6).

"The important thing is the project, the content. But I do think that, for example, the 'Formal aspects' are important; you have to write and write well, you cannot have spelling mistakes, you have to cite well. These are the minimums that we have to comply with. What I do agree with you is that many lecturers give more importance to this than to the content, which I do not agree with. No matter how good the content is, if you write the way you want and the structure is not adequate, the work is not good, you are not doing what they are asking you to do" (S8).

Inappropriate use of rubrics

The lecturers considered that, at times, the assessment boards make inadequate use of the instruments, depending on the criteria used:

"In the sense of how the correction is applied; in some cases it was a misinterpretation of the rubric. [...] In formal issues, when we were talking to the Language Didactics department, evidently their level of demand in that part was higher [...]. You have a very high tendency to evaluate around your knowledge" (L2).

"We each have different criteria for using it. At least me, when I have been a colleague, I have seen everything" (L3).

The lecturers were very critical of some incorrect uses they have observed on the assessment boards: (1) limiting themselves to the marking column, without using the rubric; (2) using the rubric backwards, first marking and then choosing the indicators; (3) arriving on the board without having filled in the rubric beforehand; (4) filling in the rubric without having read the entire FYP in detail:

"How did I see this? Firstly, when they give it little importance, i.e., since it is of no use, it is enough if I put a mark in the right column. Second, they begin to assess from right to left, that is, by putting the mark and converting it into a level. [...] And, for example, when they don't bring it filled out when they are on the assessment board " (L3).

"They apply it badly because they do it to fill it in and to show that they have done it. [...] The rubric is used as an instrument to justify such a poor assessment process. [...] They take refuge in the fact that the rubric says it here" (L4).

The students had different opinions among themselves about how they believe the assessment board usually works with the instruments. Generally speaking, they felt that they make inappropriate uses of the instruments, but they demonstrate that they did not know how they are actually used, criticising uses that do not occur:

"I think that five minutes (time in which the student leaves the classroom and the members of the board discuss the mark) to assess what has taken us so much time, seems to me very little time. Either they know the rubrics by heart and fill them in a little bit in general, or I don't think that in five minutes [...]. Then there is another case that strikes me very much, [...] that they take very much into account the semicolons and commas, and in the assessment rubric I don't see any of that" (S2). "It is that, for me, that they look at that before the content of the FYP and how it has been carried out, it seems to me that it does not make sense" (S4).

"What I have noticed is that, in the rubrics, the process is valued very little. Unfortunately, it is a final mark and what you have done along the way is not worth anything. I don't find anything in the rubrics that values that process; that would be remedied by giving weight to the assessment made by the tutor" (S2).

The obsession with marking

The lecturers' responses show that the rubrics are eminently used for the purpose of marking, although some of them criticise this obsession:

"We misuse marking [...]. In some assessment board conversations we say: 'I put a B so that here I get a 1'. I think that's the first problem, we don't know how to use it, because we always think about marking. [...] There is a certain obsession with marking. [...] Lecturers turn letters into numbers, that is, 'A' is 4/4 parts of the mark; they are proportions that become numbers" (L3).

"What people are looking for is something that translates into a mark. And they have told me so!" (L1) "Because the first problem you had was the disparity of criteria to convert it into a mark" (I) "Yes, but it is a problem that lecturers always create; more than teaching or formative assessment, they are concerned about the mark" (L4).

For their part, students also debated about the marking use of the rubrics, showing different positions: (1) some do want or need a mark to know how their work is going, and value that it is justified; (2) others do not need a numerical mark, because they know how to interpret the rubric, having worked with other similar ones in undergraduate subjects:

"After the defence and after the assessment board met, they did justify to me why I had that mark" (S6).

"Sure, but you do need it. [...] they don't give it to you, you directly transform it" (S1).

"Man, you know that B-A is good. Less than A-B no. [...] I don't need to see a number in the rubrics, because we've been getting subject marks with A-B-C-D for five years and we know what each one corresponds to, approximately" (S2).

"No, but we need it, even if we say, 'No, I don't want to know the mark!' [...], but then you really do want to know it, to know where you stand" (S1).

"We all want to know a number to know if it is right or wrong, but it is not our fault, it is the fault of the education system, which has always assessed us with a mark, giving importance to the numerical value" (S2).

Discussion

The use of rubrics as instruments for the assessment of the FYP by students and lecturers of a faculty of education has been analysed.

In relation to the first category, the results indicate that the instruments are public from the beginning of the course in the Virtual Campus, therefore, it is a very transparent assessment process that could facilitate the implementation of formative assessment processes throughout the development of the FYP. Studies such as that of Jonsson (2014) show three possible formative uses of rubrics, giving the rubric to students from the beginning and working with it orally: (1) the teacher introduces the rubric

explaining to students one by one the criteria to be assessed; (2) the teacher transmits the essence of each aspect to be assessed without details, with samples of specific work exemplifying the criteria; (3) the teacher briefly explains the criteria and asks students to use the rubric to evaluate their peers. However, despite having found that the rubrics are accessible from the very beginning, it seems that not all students know about them or consult them, and that a significant part of the teaching staff neither shows them to the students they tutor nor uses them during the process of carrying out the FYP. Therefore, there is a strong dissonance with what some studies indicate, which point out that, when rubrics are available from the beginning in higher education, as in this case, students can use them for formative assessment and self-assessment to guide their own learning process in the completion of the task (Fernández-Garcimartín et al., 2023b; Panadero et al., 2012; Panadero & Jonsson, 2013; Sharef et al., 2014). In this same way, Jonsson (2014) indicates that if students read, understand and use the criteria of the rubrics for the development of their work, they will have a better performance in the task; but not all of them get to do it. The results show that many students criticise that their tutors have not worked with them on the FYP assessment instruments, contrary to what a tutor should do according to Díaz-Vázquez et al. (2018): guide the student in the teaching-learning process of the FYP. For his part, Jonsson (2014) states that the use of rubrics in a formative and transparent way makes it possible for students to know the assessment criteria and use them to self-assess their work, which facilitates their understanding and use of the criteria and the analysis of their level of competency in the task. In this regard, Fernández-Garcimartín et al. (2023a) show how during COVID-19 they worked transparently with the rubrics of the PE FYP; however, this feature was not used as much as it could be.

In relation to the second category, the uses of the rubrics are analysed. The results show that both lecturers and students recognise that the instrument has adequate and inadequate uses. The appropriate ones are related to its objectivity and its possibility of serving as a guide in the development of the project. There is research that considers that rubrics are suitable for evaluating those projects in which different levels of achievement must be identified, since they are organised into different levels of achievement and help to make the leap to the final mark (Panadero et al., 2014; López-Pastor and Pérez-Pueyo, 2017). However, different inadequate uses by the teaching staff on the assessment board are also mentioned (a certain passivity when using the instrument, not agreeing with its use, not having done the work of filling it in, focusing only on the mark without giving importance to the descriptors, etc.). It can be understood that it is the instrument itself that does not adapt to the assessment process of the FYP, as indicated by De Sande et al. (2011), who consider it complex to assess and mark the FYP with the rubrics, since they are too general and do not cover all types of work; in addition to not being able to assess all the competencies of the degree. On the other hand, the students affirm that they do not know how the assessment and marking procedure of the FYP is carried out with these rubrics. The results show that some of the students do not seem to have a correct idea of what the assessment board evaluates in the FYP. In fact, the learning opportunity of using the rubrics with the students is not taken advantage of. Romero-Martín et al. (2023) find similar results when they observe a lack of involvement in the assessment on the part of the student when analysing the end-of-studies guides for the end of PE studies.

Finally, the results indicate a certain obsession with marking when analysing the use of rubrics, both by lecturers and students. Lecturers consider that rubrics are eminently use with the purpose of marking, although some of them criticise this obsession, in line with what can be found in other investigations (López-Pastor and Pérez-Pueyo, 2017; Romero-Martín et al, 2023). The students show different positions on the subject; some of them would appreciate it if the assessment board provided them with the completed rubric, in order to better understand the mark received and the quality of the work, while others affirm that knowing the rubric, they already know how to interpret the mark received.

In relation to the results obtained in this category, using rubrics to evaluate FYP can bring objectivity to the assessment and facilitate the leap to marking; but it depends on how the instrument is used by each lecturer on the one hand and the assessment board as a whole. This obsession may be caused by different reasons: the lived tradition on assessment, more focused on marking than on learning, and using the rubric exclusively to perform a final and summative assessment. Jonsson &

Svigny (2007) show that rubrics are a good instrument to obtain reliable marks for a project, preferring analytical instruments to favour consensus among assessors.

It seems key to work with formative and shared assessment systems from pre-service teacher education so that students take advantage of the formative opportunities of rubrics when preparing their FYP. López-Pastor et al. (2020) and Pascual-Arias et al. (2023) show the importance of experimenting with formative and shared assessment processes in pre-service teacher education so that students are able to apply them in other areas. Therefore, it seems important: (1) to train university faculty to learn how to use rubrics to enhance learning and self-regulation during the FYP development process; (2) to investigate faculty who already use rubrics with this approach, and to transfer the results to the rest of the faculty and institution.

Conclusions

In this study we have responded to the two research objectives: (a) to analyse the use of rubrics as assessment instruments of the FYP by the agents that participate in the process of development of the FYP in the PE teachers' degree; and (b) to analyse the use that the assessment board makes of the rubrics during the process of final assessment of the FYP.

In relation to the first objective, the use of rubrics as assessment instruments for the FYP is completely transparent in this case, since they are published in the Virtual Campus of the degree from the beginning of the course, but the learning opportunity that this implies does not seem to be taken full advantage of. The lecturers indicated, as did the students, that the instruments have little formative character in themselves, only if they are used for this purpose. In order to give a formative use to the rubrics, it seems necessary for the students to have access to the rubrics from the beginning and for the tutors to work with them during the whole process, promoting their self-regulation through cycles of self-assessment, feedback and feedforward.

In relation to the second objective, using rubrics to assess FYP seems to be useful to bring objectivity to the assessment and facilitate the leap to marking. On the contrary, the inadequate use of rubrics seems to be more related to the criteria of use by the teaching staff than to the instrument itself. In this regard, there is a certain obsession with the marks on the part of lecturers and students.

The main lessons are: (1) the usefulness rubrics seem to have for the final assessment of the FYP, a situation currently widespread in higher education; (2) the proposal of strategies to give a formative use to the rubrics during the whole process of development of the FYP. Therefore, this study may be useful for those faculties that are using rubrics to assess the FYP, due to the advantages that this entails.

The limitations of the study are related to the low sample of participants, as well as the single context in which the analysis was developed. As a prospective, it would be interesting to expand both the sample and the comparison between the assessment of the FYP of different faculties of education and even with respect to other different degrees. Likewise, it is proposed to carry out the study with a larger sample of interviewees and using a mixed research methodology. This study deals with a novel research topic; there are few references on the rubric assessment of the FYP in PE, and even fewer on the use of this instrument by lecturers and students in PE.

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Annexes

Annex 1. Sample of part of the rubric of the FYP assessment board.

Table 5 *Rubric 2. FYP assessment board*

Student:			Name of assessor:		
Title of the FYP:	:				
Res:					
2.1. FORMAL ASPECTS	A	В	С	D	Rating
Item	Outstanding	Good	Pass	Fail	
Reference citation (according to APA)	Citations and references are in accordance, without errors, with the provisions of the FYP regulations (*What is not included in what is published in the Virtual Campus is not penalised).	Citations and references comply, with some minor errors, with the provisions of the FYP regulations (*What is not included in what is published in the Virtual Campus is not penalised).	Citations and references comply, with significant errors, with the FYP regulations (*What is not included in what is published in the Virtual Campus is not penalized).	Scarce use references and presence of serious errors and project does not comply with the FYP citation rules (published in the Virtual Campus). FAILED	Rate from 0 to 1.5 for this section as a whole. It is not necessary to attribute the same value to all items.
Format and structure (according to FYP guidelines)	The project complies with the formal requirements established in the FYP guide, in terms of dimensions, extension, font, margins, line spacing, titles and insertion of images, tables, graphs and figures.	The project complies with the formal requirements established in the FYP guidelines, with some minor errors.	The work conforms to the formal requirements established in the FYP guide, with significant errors.	The work does not comply with the formal requirements established in the FYP guide. FAILED	