

Formative and Shared Assessment and Final Degree Projects in Physical Education Pre-service Teacher Education

Evaluación formativa y compartida para la tutorización de Trabajos Fin de Grado en la formación inicial del profesorado de Educación Física

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Abstract

The aim of this research is to analyse the processes of formative and shared-assessment (F&SA) in the development-tutoring and defence-evaluation of the Final Year Projects (FYP) in Physical Education Teacher Education. A case study was carried out with 20 participants (12 lecturers and 8 students), applying four data collection techniques (in-depth interviews, focus group, group interview and seminar proceedings). The results show that it is possible to carry out F&SA processes during the development and final evaluation of the FYP. The main results are: (a) rubrics are not usually used as an instrument for feedback, self-regulation and self-assessment; (b) during the COVID-19 confinement, rubrics were used to provide formative feedback and to justify the online grading of the FYP; (c) teachers and students prefer the defence of the FYP to be face to face, due to the advantages in terms of the feedback they obtain. Lessons learned are provided on how to carry out F&SA processes during the tutoring-development and evaluation-defence of the FYP using the rubrics as a formative, feedback and feedforward element. These results represent an advance in the learning processes using F&SA and feedback in a very understudied subject, the FYP.

Key words: assessment, feedback, Final Year Project, Physical Education, COVID-19.

Resumen

El objetivo de este estudio es analizar los procesos de evaluación formativa y compartida (EFyC) en la elaboración-tutorización y defensa-evaluación de los Trabajos de Fin de Grado (TFG) de la Formación Inicial del Profesorado de Educación Física (FIP-EF). Se realiza un análisis cualitativo a partir de un estudio de caso con 20 participantes (12 profesores y 8 alumnos), aplicando cuatro técnicas de obtención de datos (entrevistas en profundidad, grupo focal, entrevista grupal y actas de seminario). Se obtiene que es posible realizar procesos de EFyC durante la elaboración y la evaluación final del TFG. Los principales resultados son: (a) las rúbricas no se suelen aprovechar como instrumento de *feedback*, autorregulación y autoevaluación; (b) durante el confinamiento por la COVID-19 se usaron las rúbricas para dar *feedback* formativo y para justificar la calificación on-line del TFG; (c) profesores y alumnos prefieren que la defensa del TFG sea presencial, por las ventajas respecto al *feedback* que obtienen. Se aportan lecciones aprendidas sobre cómo llevar a cabo procesos de EFyC durante la tutorización-elaboración y evaluación-defensa del TFG usando las rúbricas como elemento formativo, de *feedback* y *feedforward*. Estos resultados suponen un avance en los procesos de aprendizaje empleando EFyC y *feedback* en una asignatura muy poco estudiada, el TFG.

Palabras clave: evaluación, feedback, Trabajo Fin de Grado, Educación Física, COVID-19.



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Introduction

Final Year Projects in Physical Education: context and assessment

Final Year Projects (FYP) came into being with the “Bologna Process” in 1999. According to Royal Decree 1393/2007, higher education studies finish with the completion of a FYP. Vicario-Molina et al. (2020) define the FYP as a project which degree students complete to finish their studies, where they must demonstrate the competencies acquired. These authors indicate that the FYP involve a study load of 6-30 ECTS credits (European Credit Transfer and Accumulation System), depending on the study plan of the corresponding university. Each university has the autonomy to establish a personalised guide where these criteria are detailed (Sancho-Esper et al., 2018). Generally, those who participate in the development and assessment of the FYP include: the student, a lecturer as the student’s tutor, and two or three lecturers who make up the assessing committee, depending on each university; there can also be group FYP.

The degree in primary education can include qualifying or habilitating minors, among which figures Physical Education (PE). Romero & Chivite (2021) consider that generic teaching competencies predominate over specific ones in FYP and Master theses.

Vicario-Molina (2020) indicates that it is the assessment committee that should evaluate the development and presentation of the FYP, and in turn, should assess the training of the student in the knowledge and aptitudes acquired in the degree. Regarding the assessment of the FYP during the confinement due to COVID-19, Gil & Vallés (2021) found that it did not significantly affect the monitoring of the students, or their learning, or their results, in spite of the changes made in the organisation and assessment of the subject.

The instruments used are especially important in the assessment. López-Pastor & Pérez Pueyo (2017) define the assessment instruments as the documents that are related to the assessment activity, establishing requirements and aspects to be evaluated with specific achievement levels. Quintana & Gil (2015) indicate that the assessment instruments should be coherent and contextualised with what is to be assessed and be clearly worded so that all who access them can understand them; they also consider that their use should be formative, transparent and clear.

Assessment of FYP in Initial Teacher Training in Physical Education (ITT-PE): assessment rubrics

Due to the process of convergence of the European Higher Education Area (EHEA), assessment in higher education is oriented towards the assessment of competencies and thus, also the assessment of the FYP. Different authors consider that the rubrics are the most commonly employed assessment instruments in ITT (Etapé et al., 2012; Urbietta, 2011). Reyes (2013) indicates that the rubrics facilitate

the systematisation and collection of evidence from the students’ work and adds that its formative use increases their motivation. Panadero & Jonsson (2013) explain that to give a formative use to the rubrics it is important to work on each assessment criterion with the students, guide them towards the students’ learning process and analyse their evolution according to the different criteria of the instrument. Specifically, studies like those of Urbietta et al. (2011) and Resines & Valle (2013) report experiences on the design and use of rubrics in the FYP, coinciding in that work with this instrument makes it possible to: 1- further reflect and get a deeper understanding of the learning; 2- self-regulate their knowledge; 3- increase task participation; 4- improve the teacher’s direction of the students in the task; and 5 – increase motivation for the task.

There are two types of rubrics or descriptive scales: holistic and analytical. Martínez-Rojas (2008) defines holistic rubrics as instruments that have general assessment criteria with few details, referring to the general competencies that the students should acquire. In contrast, the author defines analytical rubrics as very complete and detailed instruments, of more complexity than holistic ones. The study by Estapé et al. (2012) shows the benefits of assessing the development process and the final result of the FYP for different qualifications. Furthermore, the work of Fernández-March (2011) and Martínez-Rojas (2008), affirm that rubrics are the instruments that best adapt to the assessment of competencies and that they are also useful to clarify the objectives of the project and the formative scope of the learning during the process. Therefore, it seems important for the FYP assessment panels to use specific rubrics to facilitate their work.

Participation of the students in the assessment of FYP in ITT-PE: formative and shared assessment.

Sánchez et al. (2014) and Quintana & Gil (2015) state that in the FYP it is important to work with a transparent, continuous and formative assessment system. In the same line of thought, Panadero & Jonsson (2013) defend the importance of offering transparency in the assessment of FYP, because it makes it possible to assess the levels of achievement of the competencies involved in the project more accurately.

The participation of the students in the assessment can be carried out in different ways: 1- self-assessment; 2- peer assessment; 3- shared assessment (a teacher-student dialogic process) (Gil & Padilla, 2009). García & Ferrer (2016) defend the importance of the students knowing what is going to be assessed with the FYP, because it allows them to work effectively. Gil & Padilla (2009) add that they should fulfil at least two conditions: 1- that the instruments and techniques employed should have explicit criteria accepted by the students; and 2- that the students should know how to apply the criteria to the task.

The Formative and Shared Assessment (F&SA) system is formed by two interrelated concepts. López-Pastor & Pérez-Pueyo (2017) define “formative assessment” as the process of assessment that makes it possible to 1- improve the students’ teaching-learning processes; 2- improve the teaching capacity of the teacher; and 3- improve the teaching-learning processes carried out; while they define “shared assessment” as the involvement of the students in the assessment using different techniques and forms of dialogue.

The studies by Medina et al. (2020) and Nicol & Macfarlane (2006) also give fundamental importance to feedback. Panadero & Jonsson (2020) offer solutions in which the students form part of the assessment by using rubrics. Furthermore, they show that the formative use of rubrics for self-assessment and feedback improve the development of the task if they work with them during the whole learning process, and also minimise the differences between the students’ expectations and the result of the learning, allowing them to self-regulate their learning.

Generic studies have been found on the use of rubrics in F&SA systems in ITT-PE. Atienza et al. (2016) find advantages in using F&SA systems in ITT-PE related to more immediate and varied feedback processes (teacher and classmates). Ureña (2021) explains a process of tutoring and F&SA of the FYP in ITT, based on the use of rubrics established by the tutor and students, to self-assess and give constant feedback. A similar proposal can be found in Fernández-Garcimartín et al. (2021) but with the official rubrics of the school. Fuentes-Nieto (2021) and Pintor & Gómez (2021) find that the main change in tutoring FYP-PE during the confinement due to COVID-19 (2019-20) was having to do everything at a distance (virtual tutorials and contact by telephone), but that the processes of formative assessment could be maintained during their development. However, the final assessment processes generated a higher workload for the panel, as they had to carry out video conferences, video assessments of the students and a final synchronous assessment.

Throughout the introduction the numerous benefits of the participation of the students in the assessment, especially using rubrics as tools, have been reviewed. But no specific studies have been found on the use of S&FA systems in the development and defence of FYP in ITT-PE. Thus, the main aim of this study is to analyse the F&SA processes that arise in the tutoring, assessment and defence of FYP in the PE minor.

Methodology

Participants

This study involved 20 participants from the Faculty of Education (12 lecturers and 8 students). The sample was chosen for convenience and participation was completely voluntary. All the participants were informed of the

data analysis procedure and the anonymisation of the information. All of them reviewed the transcripts of their interviews and/or meeting minutes.

A heterogeneous selection of lecturers was made for the in-depth interviews, according to gender and professional position. All have been tutors and/or members of assessment committees for at least one FYP-PE. They were contacted via e-mail. The letter L and the number of the lecturer in chronological order of the interviews were used to code their interventions, The students belong to the last year of the degree and are coded with S and followed by a number. The specific selection criteria for the sample are detailed below:

-Lecturer selection criteria: (1) participation in the process of creating the instruments; (2) participation in assessment panels for FYP since the creation of the instruments (2015), so that they have first-hand knowledge of assessment with these rubrics and their different use by the rest of the lecturers.

-Student selection criteria: (1) completion of the FYP of the degree in Primary Education the previous year, and current development of the FYP in Infant Education; (2) age; (3) academic record (high; medium; low); (4) personal evaluation of the FYP and its assessment instruments (agree, don't agree).

Design

This is a qualitative case study. Torres (2019) defines “case study” as the analysis of a particular context within the establishment and confirmation of a hypothesis. This study analyses the F&SA processes carried out during the tutoring-development and defence-assessment of the FYP in the ITT-PE in a faculty of education. Every student carries out his or her FYP directed by one or two tutors. There is a general guide for the students and lecturers on its completion and tutoring. The tutor authorises the presentation and defence of the FYP. The final assessment is made by an assessment committee of two lecturers. The assessment processes are structured in three differentiated situations (Table 1):

A seminar has been operating in the faculty since the 2020-2021 academic year on how to carry out F&SA processes during the direction of the FYP; it is voluntary and is composed of 12 lecturers and 2 students (L1, L8-L12 from Table 2). All the participating lecturers receive the same training on how to carry out the F&SA processes during their tutorship of the FYP.

Table 1. The process for handing in, defending and assessing the FYP in the pre-confinement, during confinement and post-confinement situations

Processes	Situation 1: 2015-2020 (pre-COVID)	Situation 2: 2020-2021 (COVID confinement)	Situation 3: 2021-2022 (post-COVID)
1. Handing in of documentation and prior assessment	<ul style="list-style-type: none"> -The tutor approves the FYP. -The student hands in the FYP and the documentation in paper to the secretariat. -The panel collects it and reads it before the oral defence. 	<ul style="list-style-type: none"> -The tutor approves the FYP. -The students upload the FYP to the virtual platform. They video their defence and upload it to "Drive". -The panel reads the document and sees the video. 	<ul style="list-style-type: none"> -The tutor approves the FYP. -The uploading of documents on-line to the platform has been maintained.
2. Defence of the FYP	<ul style="list-style-type: none"> -The defence of the FYP is face to face and in public before the panel. After the defence of the FYP the panel gives feedback and asks questions. 	<ul style="list-style-type: none"> -The defence is carried out asynchronously: 10 minute video of the student (as in the normal situation). 	<ul style="list-style-type: none"> -The defence is face to face, except in cases of confinement for COVID-19, when it is virtual and synchronous.
3. Duties and functioning of the panel	<ul style="list-style-type: none"> -The panel completes the two assessment rubrics of the FYP: (a) written work (80% of the final mark); (b) oral defence (20% of the final mark). 	<ul style="list-style-type: none"> -The panel meets virtually or by telephone to assess the document and the video, come to an agreement and complete the rubrics (the same, but with "b" adapted to the new situation). 	<ul style="list-style-type: none"> -As in the normal situation (pre-COVID).
4. Role of the tutor in the oral defence	<ul style="list-style-type: none"> -The tutor may be present during the defence. After the defence, in private, the panel can talk to him or her about the development of the FYP. 	<ul style="list-style-type: none"> -The tutor can talk with the panel by videoconference before it reports to the student. 	<ul style="list-style-type: none"> -As in the normal situation (pre-COVID).
5. Communication of mark and possible appeal	<ul style="list-style-type: none"> -The student comes back in and the panel gives the mark and informs him or her about the possibility of appealing. 	<ul style="list-style-type: none"> -The student (and tutor) are usually invited by videoconference on the date and at the time established. The assessment and mark are given. -The rubrics are sent to the student on a voluntary basis. 	<ul style="list-style-type: none"> -As in the normal situation (pre-COVID).

Source. Own elaboration.

Data collection instruments and techniques

The following data collection techniques have been used:

1-In-depth interviews: individual interviews were carried out with six university lecturers by videoconference using Cisco Webex. Maxwell (2019) indicates that this technique serves to understand the personal perspectives of the participants. It was decided to use this technique to ascertain the perception of each lecturer individually, without their being influenced by external opinions. A script of questions was drawn up to guide the interview according to the objectives and categories considered (Table 3). A sample of the questions on the script is given below:

"How did you perceive the response of your students to the feedback?"

"Did you notice that the feedback you provided for them was sufficient?"

"Did you use any assessment instrument to support your tutoring and follow-up?"

2-A focus group with five students and a group interview with three students from the faculty, both using Cisco Webex. The aim of the two techniques was to encourage a debate on the assessments and experiences of the students. As indicated by Hamui & Varela (2013), the intention is to get information about the thoughts, feelings and experiences of the interviewees. Specifically, the students were from a similar context, but with different experiences, as it was thought that their meeting would generate a debate. The group interview was carried out because, after analysing the results of the focus group, it was desired to add the perception of three students who perfectly fitted the selection criteria, and who had not been previously involved. In both cases a script was drawn up with the questions to be asked according to the objectives and categories planned (Table 3) among which were:

"Did each tutor provide you with the assessment rubrics that were uploaded on the campus? Did you use them at any time? If so, when and how?" (I).

“Would you propose to your tutor to use them from the beginning?” (I).

3-The minutes of the meetings of the Seminar developed in the two post-confinement courses (2020-2021; 2021-2022). The coordinator records the meetings and draws up

the minutes which are sent to all the participants to detect if there are any errors and to correct them.

Table 2 shows the temporal organisation, the development of each data collection technique and the characteristics of the participants.

Table 2. Temporal organisation, design of data collection techniques (II: In-depth interview; FG: Focus group; GI: Group interview; SM: Seminar minutes), and characteristics of the participants

Technique	Subjects	Characteristics	Interview date	Transcription date	Medium
-	I	Interviewer	-	-	-
II	L1	Woman lecturer.	29/10/2020	16/11/2020	Cisco Webex
	L2	Man lecturer.	23/11/2020	24/11/2020	
	L3	Man senior lecturer.	24/11/2020	21/12/2020	
	L4	Woman senior lecturer.	03/12/2020	18/01/2021	
	L5	Man senior lecturer.	10/12/2020	19/01/2021	
	L6	Woman lecturer.	11/12/2020	21/01/2021	
	L7	Woman senior lecturer.	13/12/2020	26/01/2021	
FG	S1	Woman student with high academic record.	06/12/2020	27/01/2021	
	S2	Man student with low academic record.			
	S3	Woman student with high academic record.			
	S4	Woman student with medium academic record.			
	S5	Woman student with low academic record.			
GI	A6	Woman student with medium academic record.	28/12/2020	29/01/2021	
	A7	Man student with high academic record.			
	A8	Woman student with low academic record.			
SM	L1	Woman lecturer.	Years 2020-21 and 2021-22		
	L8	Woman lecturer.			
	L9	Man Professor.			
	P10	Woman associate lecturer.			
	P11	Woman lecturer.			
	P12	Woman pre-doctoral fellow.			

Source. Own elaboration.

Data analysis

The data analysis was performed with “Atlas.ti.V.9” in two phases:

1-Transcription and uploading of data to the programme. The interview questions responded to the study objective.

2-Categorisation and coding of the collected data. The information was filtered to respond to the objective and was

organised using a system of categories and subcategories, saturating ideas and triangulating the information among the instruments (Table 3).

Table 3. Categories and subcategories of the results

Objective	Categories	Subcategories
To study the processes of formative assessment that arise in the tutoring, defence and assessment of the FYP in ITT-PE	1. Formative assessment using the assessment rubrics during the development of the FYP of the PE minor.	1.1 Formative assessment processes during the tutoring and monitoring of the FYP. 1.2 Use of the rubrics as an element of F&SA during the development of the FYP
	2. Process of defence and assessment of the FYP of the PE minor and feedback from the assessing committee.	2.1 Defence of the FYP and feedback from the assessing committee
		2.2 Importance of face to face feedback
		2.3 Formative assessment using access to the assessment rubrics

Source. Own elaboration.

Qualitative rigour was assured using the criteria of Guba (1989) and Varela & Vives (2016):

-Credibility: transcribing and analysing the data, prior to the review and consent of each subject; carrying out a second round of interviews to validate specific data that were not clear and triangulating the information from the different techniques used.

-Transferability: detailing the three procedures carried out of the defence and final assessment and the methodological procedure followed, facilitating the transferability of the results.

-Dependability: contrasting and triangulating the results obtained in the data collection techniques with the participants. The stability and coherence of the analysis has been assured.

-Confirmability: triangulating the techniques and the participants, analysing the data, connecting them and including direct quotes from the participants.

Results

The results are organised by categories and subcategories (Table 3).

1. Formative assessment using access to the assessment rubrics during the development of the FYP of the PE minor.

1.1 Processes of formative assessment during the tutoring of the FYP

The results show that during the confinement due to COVID-19 the lecturers gave feedback to their students using different on-line means. In most of the cases it was through comments in the work itself, but at times via e-mail or videoconferences; some tutors occasionally used "WhatsApp" to give quick immediate feedback:

"The tutorials were by videoconference and corrections in *Word*. They sent me the different versions of the project and I sent it back with comments, feedback,

questions and corrections (L4-II). "How did you perceive the student received the feedback?" (I). "I think that they received it very well. I always ask them not to delete comments, that way I can see if this comment has been resolved or not" (L4-II).

"My tutor made comments in the document, as well as things he didn't like and that I thought I should change, he also made recommendations. He put the most important things in the e-mail. Then in the comments, if I had any doubts, I put the reply in his comment in another colour so that he could read it and tell me what he thought before changing anything" (S6-GI).

However, many of these processes (especially the review by e-mail, in the Word file itself), were already being done in some cases in the pre-COVID era. The lecturers value these feedback processes, see that they work and favour learning. The students seem to be satisfied with the way their tutors give the feedback:

"My first tutor asked me to have the tutorials on-line. With the second tutor they were like that because of the confinement. I didn't use rubrics with either of them to correct the project. (...) the second tutor insisted more on feedback on what mistakes I had or suggestions to improve the document" (S8-GI).

"My tutor always corrected via e-mail, I sent it to him and he gave me feedback. For specific doubts that needed immediate feedback, 'WhatsApp' seemed to me a very good option" (S6-GI).

1.2 Rubrics as an element of F&SA during the development of the FYP

One of the assessment instruments that some tutors use to give feedback is the official assessment rubric for the final FYP document, which details the grading indicators. The results indicate that the tutors did not use this tool with their students, which the latter felt they lacked. The students value the formative effect that this tool could have offered them, highlighting: (1) it would help to improve the process of developing the project; (2) it would make

it possible to carry out self-assessment processes: (3) it would help to adapt the project according to the mark they aimed for:

“They should give us the rubrics so that we can self-assess during the process. In my FYP I did not have access to them, or feedback. I know that the panel in my face-to-face FYP had the rubrics because they were on the table and they noted things down on them” (S8-GI).

“Would you propose that your tutor use the rubrics from the start?” (I). “Yes” (S1-FG). “It would have been useful if my tutor had sent me the completed rubric in the same way she sent me the reviewed FYP (...). That she had said: You are in this line, in case you want to modify it and get a higher mark, or you want to leave it like that” (S5-FG).

“Using the rubrics could help to improve the project apart from the written feedback they can give you. I think they can help the student a lot during the process.” (S4-FG).

One of the students was critical because he had never seen the FYP assessment rubrics, insisting that he could have been provided with formative help to develop it. It is a questionable statement as the students have them available on the virtual campus from the beginning of the year:

“I found out in the presentation and defence itself that there were rubrics. I think that if we had the criteria at our disposal and we know what they are asking for, we would have a guide from the beginning of what was expected of our FYP” (S7-GI).

“Well, they should (access the tool), but, as always, everyone is different. (...) The information is available; you can make an effort to make the information visible and transparent; but it also depends on the student” (L7-II).

In this regard, one of the lines of work of the permanent seminar is that the tutors work explicitly with the rubrics with their students from the beginning, so that they know and use them during the process of developing their FYP, making sure they understand all the items. Another line is to use this rubric to carry out self-assessment and shared assessment processes with the student, on the different drafts that are handed to the tutor, so that they foment their learning and self-regulation:

“It proposes agreeing on a formative action protocol: (a) that the tutors give the students the rubrics as part of the tutoring process; (b) that the students use the rubrics for self-assessment every ‘x’ times they hand in a document as agreed, getting them accustomed to carrying out self-assessment; (c) that the students carry out a final self-assessment when they finish the FYP with the tools; (d) that the lecturer gives feedback on these tools, to give the student his or her view of the quality of the work; (e) a similar operation in the assessment of the FYP and in the use of the tools by all the members of the seminar and (f) to work on the validity of the tools with the students to see if they fully understand each descriptor” (L10-SM1).

The protocol mentioned was carried out by several lecturers from the seminar, who concluded that the students were not accustomed to self-assess and that they forgot to fill out the rubric. It is proposed that: (1) the self-assessment is made in a face-to-face tutorial; (2) that the rubric is included at the end of the student’s document. One of the lecturers has carried out this process with two FYP students and concludes that it should only be done for some documents handed in:

“She thinks that the students are not clear on the concept of “self-assessment” (...). She thinks we should continue to insist on them” (L1-SM6).

“She has begun to work on the protocol (...). She has proposed we copy and paste the rubric at the end of the FYP document so that the students don’t forget to fill it in” (P11-SM2).

“She is working on the rubrics on each of the draughts that are handed in. She has decided not to send the rubric in each correction because she does not consider it useful. She prefers to do it less often, so that the evolution is seen more clearly.” (LP12-SM2).

2. The FYP defence process in the PE minor and feedback from the assessing committee

2.1 Defence of the FYP and feedback from the assessing committee

It is necessary to distinguish two moments in the defence of the FYP: the situation of virtual teaching due to COVID-19 (2020) and the situation of face-to-face teaching (the years before and after the confinement).

During the confinement a protocol was established for the defence, with a check list for the teaching staff (as panel or tutor) with compulsory and voluntary features. The lecturers agreed that each one would read the FYP at home and they connected by internet the day of the defence, to share their evaluations, before having the videoconference with the student. It was a voluntary decision on the part of the panel whether or not to hand the completed assessment rubrics over to the students:

“You receive the protocol, (...), you receive the documents individually, you evaluate them and correct them, you have your rubric, and you gradually fill it in. Then we got into contact for our individual assessment. We discussed and we found a mid-point, which was the mark. (...). Then came the defence, where we connected via Internet, sometimes the tutor was present (...). Then we read the evaluation and the mark and we told it to the student” (L6-II).

“The day of the defence, first we talked to the tutor. We told him/her the aspects that, according to the rubric, could improve in the FYP. Then we called the student, we talked with him, and gave him feedback. We also gave him feedback through questions (...) so that he realised there were things he had put which were not right.” (L5-II).

On their part, the students experienced very different situations during the confinement. In general, the panel used the rubrics to give feedback, something which had not been done in previous years. They explain different situations.: A-the panel sends the completed rubrics as a support for its feedback; B-they don't send them, they just give the mark; C-the panel asks questions virtually and only gives the final mark; and D-they send an e-mail with the mark and the global qualitative evaluations, etc.:

"I got an e-mail with the link for the meeting (...) They began to make comments, they asked me a few questions and at the end they gave me my mark" (S2-FG).

"They commented on general aspects like how the project was done, without mentioning sections. (...) by mail they also told me what they had thought was good or bad in general" (S7-GI).

"As I was doing the double degree, I did two FYPs. In the first they didn't contact me; they sent the rubric directly to my account and that was that. With the second, they did contact me, we had a videocall. It was very good because the panel gave me a lot of feedback" (S3-FG).

"The day of the defence they sent me the marks by e-mail and the comments of all the members of the panel. I didn't have a meeting with them or a videocall. (...) The e-mail contained my mark and the comments were in the rubric." (S6-GI).

2.2 The importance of face- to-face feedback

The lecturers compare the virtual defences due to the confinement (2020) with the situations in face-to-face teaching. They prefer face-to-face teaching, because they can communicate more effectively and because it establishes closeness:

"When we are face to face, I find it easier to express and explain myself, you can see my expression and you have much more direct feedback. It's horrible with a screen because you feel you are not communicating 100%, as if there was a barrier and the message was not getting through" (L3-II).

"With the on-line defences you lose the richness of the dialogue with the student. (...). And before, you shook their hand or gave them a hug when they finished, you were pleased... Now they are there, alone" (L1-II).

The students also prefer the face-to-face feedback from the panel, because it allows them to resolve doubts about the work and explain aspects that haven't been clarified in the defence. One student specified that the type of feedback does not depend so much on whether it is face-to-face or virtual, but on the teachers that make up the panel:

"I believe that if there is not contact with the student, the panel can have doubts and at that moment, as happens in the face-to-face situation, these doubts can

be resolved because they ask you about their doubts and you can defend yourself and present your position. I think that this is taken into account in the face-to-face defence when they decide on the mark, because you explain yourself and they know the reason. In contrast, in the on-line situation, if you don't even have a videocall, the panel's doubts are not going to be resolved and they are going to evaluate according to their initial opinion. They only send the message with the mark, your defence is not taken into account, and it should be" (S8-GI).

"I received more feedback in the face-to-face defence of the FYP than in the distance situation" (S1-FG). "Me too" (S2-FG). "I think that this depends on the people that you get. It's true that in my panel this year they gave me much more feedback than last year, but they were different people" (S5-FG).

2.3 Formative assessment using access to the assessment rubrics

One of the lessons learned with the confinement situation and virtual defence of the FYP was the possibility of using the assessment rubrics as a way to give formative feedback at the end of the defence, as a justification for the mark given. This is something that had not occurred in the previous pre-COVID years (see category 2.1). The students indicate that the panel never showed them the assessment tools and that they did not know them:

"I have never seen them filled in" (S6-FG).

"I had not seen these documents before. Then it appears that if you see them before they are going to grade you, they can help you a lot." (S3-FG) "No, not before the first FYP no" (S4-FG). "I didn't either" (S5-FG).

However, the results indicate that the use of the rubrics as a tool for giving formative feedback was something voluntary in the confinement, a feature that had not been carried out before:

"We justified to them why they had that mark and we said: 'We are going to send you the rubrics by mail, and there you can see the marks of your assessments and comments'" (L2-II).

For their part, the students positively value this change, the access to the assessment carried out using the rubrics. There is also criticism from the students that did not receive them.

"As a positive point, in my second FYP, I did have access to the rubric; but not in the first face- to-face FYP" (S1-FG).

"In the case of the face-to-face FYP, I saw the rubric and they told me the mark, it seemed to me to be correct and they explained a little why they were giving me that mark. I didn't get to see the rubric to see where I had failed and what I could have done better. In this on-line case they did send it to me, I think that's good" (S6-GI).

"I am not at all happy with the committee, because as they didn't send me the rubric, either when notifying me of the change of the mark after the complaint, or at any time ..." (S2-FG).

Discussion

The aim of this article is to analyse the processes of F&SA which are carried out in the tutoring, assessment and defence of FYP in ITT-PE. The results show that these processes of F&SA can be carried out in the development and tutoring of the FYP and in the final assessment and grading. The findings show that some lecturers already carried out processes of feedback virtually during the development of the FYP, but that it became more widespread during the confinement: comments in Word, in the e-mail, by videoconference or with applications like "WhatsApp". Similar results are found in other studies on the tutoring of FYP-PE during the confinement (Fuentes-Nieto, 2021; Pintor & Gómez, 2021). Thus, the situation of confinement accelerated and generalised the use of this type of techniques to carry out F&SA processes during the development of the FYP; and have become established in the last two years (2020/21-2021/22). However, some students indicate that they prefer face-to-face tutorials to virtual ones because they improve their communication with the tutor.

One topic which was repeated, both by the students and by the teachers, was the possibility of using the faculty's official assessment rubrics as self-assessment, shared assessment, feedback and feedforward tools during the process of developing the FYP, in order to be able to carry out systematic processes of self-regulation and improvement. The students indicated several advantages to the use of the rubrics, imagining what benefits their use would have given them during the development of the FYP: to carry out processes of self-assessment and help to adjust the project according to the mark they wanted to achieve. These results coincide with those found in other studies on the formative use of rubrics in ITT: an improvement in the learning and self-assessment, more motivation and participation on the part of the students (Panadero & Alonso-Tapia, 2017; Resines & Valle, 2013; Reyes, 2013; Urbietta et al., 2011). That is, students and teachers consider that using the rubrics can serve to inform the student about what is being asked for in the FYP during its development; and this possibility and its advantages appear in generic studies on ITT (Fernández-March, 2011; Panadero & Alonso-Tapia (2017), and only one in FYP (Estapé et al., 2012), that shows the benefits of valuing and self-assessing the process of developing the FYP, as well as the final result.

However, the results seem to indicate that the rubrics are not used following this formative model, despite being available on the virtual campus of the subject. This lack of use may be due to several factors: (a) the students do not conceive that this could be a tool which helps them

to learn and produce a better FYP; (b) the teachers do not insist in working on it as an instrument of self-assessment and self-regulation; they do not seem to know its possible formative use and its advantages. In this respect, García & Ferrer (2016) affirm that the fact that the students know the levels of achievement of the FYP means that they do the task more effectively, and moreover, Fernández-March (2011) and Martínez-Rojas (2008) believe that the rubrics are useful for clarifying the objectives of the work and the formative scope of the learning during the process. For example, Sánchez et al. (2014) and Quintana & Gil (2015) state that the assessment system of the FYP should be transparent, continuous and formative. However, the results show that the students' habits are difficult to break and that they find it hard to use the rubrics as tools of self-assessment during the development of the FYP. In this respect, it seems that there is much work to be done to improve the generalised use of this type of good practice among students and teachers as these rubrics are often not used as tools for F&SA, but as tools for the assessment and final grading of the FYP. The results show that during the last two years some teachers have drawn up a protocol on how to generate F&SA processes with the rubrics during the tutoring, which show coincidences with the work of Panadero & Jonsson (2013), who propose that to give a formative use to the rubrics it is important to work with the students on each assessment criterion, guide them in the process of the students' learning and analyse their evolution according to the different criteria of the instrument.

The results show that the solutions given for the defence and final assessment of the FYP by the panel during the confinement phase (March-July 2020) gave rise to some problems: some cases without synchronous contact with the students to give them feedback, greater complexity and more work for the panel, etc. No studies have been found on this topic, but it appears to be crucial for the student to receive direct feedback to consider the FYP finished. In this respect, it is understandable that the students prefer the defence to be face to face and to receive feedback in the process, because it allows them to resolve doubts about the work and clarify some aspects to the panel. Moreover, the results indicate that the lecturers also prefer the defence and assessment to be face to face: (a) it permits them to communicate effectively; (b) it brings the people involved closer together; (c) it takes less time; and (d) it makes it possible to solve unforeseen problems more simply.

The results also show that during the confinement the students were grateful for any type of feedback from the panel in the final assessment process of the FYP, either as qualitative evaluations and/or questions on the project (videoconference), or by receiving the assessment rubrics filled in at the end of the process. These results reinforce the studies that show the importance of feedback in learning processes (Medina et al., 2020; Nicol & Macfarlane, 2006). It is true that the students experienced very different situations in this course, some very impersonal. No studies

have been found on whether the fact of being face to face or virtual affects FYP students when giving formative feedback, but the data seem to indicate that the face-to-face defence and assessment of the FYP provides numerous benefits which are not available when using a screen.

The virtual asynchronous defence process of the FYP was only used in the year of confinement (2020), and the face-to-face format was recovered in the later years for most of the students, with the option of a virtual synchronous defence being exclusively for students confined for COVID-19. In this respect, the results show the clear advantages of the face-to-face defence-assessment procedure for the FYP used after the confinement ended: to have action protocols and check lists for the students, tutors and panels; to use the virtual campus to upload and assess the documents of each FYP, and for the tribunal to send the rubrics electronically.

After analysing and discussing the results it seems of great interest to underline the lessons learned on the processes of F&SA in the FYP-PE.

Lessons learned

A- The results show that it is possible and appropriate to us F&SA dynamics during the whole process of development and tutoring of FYP to improve the process, and that several strategies can be useful:

1-To share the assessment rubrics with the students from the beginning of the process, and to ensure that they understand all the items and the quality levels indicated.

2-To implement continual feedback processes during the tutoring. Different complementary techniques can be used: reviewing the documents, by e-mail with side comments, or in the same mail, or fixing delivery dates by sections to self-regulate the process.

3-Face-to-face and/or virtual tutorials when necessary to resolve doubts or aspects that require dialogue.

4-For the students to carry out regular processes of self-assessment and shared assessment with the tutor using the assessment rubrics from each faculty, or general ones if this type of instrument does not exist. They can be done with each delivery of the FYP, although the results show that it may be preferable to do so every 2 or 3 specific landmarks during the development process.

B- the results show that it is possible and appropriate to carry out F&SA dynamics during the defence and final assessment of the FYP, and different strategies can be used:

1-The use of processes of dialogue and formative feedback after the FYP defence, on the part of the panel with the students, either face to face or virtually, based on the instrument.

2-To e-mail or make available for consultation on paper, the rubrics filled in by the panel, so that the students have

explanatory feedback of the assessment performed and the consequent mark.

Conclusions

The aim of this article is to study the S&FA processes that are carried out during the tutoring, defence and assessment of FYP in ITT-PE. The results show that these processes can be implemented in both phases provided that the assessment rubrics are used from the beginning and with formative feedback.

The results show that there is not much of a tradition of using the assessment rubrics to guide and foment the students' self-regulation during the development of the FYP, and to make it possible for the students to self-assess. It has only been in the last few years that this type of F&SA processes has begun to be generated with the official rubrics, based on the implantation of a Teaching Innovation Project (TIP) after the confinement. In spite of this, the first results seem to show that the students are not accustomed to using them as a self-assessment tool. In contrast, the processes of formative assessment during the completion of the FYP seem to have been well established in the faculty for many years and were maintained in the three phases studied (pre-COVID, confinement and post-confinement).

Moreover, during the confinement phase another very interesting use of the rubrics appeared: as a way in which the panel provides formative and justificatory feedback after the FYP defence. Furthermore, the comparison among phases makes it quite clear that both the students and the lecturers prefer the defence to be face to face, due to the advantages it has against a virtual situation.

No study has been found on the process of creation of rubrics by assessment panels for FYP-PE in education faculties, although there are some on their use; so, the present investigation makes a fundamental contribution to the existing literature on the topic, tackling the way in which the rubrics are created and used in the process. This study intends to open up a new line of research on the real possibility of using F&SA processes in FYP-PE, but also fully open to other minors and qualifications. It details lessons learned about how to use them during the tutoring-development of FYP and in their assessment-defence.

The main limitation in this study is the very specific context in which it has been carried out, although the attempt has been made to make the lessons learned transferable to other FIP-PE faculties. Looking forward, it would be interesting to extend this study to different education faculties in the whole of Spain, thus widening the sample of students and teachers. It would also be interesting to use a control group in the research to be able to compare the benefits of the F&SA system for the development of FYP, against "traditional" tutoring. Moreover, it would be positive to analyse how the use of rubrics as a feedback and feedforward tool in the completion of the FYP affects the

student's perception of the learning acquired, compared to those who have not used it.

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