

Using a Virtual Platform to Give Feedback on Teacher Training

Uso de plataforma virtual para retroalimentar la formación del profesorado

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Abstract

Given the current importance of the use of Information and Communication Technologies (ICT) in training processes, it is interesting to find out how these tools are integrated into teaching and learning processes, specifically in assessment of and feedback on practices in teacher training. This study addresses the types of written feedback provided by tutors and mentors to trainee teachers through the use of the virtual platform Sistema de Evaluación De Prácticas Docentes (SEPRAD) and examines the degree of satisfaction that future teachers have when using this technological support. A retrospective qualitative design with an interpretative approach was applied for that reason. The participants were 34 university tutors, 96 school mentors and 315 trainee teachers from different Pedagogy degree courses. Among the most significant results, one of the standouts is that the tutors provide mostly authoritative feedback, with a marked orientation towards correction. Regarding the use of the virtual platform, trainee teachers rate it positively, but call for the possibility of greater interactivity between peers, tutor, and mentor. The implications of these findings for trainee teachers are discussed, as well as the potential of the virtual platform to encourage feedback.

Keywords: educational assessment, feedback, ICT in education, practices, teachers' training, virtual platform.

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Resumen

Dada la importancia que adquiere en la actualidad el uso de las Tecnologías de la Información y Comunicación (TIC) en los procesos formativos, resulta de interés conocer cómo estas herramientas se integran en procesos de enseñanza y aprendizaje, específicamente en la evaluación y retroalimentación de las prácticas en la formación de profesores. Este estudio aborda los tipos de retroalimentación escrita que brindan tutores y mentores a los profesores en formación mediante el uso de la plataforma virtual Sistema de Evaluación De Prácticas Docentes (SEPRAD) y conocer el nivel de satisfacción que tienen los futuros docentes al utilizar este soporte tecnológico. Para ello, se aplicó un diseño cualitativo retrospectivo con enfoque interpretativo. Los participantes fueron 34 tutores universitarios, 96 mentores de centros escolares y 315 profesores en formación de diferentes carreras de Pedagogía. Entre los resultados más relevantes se destaca que los tutores brindan mayoritariamente retroalimentaciones del tipo autoritarias, con una marcada orientación a la corrección. En lo referido al uso de plataforma virtual, los profesores en formación la valoran positivamente, pero demandan posibilidades de mayor interactividad entre pares, tutor y mentor. Se discuten las implicancias de estos hallazgos para la formación de profesores y las potencialidades que presenta la plataforma virtual para favorecer la retroalimentación.

Palabras clave: evaluación educativa, formación de profesores, plataforma virtual, prácticas retroalimentación, TIC en la enseñanza.

Introduction

During the 21st century, the introduction of digital media has led to a transformation in various fields around the world: education, economics, social, politics, and culture (Coll & Monereo, 2008; Organisation for Economic Cooperation and Development, OECD, 2015). The ubiquity of information and communication technologies (ICTs) in practically all aspects of people's activities multiplies the possibilities and contexts for learning beyond the formal setting (Cabero, 2017; Coll & Monereo, 2008).

In the midst of these changes being facilitated by Information and Communication Technologies (ICT)s, there is an effort to rethink the principles or foundations of educational practices to meet the needs of society (Cabero, 2017). For teacher trainers it is essential to include the use of ICTs to impact learning and help trainee teachers to acquire skills, contributing to the transformation of teaching and improving learning (Canabal & Margalef, 2017; Coll, Mauri, & Onrubia, 2008; Severin, 2013). In this regard, Coll (2008) argues that the mediating potential of ICTs is only kept up to date and made effective when these technologies are used by students and teachers to plan, regulate, and guide their own and other people's activities, introducing important changes into the teaching and learning processes.

Therefore, ICTs shape new environments and settings for initial teacher training in terms of orientation and tutoring, eliminating space-time barriers and facilitating collaborative work and flexibility in learning (Domingo & Marquès, 2011). Some research has sought to understand the potential of using ICTs to provide formative feedback (Remesal, Colomina, Mauri, & Rochera, 2017) to help students conduct collaborative work (Mauri, Ginesta, & Rochera, 2016) and for the assessment of student learning, promoting self-regulation in the educational process

(Redecker & Johannessen, 2013). These procedures can be carried out using online forums, wiki¹, webquest², virtual platforms, and interactive digital whiteboards, among other resources, since they provide immediacy and greater opportunities for feedback between students and teachers (Carless, Salter, Yang, & Lam, 2011).

Review of the Literature

The contribution of digital media to learning processes

Virtual platforms or Learning Management Systems (LMS) have become a tool that serves teaching and learning processes (Correa & Paredes, 2009; Galván, 2017; Gutiérrez & Tyner, 2012), being integrated depending on the needs of the teachers and students (Boneu, 2007; García & Seoane, 2015). From this perspective, these platforms are resources that contribute to the organization of activities that are not face-to-face and which are complementary to the development of a subject to provide information to and oversight of a group of students, which creates an environment of teacher-student intimacy that is not provided by other spaces (García-Valcárcel, 2007).

The use of these platforms has five essential characteristics, according to Boneu (2007):

- Promotion of interaction.
- Flexibility.
- Scalability.
- Designation of roles depending on the user.
- Support for the teaching-learning process from the perspective of planning, methodological strategies, and assessment.

In terms of assessment processes, the use of such platforms facilitates the evaluation of the work done by the teachers in the individualized monitoring and feedback for each student, and also for their autonomous work (Rodríguez & Álvarez, 2013).

Feedback on learning of trainee teachers

Feedback on the initial training of teachers has been the subject of various studies (Copland, 2010; Mayoral & Castelló, 2015; Voerman, Meijer, Korthagen, & Simons, 2015), acknowledging its importance and influence to help trainee teachers in learning how to teach (Ali & Al-Adawi, 2013). Meanwhile, Sutton & Gill (2010) highlight the major role that feedback practices should assume in the curricular development of university education, promoting students' awareness of their strengths and areas to improve, allowing them to identify action plans that contribute to the improvement of their weaknesses (Insuasty & Zambrano, 2014) and guide their learning (Canabal & Margalef, 2017).

From this viewpoint, feedback is considered to be a key factor to assure the quality of training programs (Christopher, Könings, Schuwirth, Wass, & Vleuten, 2015). By means of "giving back" information, the teacher contributes to the pedagogical knowledge of the trainee teacher, providing strategies for reflection and improvement of their performance (Anijovich & Cappelle, 2017; Gibbs & Simpson, 2009). Feedback is

1. Wiki is a collaborative internet website that can be edited by various users.

2. Webquest is a guided teaching activity in which students research information on the internet.

thus synonymous with feedforward, that is, learning-oriented assessment that emphasizes the prospective and constructive sense for self-directed learning, self-reflection, and self-assessment (Cathcart, Greer, & Neale, 2014; Nicol, Thomson, & Breslin, 2013; Walker, 2013).

Hattie & Timperley (2007) identify four types of feedback that favor focused learning: homework; in the process of homework; in self-regulation; and in the individual themselves. Meanwhile, Heron (1990) proposes a framework with two types of feedback: authoritative and facilitative. In this respect, the studies by Insuasty and Zambrano (2011; 2014) indicate that trainee teachers receive more authoritative feedback, aimed at what they should do, while the study by Mayoral and Castelló (2015) shows evidence of feedback mostly focused on homework:

The feedback process is thus fundamental in practical training in which trainee teachers, tutors, and mentors participate. In this sense, Awuni (2015), Copland (2010), Putnam & Borko (2000) state that the type and amount of support provided by the tutor and the mentor will help the trainee teacher develop the proposed skills and learn to think, talk, and act as a teacher.

This implies “a complex web of components and relationships and interactions,” (Barrera & Hinojosa, 2017, p. 4) between the university tutor, the school mentor, and the trainee teacher. In this sense, Solís et al. (2011) state that the function of the university tutor is “to be a facilitator of the learning processes so that student teachers are increasingly autonomous in their day-to-day work; and the function of the ‘mentor’ is to assist with the daily insertion of the practicing student in the school” (p. 129).

Therefore, the university tutor will develop a wide repertoire of skills to facilitate the learning processes of trainee teachers; in order to do, it is necessary to mediate in the training process (Solís et al., 2011), to find out how to respond in a manner that is in tune with the students' needs (Korthagen, Loughran, & Russell, 2006); and to provide support for solving problems with a transformative sense (Svojanovsky, 2017), which allows the future professional to improve their repertoire. The role of mentors is also attributed to the emphasis on situational adaptation, technical advice, emotional support, and encouraging the trainee teacher to grow professionally and reflect on their own practice (Cid, Pérez & Sarmiento, 2011).

Virtual platform: Teaching Practice Assessment System (SEPRAD)

The SEPRAD is supported by a virtual platform that is intended to record and monitor the assessments of trainee teachers who undergo initial, intermediate, and final practice, in order to have timely information that facilitates monitoring of the professional competencies of the profile of those graduating with Pedagogy degrees from the Pontificia Universidad Católica de Valparaíso (PUCV). The system functions by allowing students to enter a control panel and access the assessment instruments contained in their practice. The following assessment areas are displayed in each of them: contextualization of teaching; planning and evaluation of learning; implementation of teaching; analysis of student learning; and self-evaluation, to which the teaching staff can upload documents, videos, and list the associated assessors. There are different tools that simplify the work of the trainee teacher, mainly in relation to the information from their practice center, attaching files to be evaluated (by area) and with feedback from tutors and mentors (Leiva & Iglesias, 2017; Pontificia Universidad Católica de Valparaíso, PUCV, 2017), as shown in Figures 1 and 2.



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Lista de cursos

U Académica: INSTITUTO DE LITERATURA Y CIENCIAS DEL LENGUAJE

Periodo: 1° Semestre 2015

Curso PRA 500-74-1

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Detalle de Instrumentos

- Contextualización de la enseñanza (15%)
- Planificación de metas y planes de clases (10%)
- Plan de evaluación (25%)
- Implementación de la enseñanza (45%)
- Informe toma de decisión (5%)
- Autoevaluación (0%)
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- Plan de evaluación (10%)
- Implementación de la enseñanza (60%)
- Informe toma de decisión (10%)
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Detalle de Instrumentos

- Contextualización de la enseñanza (5%)
- Planificación de metas y planes de clases (10%)
- Plan de evaluación (10%)
- Implementación de la enseñanza (60%)
- Informe toma de decisión (10%)
- Autoevaluación (5%)
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Figure 1. View of SEPRAD platform, assessment areas.

Source: SEPRAD (2014).

Evaluación		
Criterios	Detalle	Resultados
A. Descripción de la institución.	6 Competente	6.0 puntos
B. Descripción del aula para favorecer clima propicio para el aprendizaje.	4 Básico	4.0 puntos
C. Descripción de los estudiantes.	8 Destacado	8.0 puntos
D. Descripción de los aprendizajes diversos.	6 Competente	6.0 puntos
E. Caracterización de la institución, del aula y de los estudiantes apoyados en evidencias.	6 Competente	6.0 puntos
F. Análisis de los factores contextuales relevantes para la enseñanza y el aprendizaje de calidad.	5 Competente 4 Básico	4.6 puntos
G. Aplicación de procedimientos de investigación para la planificación de la enseñanza.	8 Destacado	8.0 puntos
H. Lenguaje Profesional	8 Destacado	8.0 puntos
I. Reflexión	5 Competente	5.0 puntos
J. Responsabilidad Profesional	4 Básico	4.0 puntos
Total evaluación		72% (Básico)
Calificación		4,8

Resultados de evaluación

PRA 650-56-1 Período 1 Semestre 2019 - Contextualización de la enseñanza (sumativa)

Alumno: Debora Rojas Lara (19.773.199-0)

Retroalimentación

Fortalezas

se realizan algunas mejoras solicitadas en informe... [ver más.](#)

Sugerencia de mejoras

revisar comentarios de informe formativo y hacer correcciones en informe sumativo [ver menos.](#)

Debilidades

se observa que se mantiene gran parte d ela inform... [ver más.](#)

Figure 2. View of SEPRAD platform, area and entry of feedback from tutor and mentor.

Source: SEPRAD (2014).

SEPRAD also stores qualitative (percentages and grades) and quantitative information (level of performance and feedback). The trainee teacher, meanwhile, can go back to review the information whenever they want. The feedback provides indicators regarding the performance on the requested tasks and what is needed to meet the level of achievement to which they aspire (Sadler, 1989). To do that, the tutors and mentors have assessment categories for each of the tasks, which they complete through the SEPRAD platform and on which a section is included to provide feedback on the strengths and weaknesses observed.

Thus, practical training at the PUCV invites the trainee teacher to take responsibility for the learning of his or her students and for his or her own professional and personal learning, within the framework of the hallmark of institutional values and for the improvement of the school institution (Leiva & Iglesias, 2017).

In view of this, this study is intended to describe the types of written feedback provided by tutors and mentors to trainee teachers when using the SEPRAD platform, which is designed for assessment of and feedback on practices and revealing the student's degree of satisfaction with this tool.

Methodology

The research was approached using a retrospective qualitative design (Flick, 2007) with an interpretive approach (Erickson, 2006). The data used were obtained in the context of a broader project on teacher training (Proyecto de Mejoramiento Institucional, PMI, 2013). Specifically, the information reported was produced from written feedback recorded on the SEPRAD platform designed for the evaluation of the practices of trainee teachers, associated with the System of Monitoring and Supervision of Skills of the Profile of Graduates on the Pedagogy programs of this university.

The written feedback provided by tutors and mentors on trainee teachers who were taking their final professional practice was analyzed in terms of the assessment "implementation of teaching", with the support of SEPRAD and rating of its use by the students.

SEPRAD began being used as a pilot in 2014 and, in 2015, 10 of the 14 pedagogy degrees at the PUCV were included. For the purposes of this study, feedback was analyzed from seven pedagogy programs (History, Philosophy, Spanish, Music, Basic education, Mathematics, and Biology) during the 2015 and 2016 academic years.

Considering the three years for which SEPRAD has been implemented, the research postulated the following questions:

- What kind of feedback are tutors and mentors providing to trainee teachers?
- What degree of satisfaction do trainee teachers have in the use of a virtual platform for assessment of and feedback on practices?

Participants

We considered written feedback from 34 tutors and 96 mentors provided to 169 trainee teachers (2015) and 146 trainee teachers (2016), after the evaluation of implementation of teaching in 2015 and 2016. The tutors were teachers hired by the university and the mentors were teachers from schools that had an agreement with the university.

The role of the mentor is that of a "critical expert" who acts as a strategic mediator, collaborating in the professional development of the trainee teacher through the joint consideration of concepts and/or alternatives for action based on pedagogical and disciplinary knowledge. The tutor's role, meanwhile, is to promote social interaction, the construction of pedagogical and specialized knowledge in a collaborative manner, and the permanent integration of practical experience and theoretical reflection to solve problems in the school context (PUCV, 2015).

The records of feedback used in this study correspond to all of the trainee teachers that implemented teaching in the final teaching practice.

Table 1. Characterization of university tutors for final teaching practice

Participant	Tutor	Percentage (%)
N	34	
Academic degree	Bachelor's	24%
	Master's	62%
	Doctorate	14%
Contractual situation	Hours	47%
	Part-time	29%
	Full-time	24%
Total trainee teachers for whom feedback was provided	Year 2015	169
	Year 2016	146

Source: Prepared by the authors.

Table 1 shows the diverse conditions for the tutors in the final practice for the degree courses analyzed. From the training perspective, 24% had a bachelor's degree, 62% had a master's degree, and 14% a doctorate, which is important information when considering the level of qualification that the tutors have to carry out this task.

Table 2. Characterization of university mentors for final teaching practice

Participant	Mentor	N
N	96	
Specialty	History	14
	Philosophy	6
	Music education	6
	Spanish	12
	Basic education	32
	Biology	11
	Mathematics	15
Type of school funding	Municipal	22
	Subsidized private	34
	Paid private	6
Total trainee teachers for whom feedback was provided	Year 2015	169
	Year 2016	146

Source: Prepared by the authors.

Table 2, on the other hand, shows the specialty of the mentors and the type of funding of the schools, where 35% of them were municipal, 55% subsidized private and 10% paid private.

Instruments and procedures

In the second semester of 2015 and 2016, every tutor and mentor of final teaching practice had to observe the implementation of teaching by the trainee teachers during a 90-minute class. Subsequent to this observation, both tutors and mentors independently assessed the class given by trainee through a category on the SEPRAD platform and provided written feedback to each future teacher. Each piece of feedback registered was formulated according to three aspects required by the platform: strengths, weaknesses, and aspects to be improved, all considered in the analysis process.

In 2016, all of the trainee teachers responded to a survey with the aim of revealing their degree of satisfaction with the platform. This survey considered the areas: content and materials, technical aesthetics, functionality, teaching, use of communication tools, and overall assessment. A rating scale of 1 to 4 was used, with 4 being the highest degree of satisfaction and 1 the lowest.

Data analysis

The feedback was examined based on an analysis of content with deductive categories (Mayring, 2000), based on Heron's (2001) approaches, as shown in Table 3.

Table 3. Intention of intervention and type of feedback

Intention of intervention	Type of feedback	Description
Authoritarian interventions	Prescriptive	Refers to interventions intended to directly orient the behaviors that the assessed trainee should have.
	Informative	Refers to interventions intended to transmit knowledge, information, and meanings to the assessed trainee.
	Confrontational	Refers to interventions intended to raise awareness about any limiting attitude or behavior of the assessed trainee.
Facilitative interventions	Cathartic	Refers to interventions intended to allow the assessed trainee to discharge emotions, mainly of pain, fear, and anger.
	Catalytic	Refers to interventions aimed at self-discovery , self-directed life, learning, and problem solving in the assessed trainee.
	Supportive	Refers to interventions intended to confirm the personal value of the assessed trainee, their qualities, attitudes, or relationships.

Source: Heron, 2001.

Feedback interventions provided to each student by tutors and mentors were coded using the Nudis Vivo software (QSR International, 2018). The coding was carried out by two researchers independently before then being compared, reviewing those in which there were differences, analyzing them again and reaching a consensus. Finally, a third researcher audited the coding of the type of intervention made by the university tutor and the feedback formulated.

A descriptive statistical analysis was conducted for the data collected in the satisfaction survey.

Results

According to Table 4, the tutors mostly provide feedback with interventions of an authoritarian type to students in their final teaching practice ($N = 750$, year 2015; $N = 587$, year 2016), rather than feedback of a facilitative type ($N = 329$, year 2015; $N = 197$, year 2016). The most frequent types of authoritarian feedback were informative ($N = 386$, year 2015) and descriptive ($N = 313$, year 2016). The feedback with facilitative interventions provided most often by the tutors was supportive ($N = 216$, year 2015; $N = 156$, year 2016).

Table 4. Type of feedback from tutors in final teaching practice, 2015 and 2016

2015 and 2016	Basic education		History		Music		Biology		Maths.		Philosophy		Spanish		Totals	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Authoritarian Interventions	289	263	177	82	37	21	16	38	173	68	108	11	40	104	750	587
1. Descriptive	121	151	53	51	17	10	9	22	96	30	55	8	22	41	283	313
2. Informative	141	54	94	10	14	4	7	7	68	12	44	1	18	29	386	117
3. Confrontational	27	58	30	21	6	7	0	9	9	26	9	2	0	34	81	157
Facilitative interventions	100	136	77	11	26	24	16	11	80	19	18	3	18	27	329	197
1. Cathartic	4	6	3	1	1	0	2	1	8	5	1	0	1	8	20	21
2. Catalytic	33	7	18	2	7	1	4	1	25	4	5	0	1	5	93	20
3. Supportive	63	123	56	8	18	23	11	9	47	10	12	3	16	14	216	156

Source: Prepared by the authors.

Some examples of authoritative, descriptive, and informative feedback provided by the tutors are shown below:

The class is conducted through a didactic sequence according to the complexity of the contents and skills of the students. Although the beginning and development of the session are very extensive, these are distributed appropriately depending on the objective of the work provided. Various activities are implemented based on previous knowledge, moments in the session, and the complexity of the evaluation work (T6, 2015, informative).

There should be a normalization before and as the class verbalizes the expected behaviors. Always think of more activities, since the learning rates of the students are different (T2, 2016, prescriptive).

The feedback provided by mentors to students in their final teaching practice was also mostly authoritarian ($N = 755$, year 2015; $N = 667$, year 2016). The feedback that was least common involved facilitative interventions, but, even so, the mentors gave more feedback with facilitative interventions than the tutors ($N = 413$, year 2015; $N = 378$, year 2016).

Meanwhile, the tutors and mentors gave relatively little feedback of a cathartic type (Tutors $N = 20$ and $N = 21$; Mentors $N = 30$ and $N = 28$) and provided more supportive feedback (Tutors $N = 216$ and $N = 156$; Mentors $N = 303$ and $N = 300$). It should be noted that 18 and 16 mentors (for 2015 and 2016, respectively) did not record valid feedback. The main results are shown in Table 5.

Table 5. Type of feedback from mentors for final teaching practice, 2015 and 2016

2015 and 2016	Basic education		History		Music		Biology		Maths.		Philosophy		Spanish		Totals	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Authoritarian Interventions	216	199	163	141	36	25	20	21	179	152	94	46	47	83	755	667
1. Descriptive	102	101	49	44	16	14	7	12	97	83	46	13	28	37	345	304
2. Informative	96	72	91	76	14	4	4	7	73	51	42	28	16	23	336	261
3. Confrontational	18	26	23	21	6	7	9	2	9	18	6	5	3	23	74	102
Facilitative interventions	130	148	85	71	24	12	30	13	69	56	23	22	40	41	413	378
1. Cathartic	8	5	7	2	2	3	3	3	6	7	2	3	2	5	30	28
2. Catalytic	26	14	16	5	3	2	4	5	16	8	7	9	8	7	80	50
3. Supportive	96	129	62	64	21	7	23	11	47	41	18	19	36	29	303	300
4. No record of feedback															18	16

Source: Prepared by the authors.

Examples of feedback provided by mentors to trainee teachers include the following:

Lacks a little more management of time to close activities and round off the class (M19, 2015, authoritarian: prescriptive).

Caroline, you are a teacher with an excellent willingness to learn and try new things, something very positive that can be innovated in the classroom. Therefore, I suggest that you have more confidence in your abilities, so you dare to do more things; the key is to try new strategies that favor the attainment of new learning in the students (M14, 2016, facilitative: supportive).

Regarding the results shown, Canabal and Margalef (2017) state that the difficulty of making facilitative feedback is due to the shortcomings of teacher training, not only in terms of pedagogical knowledge, but also in practical skills to review a task that has been completed, identify and correct errors, or point to successes, in addition to guiding, supporting, and stimulating the student in their subsequent learning.

Montecinos, Barrios, and Tapia (2011), meanwhile, argue that authoritarian feedback may be related to a style of directive supervision on the part of tutors and mentors. However, it should be expected that, in the final teaching practice, tutors and mentors would provide greater facilitative feedback of a catalytic, cathartic, and supportive type, since they are aimed at guiding the trainee teacher in self-discovery, to understand their

teaching experience, reflect on their practice, and apply knowledge in solving real problems in the school context, creating atmospheres of trust and empathy between the tutor, mentor, and trainee teacher (Insuasty & Zambrano, 2014; Randall & Thornton, 2005).

In this regard, in their research related to the reflective experiences on advice for teaching practice, Insuasty and Zambrano (2014) determined that the tutors essentially followed feedback models of a prescriptive and informative type, which inform the trainee teacher only of what they do positively or negatively in their practice, making suggestions for improvement, which is consistent with the results of this study.

Results of the survey on using the SEPRAD platform

Figure 3 shows that the factors of study content and materials ($N = 3.73$), technical aesthetics ($N = 3.58$), and functionality (3.54) have greater satisfaction for trainee teachers than the factors of communication (2.89) and teaching (3.39). Generally speaking, they show satisfaction regarding the use of the platform, as they score 3.91 in their overall assessment.

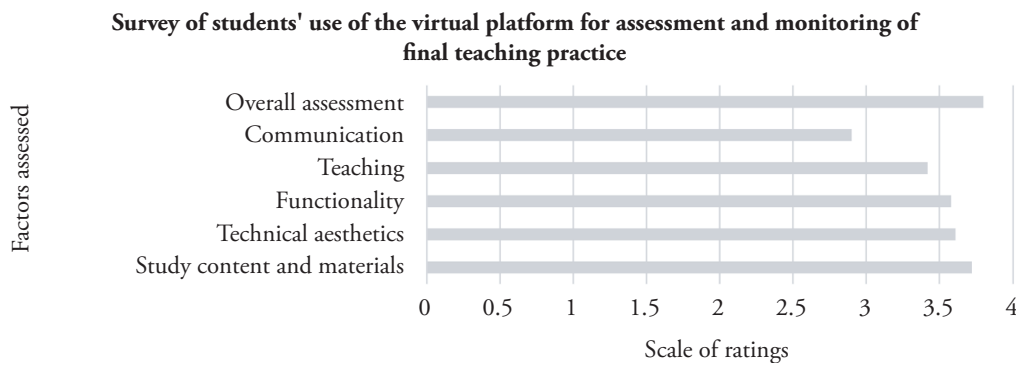
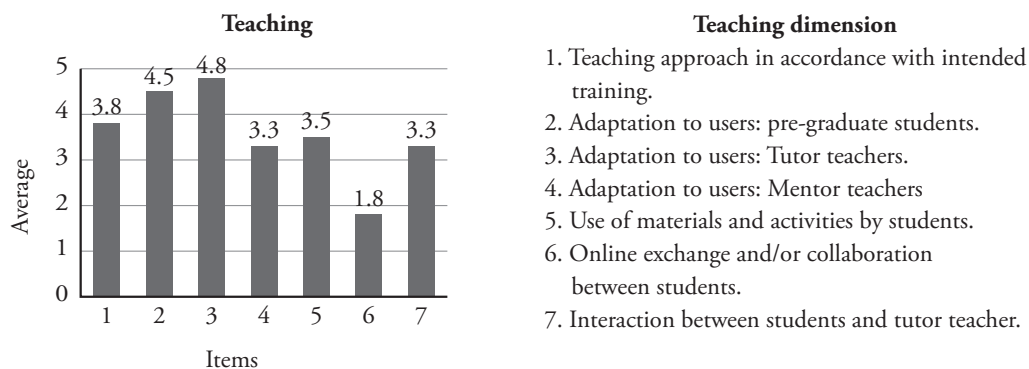


Figure 3. Results of survey of satisfaction of use of the SEPRAD platform.

Source: Prepared by the authors.

The lowest-ranked dimensions are teaching and communication tools. We can see in Figure 4 that item 6 of the teaching dimension: online exchange and collaboration, is that in which the lowest satisfaction is seen ($N = 1.8$).



- Teaching dimension**
1. Teaching approach in accordance with intended training.
 2. Adaptation to users: pre-graduate students.
 3. Adaptation to users: Tutor teachers.
 4. Adaptation to users: Mentor teachers
 5. Use of materials and activities by students.
 6. Online exchange and/or collaboration between students.
 7. Interaction between students and tutor teacher.

Figure 4. Results of the teaching dimension.

Source: Prepared by the authors.

In the dimension on communication tools, the item with the lowest satisfaction is the use of chat for learning ($N=1.7$).

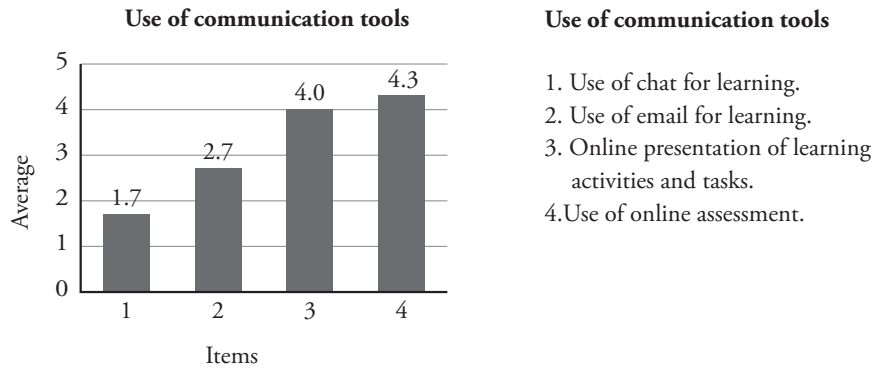


Figure 5. Use of communication tools.
Source: Prepared by the authors.

In the open questions asked in the survey about the overall assessment of the platform, the trainee teachers highlighted that the evidence for learning is available during the entire practice process, and the sending of reports for the various assessments is also facilitated, saving time and money by being able to upload files online. Similarly, they emphasize that since the mentors and tutors must provide written feedback, they are available at any time they want to review and record them. In addition, they state that the platform is easy to use and very didactic. However, they call for greater interactivity for communication with peers, as well as with the teacher mentor and tutor.

Conclusions

The conclusions are presented in accordance with the two themes addressed in this study: firstly the types of feedback provided by tutors and mentors in implementing teaching in the final teaching practice of trainee teachers, and then the assessment by the students of the use of a virtual platform for assessment and feedback on the practice.

Types of feedback provided by tutors and mentors

As regards this point, tutors and mentors mostly give their trainee teachers authoritative and informative feedback, rather than facilitative feedback.

Indeed, both mentors and tutors generally inform trainee teachers about what they did well in class, as well as the aspects that they should change, with a more directive style predominating in the process of identifying strengths and weaknesses, since it is they who identify and point out what needs to be improved (Solís et al., 2011).

While tutors and mentors mostly provide authoritarian feedback, mentors tend to give more facilitative written feedback of the supportive kind. In this regard, the study by Le and Vásquez (2011), which analyzed mentor and tutor feedback and the perceptions of trainee teachers in relation to this, revealed that the latter appreciate the feedback strategies provided by the mentors. Similarly, Awuni (2015) concluded that trainee teachers valued mentor feedback more, since they provided constant support for the teaching and learning process. Meanwhile, Canabal and Margalef (2017) highlighted the impact for the trainee teacher of receiving feedback oriented towards the emotional and personal area.

When analyzing the feedback from tutors and mentors, it was possible to identify that providing feedback after applying an evaluative category and submitting a grade could influence the way in which the feedback was provided to the trainee teacher.

Harrison, Könings, Schuwirth, Wass, & Vleuten (2015) and Contreras-Pérez and Zúñiga-González (2017) support this assertion, arguing that feedback subject to the assessment could represent a negative influence, since it provides a marked orientation towards correction. This result invites us to investigate the feedback processes in the context of a formative assessment without grading.

Similarly, it is considered essential to understand the need to have written feedback reports after the visit to the classroom by the tutor to observe the trainee teacher, in order to make them aware of teaching aspects to improve their training.

In this light, Mauri et al. (2016) state that the feedback should have a clear objective oriented to the task, so that the student can make sense of it and project it into their professional practice. Nevertheless, tutors and mentors should be encouraged to provide more facilitative written feedback that tends towards reflection on the part of the trainee teacher and does not simply describe achievement of the assessment criteria.

Use of the virtual platform for assessment and feedback of practices

In relation to this point, the results of this research indicate that trainee teachers valued the SEPRAD platform positively, since it allows formalization of the feedback and access to that feedback at any time during the training process, as well as familiarizing students with the criteria, categories, dates, and protocols that guide the preparation of reports at every assessment stage of the practice. However, they have a less satisfactory evaluation of the possibilities for interaction that the platform provides for exchange and collaboration between peers, the use of chat for learning, and the use of email.

In this regard, López, Romero, and Roperó (2010) suggest that forums, chat, and consultations improve students' communication with each other, as well as with their teacher. It is important to highlight that the expansion of ICT into academic environments is a process that requires constant evaluation of the impact of such tools, in order to optimize the primary process of inclusion (Ávila-Fajardo & Riascos-Erazo, 2011).

In terms of the use that mentors and tutors make of the platform to provide feedback, we observed that a significant number of mentors do not record feedback for the trainee teachers. In this regard, it should be noted that the platform requires a minimum amount of characters to be entered into the space provided in order to close the assessment, but some mentors type the same meaningless character repeatedly, which could be due to the lack of time they have to carry out their duties, which is why they "complete" the requirement by adding these meaningless characters. The results suggest the relevance of more research focused on the use and assessment of digital media by all participants to promote learning, to deliver precise guidelines that contemplate a technical-pedagogical model that incorporates aspects based on technology, content, and teaching (Cabero, 2017).

According to the findings related to the types of feedback made using a virtual platform, the standout is the relevance of these resources in facilitating assessment and feedback processes that involve various assessors in different university and school settings, where large numbers of students are assessed and on whom feedback is provided simultaneously. In this regard, it seems important to incorporate virtual platforms into the practical training of teachers, since they provide tools that facilitate and favor the exchange of information and the creation of knowledge between people who are separated geographically (Barreras-Corominas, Fernández, & Gairín, 2014), but which are working towards a common goal.

The results of this research also highlight the need to improve the interactivity of the SEPRAD platform and the training of tutors and mentors in feedback tasks, as well to look at academic burdens and availability of time to pave the way for professional development and not solely as a mere evaluation of the process of practice.

Finally, based on these findings, future research could look more deeply into the tendency to provide authoritarian feedback in order to find out more about the preconceptions and limitations of tutors in this regard. Meanwhile, from the perspective of trainee teachers it would be worth studying the contribution of this assessment system and feedback on practices to the development of their professional teaching skills.

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