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ASSESSMENT IN SECONDARY EDUCATION: STRATEGIES AND TECHNIQUES USED BY TEACHERS IN THE REGION OF MURCIA

EVALUACIÓN EN EDUCACIÓN SECUNDARIA: ESTRATEGIAS Y TÉCNICAS UTILIZADAS POR EL PROFESORADO DE LA REGIÓN DE MURCIA (SPAIN)

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Summary

Assessment in education contains a great variety of dimensions that affect such phenomenon and must respond to the following questions: who, what, when, how and why to assess. Within the Spanish legal framework, currently assessment must be integrative and formative to bring the students the opportunity to achieve the objectives through diverse assessment instruments. Thus, a study addressed to 107 teachers of the Region of Murcia in secondary education —in the stages of ESO and Bachillerato— who are specialised in different fields has been carried out by means of a survey to know their perceptions about assessment as regards the teaching practice and the teaching-learning process. The results obtained in this research show that, in general, teachers consider the objectives of their subjects more suitable than the competencies. Besides, female teachers and younger teachers use ICT more frequently when assessing their students. Regarding the stage, Bachillerato teachers give a higher weight to theoretical knowledge than ESO teachers, while the last ones tend to use tools such as video recordings to assess their students more frequently. This study also shows that exams are more important for tutors than for the rest of teachers. To conclude, this study demonstrates that the strategies and techniques applied by teachers when assessing depend on their sex, age, job position, employment situation and stage.

Keywords: assessment, teachers, secondary education, teaching strategies.

Resumen

La evaluación en educación contiene una gran variedad de dimensiones que afectan a dicho fenómeno y debe responder a las siguientes preguntas: quién, qué, cuándo, cómo y por qué evaluar. Dentro del marco legal, en la actualidad la evaluación debe ser integradora y formativa para llevar a los alumnos la oportunidad de alcanzar los objetivos a través de diversos instrumentos de evaluación. Así, se ha realizado un estudio dirigido a 107 profesores de la Región de Murcia —de las etapas de ESO y Bachillerato— especializados en diferentes ámbitos, mediante una encuesta para conocer sus percepciones sobre la evaluación en cuanto a la práctica docente y el proceso de enseñanza-aprendizaje. Los resultados obtenidos en esta investigación muestran que, en general, los profesores consideran más adecuados los objetivos de sus asignaturas que las competencias. Además, las profesoras y los profesores más jóvenes utilizan con mayor frecuencia las TIC a la hora de evaluar a sus alumnos. En cuanto a la etapa, los profesores de Bachillerato dan un mayor peso a los conocimientos teóricos que los de la ESO, mientras que estos últimos tienden a utilizar con más frecuencia herramientas como las grabaciones de vídeo para evaluar a sus alumnos. Este estudio también muestra que los exámenes son más importantes para los tutores que para el resto de profesores. En conclusión, este estudio demuestra que las estrategias y técnicas que aplican los profesores a la hora de evaluar dependen de su sexo, edad, puesto de trabajo, situación laboral y etapa.

Palabras clave: evaluación, profesorado, educación secundaria, estrategias de enseñanza.

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Contenido

Introduction

Álvarez (2007) states the way we assess will depend on what is knowledge for us. He insists in conceiving assessment and knowledge as two elements that must be always working together. On the contrary, separating knowledge from this process would transform assessment into a simple tool whose function would be useful to promote but useless for true acquisition of professional and personal competence. García (2010) states that one model is not better than the other one but that everything depends on the objectives set by the evaluator, teacher or researcher.

Acording to the summative and formative assessment, Pérez and Carretero (2009) demonstrated that there are plenty of teachers who consider that theoretical knowledge is the most important part of their subjects and, therefore, it is mainly what they take into account when assessing. Another element which is closely related to summative assessment is the traditional exam; according to Monteagudo (2014), the majority of Secondary teachers tend to only assess through exams and traditional assignments, but Filstead (1995) explains the tendency of pointing out the dissatisfaction caused by quantitative assessment.

Pérez (1999) remarks that qualitative assessment can help us understand the real teaching-learning processes by searching for a meaningful learning method; and Goncalves (2014) shows that the 88% of the participating teachers in his investigation state that the assessment methods have changed because of the incorporation of new instruments such us ICT, projects, oral presentations and practical tasks that contribute to foster critical thinking. Besides, Goncalves (2014) explains that introducing innovative instruments to asses give the students diverse opportunities to achieve the learning objectives. By means of alternative assessment which includes performance assessment (portfolios, journals, questionnaires, project work), self-assessment, peer-assessment and teacher observation, students are asked to solve realistic problems and use their high order thinking while they foster essential competences depending on the task. And related to it, Eggers (2016) remarks that if the assessment process comprises graded tasks or activities, such as, written assignments, tests, short oral presentations or similar, distributed throughout the course, it provides the opportunity for feedback.

Morales (2001) adds that initial assessment must be done for teachers to get a better understanding of the students' general situation which will affect the objectives and to what extent must they be accomplished. Morales (2001) defends that although it is commonly associated with summative assessment, final assessment may also be useful to consider the extent to what the objectives have been accomplished at a given time and to improve any element that may impede the teaching-learning process as long as it is taken as a part of a process which

is connected with continuous, formative assessment. And related to the formative assessment, it is worth to mention that self-assessment is a process of formative assessment during which students reflect on and evaluate the quality of their work and their learning; judge the degree to which they reflect explicitly stated goals or criteria; identify strengths and weaknesses in their work and revise accordingly (Andrade & Du, 2017, p.160).

Although assessment in Spain —according to the Spanish Educative laws— must be integrative and formative, some teachers separate this essential part of the teaching-learning process and do not use it as a tool that makes them reflect about their practices and their students' progress. However, there are also many of them that do their really best to develop an assessment as fair as possible, integrating new methods and attempting to bring their students the opportunity to succeed. For this reason, knowing and taking into account the teachers' views about assessment could be an excellent way to identify the possible weaknesses as well as the strengths of the educative approach, which could help to enhance its application in Spanish high schools. Then, we intend to respond to the following question: How do teachers really assess their students' learning in the Region of Murcia?

Empirical framework

Objectives

This study is intended to know the secondary teachers of the Region of Murcia view about assessment regarding their teaching practice as well as the learning process, or rather; our main goal is to know how teachers belonging to different fields assess their students in the secondary education (stages of ESO and Bachillerato) in the Region of Murcia.

Among the specific objectives we must highlight:

- The analysis of the strategies and techniques that teachers use as well as which ones they use the most during both the learning and the teaching processes.
- To carry out a genre comparative in order to observe significant differences according to socio-demographic variables included in our study such as sex, age experience, qualification, employment situation, institution, stage, job position, subject and position.

Method

We have carried out a descriptive type of study whose goal is to obtain information about concrete parts of the phenomenon of assessment in Secondary Education. To carry out this study, we have proceeded following the steps that a descriptive methods presents according to Bisquerra (2004) which are: to identify a problem, establish our objectives, select a sample, design the research instrument to collect data, analyse the data and finally draw conclusions.

Moreover, it has been done through an ex post facto method, which belongs to the methods aimed at drawing general conclusions or discovering new theories from systematic observations of reality (Bisquerra, 2004). Using this method means that the researchers started the investigation after the fact has occurred. In this case, assessment is a continuous phenomenon that has been studied after the teachers had experienced assessment in Secondary Education.

Among the descriptive methods, we have selected the survey type, which consists in making and selecting certain questions about a problem in order to be answered by a particular group (the sample of the study). The answer of this group will be the key to respond and find possible solutions to the problem.

Participants

The participants in this study are 107 Secondary teachers who give classes in the stages of ESO and Bachillerato and all of them work in public education high schools in the Region of Murcia. In order to request the teachers their participation and obtain as many participants as possible, an e-mail to 64 high schools located in different areas of the Region of Murcia: Cieza, Abarán, Archena, Ceutí, Lorca, Jumilla, Murcia I, Murcia II, Cartagena, among others, was written and sent. The content of the e-mail included the name of the researchers in this study, the institution, the research objective and the target group.

Furthermore, we mentioned that we would maintain data confidentiality, guaranteed their anonymity and offered them the results of such study in case they are interested. Finally, the link to access the online survey through "Google Forms" was attached to the e-mail. The e-mail sent to the different high schools is included in annex 2. Thus, to safeguard the ethics of this research, the e-mail was sent to the high schools' administration for them to resent it to the teachers belonging to all the fields. As we can see below, some of the socio-demographic features are included in Table 1.

Table 1

Frequency and percentage summary of the participating teachers' characteristics

		F	%
Sex	Man	31	29
	Woman	76	71
Age	25 or less	0	0
	26-35	7	6.5
	36-45	37	34.6
	46-55	45	42.1
	More than55	18	16.5
Experience	Less than 3	7	6.5
	3-9	14	13.1
	10-19	36	33.6
	20-30	33	30.8
	More than 30	17	15.9
Qualification	Degree (diplomado)	83	77.6
	Degree (graduado)	7	6.5
	Degree (licenciado)	9	8.4
Employment situation	Civil servant	80	74.8
	Temporary worker	26	24.3
	Hired	1	.9
Institution	State school	107	100
	Private school	0	0
Stage	ESO	56	52.3
	Bachillerato	37	34.6
	Both	14	13.1
Job position	Tutor	51	47.7
	Specialist	5	4.7

Subject	Language and Literature	9	8.5
	French/English	18	16.8
	Music	5	4.7
	P.E	2	1.9
	Religion	1	.9
	Maths	18	16.8
	Biology	6	5.6
	Latin/Greek	3	2.8
	History	16	15.0
	Physics	5	4.7
	Economics	4	3.7
	Technology/IT	11	9.7
	Art	6	5.6
	Orientation	1	.9
	Vocational T.	1	.9
	Research	1	.9
Position	Teacher	67	62.6
	Head of Department	26	24.3
	Management team	14	13.1

Among the most relevant data of this table, we find that the majority of teachers are women aged between 46 and 55 whose work experience is between 10 and 19 years and mainly teach languages (English and French), Maths and History. They have a degree and work as civil servants. Furthermore, all the participants belong to state schools and more than a half of them teach in ESO stage.

Variables

In order to establish relations and try to reply to the problem, it is essential to determine the variables that are involved in the study. As we know, a variable is the external manifestation of a construct or concept, or rather, a characteristic or property which adopts different values and can be measured (Hernández & Maquilón, 2010). Therefore, thanks to the variables we can assign a value to a concept or image to measure it in relation to other concepts.

As regards the variables that this research contains, we find, on the one hand, the independent variables which correspond to the socio-demographic information about the participants in the survey such as age, sex, work experience, the type of institution and their qualification. All this information is included in the participants section. On the other hand, we find the dependent variables which correspond to the degree of agreement with the items in the survey that deal with different aspects of assessment.

Data-collecting Instrument

We decided to carry out this research by using a survey type of research instrument specifically designed ad hoc for this study. As Buendía (1998) states, the survey is one of the most used techniques in survey research since it allows us to know what the participants think and do and it can be done in person, by phone or online. Thus, these characteristics made us select this type of instrument. It is essential to highlight that we have not found any designed and validated survey dealing with assessment in Secondary Education which especially delve into the evaluation of the teaching practice as well as the evaluation of the learning process. For that reason, we needed to design an instrument which could give response to this concrete phenomenon. To design this research instrument in order to collect the data that we needed, we proceeded as follows: first of all, the main objectives and the specific objectives were established. Then, the process of reviewing literature about the topic started. Taking into account the sources and information; we developed the items of our survey ad hoc regarding assessment. Since our main goal was to know what the participants though about assessment in the teaching process as well as in the learning process and, therefore, know their strategies and techniques, we included a liker scale for them to respond to the different items with four degrees of agreement being: 1 strongly agree, 2 disagree, 3 agree and 4 strongly agree.

As regards the first draft of the instrument, some socio-demographic items and some questions about assessment were added. Thus, after some modifications, those questions and items were evolving from the first draft to the third and final draft which consisted of two main parts containing 10 items for the socio-demographic part and 38 items dealing with assessment. These 38 items were divided, in turn, into two sub-sections: the teaching process and the learning process, having 14 and 24 items respectively.

Once we had the final version of the draft, we needed to examine our survey as regards its validity in order to implement it in this research. For that purpose, we counted on six experts' collaboration. All of them are professionals in the education field and some of them have experience in education research. On the one hand, the experts from the University of Murcia are three professors; two of them belong to the Language and Literature Didactics Department (English, Spanish and French) and the other one works in the English Department. On the other hand, we also counted on three experienced teachers from the English Department of the Dr. Pedro Guillén High School in Archena, Murcia.

Thanks to the experts' collaboration, some items were eliminated or reformulated to guarantee that the instrument was able to measure what it was intended to measure. As a result, the final version of the instrument consists of the first part which includes 10 socio-demographic questions and the second part which is divided into two dimensions: assessment in the teaching process and assessment in the learning process. They contain 14 and 38 items respectively and a total amount of 52. To respond to this items, they had to take into account the Likert scale with four degrees of agreement proposed being 1 strongly agree, 2 disagree, 3 agree and 4 strongly agree, as we can see in table X.

Table 2

Dimensions of the survey

Dimension	Description	items	Cronbach's Alpha
Teaching process	this dimension deals with objectives, contents and instruments	1-14	.855
Learning process	this dimension deals with assessment strategies	15-38	.732
		TOTAL	.804

Finally, according to DeVellis (2016), the Cronbach's Alpha technique was applied in order to determine the internal consistency of the questionnaire based on the average of the correlations between the items, the value .804 was obtained, indicating that a high internal consistency of the instrument.

The Research Process

In this research process we can distinguish some particular phases that Bisquerra (2004) presents when referring to carrying out a survey type of study: establishing the survey objectives, planning its different sections, designing and selecting the questions, analysing the quality of the questions and their validity and writing the final version of the survey. This research process consists of the following phases described in the table below.

Table 3

Summary of the research process

Phases	Tasks
Phase I	First literature review
Phase II	Proposing the research problems
Phase III	Second literature review
Phase IV	Establishing the objectives, selecting the method, designing the variables and selecting the sample
Phase V	Designing the data-collecting instrument

Phase VI	Field work
Phase VII	Data analysis
Phase VIII	Interpretation of results and conclusions

Source: Personal elaboration.

Data analysis

The quantitative analysis of the collected data was carried out using the IMB SPSS statistics software package, version 24. After closing the questionnaire in Google Forms, it was decided to download the responses' data through an Excel template and import those data to statistics software package.

Once we had the data, each variable was checked and named, as well as their corresponding labels. Likewise, the missing values were configured. The nature of the variables and the objectives that were established at the beginning of the research resulted in the application of different descriptive techniques. On the one hand, we had to calculate the descriptive statistics (frequencies, percentages, means and standard deviation). On the other hand, inferential statistics were also used, applying in this case non-parametric contrast techniques since when applying the Levene test of homoscedasticity and the Kolmogorov-Smirnov normality test, their values led us to such necessity. Thus, the tests that we have used for this purpose have been the Kruskal-Wallis test and the Mann-Whitney U test.

Likewise, to verify the reliability of the collecting-data instrument designed for this research, the Cronbach's alpha coefficient was calculated to determine its reliability, as reflected in the section referring to the instrument.

Results

Next, taking into account these research objectives, the results obtained are presented.

Objective 4.1 The analysis of the strategies and techniques used by the teachers and the most used.

Table 4 shows the results of the descriptive analysis, where we can see that the teachers participating in this research consider that the objectives set for their subject are adequate (X = 4.78), although regarding the competencies to develop the average is considerably lower (X = 3.79).

Table 4

Descriptive statistics of the teachers' responses to dimension 1: THE TEACHING PRACTICE

Ítems	%				M	SD
	SD	D	A	SA		
1. Los objetivos planteados para el desarrollo de mi asignatura son adecuados	2.8	14.0	47.7	35.5	3.16	.767
2. He alcanzado los objetivos de mi asignatura	2.8	15.0	57.9	24.3	3.04	.713
3. Los contenidos de mi asignatura son adecuados	1.9	23.4	39.3	35.5	3.08	.814
4. Las competencias a desarrollar son adecuadas	1.9	10.3	54.2	33.6	3.20	.693
5. El tiempo establecido para llevar a cabo la programación es adecuado	12.1	29.0	39.3	19.6	2.66	.931
6. Los instrumentos que utilizo para evaluar son los adecuados	.9	1.9	56.1	41.1	3.37	.575
7. Cambio los instrumentos de evaluación cuando compruebo que no funcionan	.9	8.4	37.4	53.3	3.43	.688
8. La metodología planteada es adecuada	.9	3.7	54.2	41.1	3.36	.603
9. Reflexiono acerca de mis métodos de evaluación para mejorarlos	.9	4.7	24.3	70.1	3.64	.620
10. Los criterios de evaluación que debo aplicar son adecuados	.9	11.2	57.0	30.8	3.18	.656
11. Los exámenes online son adecuados para evaluar correctamente	43.0	32.7	19.6	4.7	1.86	.895
12. Las tareas online son más adecuadas para ser evaluadas que los exámenes online	11.2	32.7	34.6	21.5	2.66	.941
13. Las tareas online son adecuadas para la evaluación de los alumnos	17.8	37.4	34.6	10.3	2.37	.896
14. Las herramientas disponibles para la evaluación online son adecuadas	24.3	40.2	26.2	9.3	2.21	.919

Source: Personal elaboration.

Table 5

Descriptive statistics of the teachers' responses to dimension 2: THE LEARNING PROCESS

Ítems	%				M	SD
	SD	D	A	SA		
15. La mejor herramienta para una evaluación justa es el examen escrito	14.0	37.4	34.6	14,0	2.49	.905
16. Valoro únicamente los conocimientos teóricos adquiridos en mi asignatura	43.0	46.7	9.3	.9	1.68	.681
17. Mis exámenes suponen el 60% o más de la nota en la evaluación final de mi asignatura	15.9	20.6	30.8	32.7	2.80	1.0&
18. El examen me permite evaluar todas las competencias del alumnado	22.4	46.7	25.2	5.6	2.14	.829
19. Evalúo mediante exámenes escritos de desarrollo	25.2	33.6	31.8	9.3	2.25	.943
20. Evalúo mediante exámenes escritos tipo test	46.7	34.6	15.9	2.8	1.75	.825
21. Evalúo mediante exámenes escritos con diferentes tipos de preguntas (preguntas cortas, verdadero o falso, corregir errores, completar)	12.1	15.9	38.3	33.6	2.93	.993
22. Evalúo mediante exámenes orales en los que los alumnos tienen que resolver una situación práctica	31.8	27.1	29.0	12.1	2.21	1.02
23. Evalúo mediante audios que mis alumnos tienen que producir	57.9	15.0	14.0	13.1	1.82	1.10
24. Evalúo mediante videos que mis alumnos tienen que crear	40.2	25.2	25.2	9.3	2.04	1.01
25. Evalúo mediante proyectos que se desarrollan durante todo el curso escolar	22.4	24.3	39.3	14.0	2.45	.993
26. Evalúo mediante proyectos transversales que incluyen otras asignaturas además de la mía	39.3	32.7	19.6	8.4	1.97	.966
27. Evalúo mediante portfolios que los alumnos tienen que realizar a lo largo del curso	43.0	24.3	27.1	5.6	1.95	.965
28. Evalúo mediante tareas grupales (proyectos, presentaciones…)	18.7	15.9	53.3	12.1	2.59	.931

29.	Evalúo mediante debates que organizo en clase	29.9	31.8	35.5	2.8	2.11	.872
30.	Evalúo mediante presentaciones orales	19.6	18.7	47.7	14.0	2.56	.963
31.	Integro mi metodología de evaluación con las TIC	2.8	19.6	42.1	35.5	3.10	.812
32.	Fomento la coevaluación para hacer a mis alumnos partícipes del proceso de aprendizaje	5.6	27.1	52.3	15.0	2.77	.772
33.	Fomento la autoevaluación para involucrar a mis alumnos en el proceso de aprendizaje	5.6	25.2	50.5	18.7	2.82	.799
34.	Negocio con mi alumnado los ítems que van a tenerse en cuenta para evaluar una actividad	26.2	41.1	26.2	6.5	2.13	.880
35.	He adaptado mis métodos de evaluación para evaluar online	9.3	29.0	39.3	22.4	2.75	.912
36.	Prefiero evaluar mediante tareas, proyectos y otras estrategias a realizar exámenes online	5.6	13.1	42.1	39.3	3.15	.856
37.	Los exámenes online son una oportunidad para que los alumnos copien	4.7	9.3	31.8	54.2	3.36	.838
38.	Tengo en cuenta la diversidad y la personalidad de mi alumnado a la hora de comunicarles la nota de un examen	1.9	5.6	29.9	62.6	3.53	.691

Source: Personal elaboration.

In Table 5 we have the results obtained from the descriptive statistics of the teachers' responses to dimension 2: the learning process. On the one hand, the results show that the items with the highest median are 38, 36 and 37 respectively. On the other hand, the items with the lowest median are 16, 20 and 23. Furthermore, the item number 38 is the one with the highest percentage. In this case, the 62.6 % of teachers strongly agree on the statement about having into account their students diversity and personality when they have to be informed about their marks. Next, we have a 57.9 % of teachers on item 23 that do not use sound recordings to assess their students and a 54.2 % of them in item 37 that strongly agree on the fact that online exams give the students the opportunity to cheat. Finally, in item number 28 we find that 53.3 % of teachers agree on assessing their students through group tasks such as projects and oral presentations.

Objective 4.2 To carry out a genre comparative in order to observe significant differences according to socio-demographic variables included in our study such as sex, age experience, qualification, employment situation, institution, stage, job position, subject and position.

In this second objective, we aimed to analyze if there are differences in the responses to the items based on the socio-demographic variables that compound the survey: sex age experience, qualification, employment situation, institution, stage, job position, subject and position.

Sex

First, Table 6 shows the results obtained after calculating the Mann Whitney U test in relation to the responses to the survey items based on sex. In this case, we can verify how the value of the asymptotic significance is lower than .05 ($p < .05$), so we can state that in the items 3,4,15,23,31 there are statistically significant differences in the responses based on sex and, specifically in favour of female teachers, as it is established in the average rank. As we can see, the average rank of female teachers that consider the contents and competences of their subjects suitable is higher than the male teachers'. Besides, more female teachers prefer to assess their students by using sound recordings that their students have to produce and they use to integrate ICT when assessing more frequently than the male teachers.

Table 6

The Mann-Whitney U test based on sex

	Sex	Average Rank	U Mann-Whitney	Asymptotic Significance
3. Los contenidos de mi asignatura son adecuados	Man-Woman	40.68 59.43	765.000	.003
4. Las competencias a desarrollar son adecuadas	Man-Woman	40.97 59.32	774.000	.002
15. La mejor herramienta para una evaluación justa es el examen escrito	Man-Woman	63.06 50.30	897.000	.042

23. Evalúo mediante audios que mis alumnos tienen que producir	Man-Woman	45.00 57.67	899.000	.032
31. Integro mi metodología de evaluación con las TIC	Man-Woman	45.06	901.000	.042

Age

The Kruskal-Wallis test was carried out in order to determine the existence of statistically significant differences in some of the items of the survey based on the age of the participating teachers. After carrying out this test, we found statistically significant differences in the item number 31. Thus, the Mann-Whitney U test has been carried out in order to know which specific pairs contain statistically significant differences.

The data obtained from the Mann Whitney U Test as regards the age are included in Table 7. As we can see, there are only significant differences in the item 31. This difference shows that the average rank of teachers in their 25 or younger who tend to use ICT when assessing their students is higher than those teachers aged between 36 and 45.

Table 7

The Mann-Whitney U test based on age

	Age	Average Rank	U Mann-Whitney	Asymptotic Significance
31. Integro mi metodología de evaluación con las TIC	25 years o less-De 36 to 45 years	31.84 20.11	191.000	.006
	36 – 45 years	34.93 24.67	273,000	.033

Qualification

The Kruskal-Wallis test shows a difference in item 23. This difference shows that there are a higher amount of teachers with a degree (grado) that tend to implement the strategy of requesting their students to produce sound recordings in order to assess them in comparison with those who have other type of qualification (licenciatura).

Table 8

The Mann-Whitney U test based on qualification

	Qualification	Rango medio Average Rank	U Mann-Whitney	Asymptotic Significance
23. Evalúo mediante audios que mis alumnos tienen que producir	Degree (Graduado) - Degree (Licenciado)	11.07 6.50	13.500	.027

Employment situation

After carrying out the Kruskal-Wallis test in order to determine the existence of statistically significant differences, the results indicate that there are no statistically significant differences for any of the cases.

Stage

In this case, the Kruskal-Wallis shows significant differences in the items 16, 24, 31. As we can see in Table 9, the weigh given to theoretical knowledge by the teachers of both ESO and Bachillerato is higher than teachers who only teach in ESO. However, those who only teach in ESO use the strategy of requesting their students to produce videos in order to assess them more frequently than those who teach in both stages. Furthermore, those who only teach in ESO tend to integrate ICT into their assessment methodology more than those teachers of both stages.

Table 9

Mann-Whitney U test based on the stage

	Stage	Average Rank	U Mann-Whitney	Asymptotic Significance
16. Valoro únicamente los conocimientos teóricos adquiridos en mi asignatura	ESO-both	32.16 / 48.86	205.000	.002
24. Evalúo mediante videos que mis alumnos tienen que crear	ESO-both	38,34 / 24.14	233.000	.014
31. Integro mi metodología de evaluación con las TIC	ESO-both	53.21 / 37.61	688.500	.003

Job Position

After carrying out the Kruskal-Wallis test, we have found significant differences in the item 17. As we can see in Table 10, tutors tend to attribute to the exams the 60 % or even more weight for the final mark than other teachers.

Table 10

The Mann-Whitney U test based on the job position

	Job Position	Average Rank	U Mann-Whitney	Asymptotic Significance
17. Mis exámenes suponen el 60% o más de la nota en la evaluación final de mi asignatura	Tutor-Other	41.35 / 61.65	783.000	.000

Subject

After carrying out the Kruskal-Wallis test in order to determine the existence of statistically significant differences, the results indicate that there are no statistically significant differences for any of the cases.

Position

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Discussion and Conclusions

Regarding the different techniques used by the teachers, we have found in the research carried out by Goncalves (2014) that the 88% of the participating teachers state that the assessment methods have changed because of the integration of new and diverse instruments such us ICT, projects, oral presentations and practical tasks that contribute to foster critical thinking. This statement coincides with our results since the 53.3 % of teachers assess their students through group tasks such as projects and oral presentations. Therefore, we could confirm a considerably positive evolution and enhancement of assessment methods and instruments in comparison with the last decades' ones. In turn, we also agree with the research done by Eggers (2016), who studies formative assessment and the types of tasks and activities that benefit students' learning process. This author states that all the activities already mentioned invite us to reflect about students' progress and effectiveness of methods and teaching practices.

On the one hand, Goncalves and Eggers research differs from Andrade & Du (2017) who do not deals with assessment instruments but with assessment types and explains how self-assessment, for instance, is a great resource that must be used to complement innovative instruments in order to make students aware of their learning process and increase their motivation by observing their own progress. On the other hand, both Filstread (1986) and Pérez (1999) agree on the fact that qualitative assessment helps us approach education from a more real perspective and reject quantitative methods.

Furthermore, we agree on the proposal by Goncalves (2014) of taking into account more elements such find a way to assess the ability to solve problems and realistic tasks that are useful for the daily life of the students as well as the integration of ICT when assessing. In this case, although Golcalves research concludes that the methods and instrument have changed, regarding the integration of ICT to assess, we find that those younger teachers in theirs 25 who only teach in ESO are the ones that use this resource the most. As a sample of that, our research results shows that those teachers who only teach in ESO use the strategy of requesting their students to produce videos in order to assess them more frequently than those who teach in both ESO and Bachillerato.

As for the Bachillerato teachers, the results obtained correspond to those conclusions exposed by Pérez and Carretero (2009). Thus, we can state that Bachillerato teachers tend to attribute a higher weight to theoretical knowledge than ESO teachers, being these last ones more innovative and practical. The reason, according the author, lies in the considerable amount of conditionings and constraints caused by the necessity to prepare the students for the college entrance exams. Therefore, assessment is conditioned by what it is taught, what is learnt and also by type of tests that is going to be taken. In addition, this statement coincides with García (2010) since assessment is also conditioned by the objectives established by the person who assesses and also the contents that must be assessed. Another author who defend the relevance of setting the learning objectives from the very beginning is Morales (2001), in this case, his research differs from ours since it deals with the importance of initial assessment in order to know what to teach, who needs more attention and how to teach, and obviously assessment is also affected by these factors.

Another relevant contribution deals with contrasting the use of exams with the use of projects and other tasks. In Monteagudo's (2014) paper it is remarked the fact that the most used instruments to assess students' learning are assignments and exams but there are no implementation of projects, portfolios or oral presentations. In the case of our research, it also contrast with Monteagudo's since we have demonstrated that the 53.3% of the participating teachers use to request their students to create projects, work on group tasks and perform oral presentations. Nevertheless, in this research, the 32.7% of teachers strongly agree on giving the exams a weight of 60% or even more regarding the final mark. Thus, regarding the importance of exams, our study coincides with Monteagudo's since the results obtained show that exams are the most important instrument when assessing students' knowledge since they represent from a 60% to a 50% of the final mark.

As a result of the study carried out, some conclusions have been drawn. Thus, I consider they may serve to expand our knowledge about the real assessment in the teaching practice as well as in the learning process that Secondary Education teachers in the Region of Murcia carry out and, thus, be able to enhance possible weaknesses that this phenomenon may currently entail.

First, regarding the learning process, our conclusion is that teachers from the Region of Murcia consider that the objectives set for their subjects are more suitable than the competencies that must be developed. Although both the objectives and the competencies of Secondary Education are quite related, this result may be caused because of the fact that while the objectives of Secondary Education aim to educate students as upstanding, tolerant and respectful people that are able to develop different skills for their lives and it is something that may be achieved in some cases or not, the competencies entail a combination of practical skills, knowledge, ethics, attitude and many social components. Thus, these results may signify that we need to foster even more the development of the competencies and it should be done from a more transversal perspective.

In second place, as for the objective about the strategies and techniques used, the item with a higher percentage (62.6%) shows that a great amount of teachers has into account their students diversity and personality when they have to be informed about their marks which means that teachers really cater for their students and how they could react to a negative mark. This represent a really positive change that may have been caused by the rising of research related to the importance of intrapersonal intelligence in the classroom and how affect is a powerful weapon to increase motivation and improve our students' performance.

Furthermore, a 54.2 % of teachers strongly agree on the fact that online exams give the students the opportunity to cheat. This statement has been widely repeated by many teachers during this atypical year in which students have had to attend to online lessons and take online exams. In fact, teachers might be right if we assume that online exams are exactly the same as in person ones, I mean, they contain the same structure, types of exercises, timing, etc. In this case, exams online could be a great opportunity for the students to cheat since they have not been properly adapted to this specific situation. However, it could be interesting to observe which percentage of teachers have been able to adapt their exams to meet the requirements of validity, reliability and practicality when designing online exams.

Regarding the objective of the socio-demographic comparison, we find that the average rank of female teachers that consider the contents and competences of their subjects suitable is higher than the male teachers'. Moreover, female teachers integrate ICT when assessing more frequently than male teachers. Another reasonable factor obtained is that teachers in their 25 tend to use ICT when assessing their students' learning in a higher degree than the older ones. Although nowadays a great majority of teachers has digital skills, this statement is directly related with the academic and personal training of teachers since the younger ones use to be always aware of the latest ICT updates to implement them in their classrooms. This does not signify that the older teachers do not assess their students through ICT instruments or apps, but it might be beneficial to develop some specific and continuous training for them to take advantage of all the instruments and strategies. Thus, it could facilitate their teaching practice and develop a more pleasant and attractive learning process.

In general, we consider that the objectives of this research have been properly accomplished. As for the main objective and the specific objective number one which are closely related, we have demonstrated that teachers of the Region of Murcia are concerned teachers who care for their students when they have to inform them about the results of an exam; that they believe that online exams are not the most suitable instrument to assess since they may not contain validity and reliability and that a half of them assess their students offering them a great variety of tasks such as projects, group tasks and oral presentations. Regarding the specific objectives, as we have said, we have obtained a general view of how teachers assess in the Region of Murcia. Although this first specific objective is accomplished, we would have to take into account more factors to enlarge this research in the future if we intend to keep on delving into this phenomenon. Finally, the second specific objective has been achieved to a great extent. We have obtained relevant information about teachers based on their age, sex, job position and stage in which they teach. Thus, we could conclude that younger female teachers of ESO are more innovative than their male colleagues. We can also observe the

tendency of innovation among younger teachers in comparison with the older ones. Moreover, it is interesting as well how tutors are those who care the most about the exams since their responsibility and involvement is clearly higher.

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