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Massive Open Online Courses for IFRS education: a point of view of Spanish Accounting Educators

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Abstract

This paper is based on a survey of 103 accounting educators from different universities of Spain on the use of MOOC, especially as regards teaching IFRS. The results show significant differences in three areas of opinion: i) the importance of the use of Internet and some Web tools for academic use; ii) general knowledge and perception of MOOCs; and iii) the opinions regarding the interest of MOOCs on IFRS. The overall opinion of educators is positive because, although the majority has never taught or participated in a MOOC, over 80% consider it useful in the learning process. Flexibility is considered the main advantage of MOOCs as well as its valuable potential for autonomous learning. Our findings highlight new opportunities for innovation in accounting education, particularly as regards MOOCs on IFRS, since a significant percentage of respondents (36%) would participate as a student and even as a course instructor (22%).

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1. Introduction

The development of information and communication technologies (ICT) and globalization, has impacted, in fact, the world of finance and education. The International Financial Reporting Standards (IFRS) are the universal

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language for business, IFRS are considered a set of higher quality standards, whose main purpose is to increase the reliability of financial statements, transparency and international comparability, so as to increase the efficiency of capital markets (Brüggemann, Hitz & Sellhorn, 2013). In the last decade, 131 countries (jurisdictions) have formalized the adoption of IFRS. Some of them require mandatory application to all or some of their listed companies, whereas others allow for voluntary use (Deloitte & Touche, 2015). The member states of the European Union require the mandatory application of these standards to group accounts of listed companies since 2005 (Villanueva, Zorio & García, 2014).

In the field of education, the IFRS standard-setter (i.e., the International Accounting Standards Board, IASB) and some professional organizations as the International Federation of Accountants (IFAC), promote IFRS dissemination through mechanisms of accounting education and professional training. As a result, IFRS education coupled with the rise of ICT constitute a very attractive framework to incorporate changes and innovation in accounting education (Apostolou, Dorminey, Hassell & Watson, 2013 & 2015).

Massive open online courses (MOOC) are a recent educational tool in higher education whose use is growing in all areas. Research on MOOC in the accounting area, to date, is scarce. Therefore, the present study looks into the perception of Spanish accounting educators as regards MOOC use especially for IFRS education. MOOCs in the business area amounted up to the 13% of the global MOOC supply in 2013 (Waldrop, 2013). A detailed search of accounting courses in the main public platforms in 2015, *Class Central* (www.class-central.com) and *Mooc List* (www.mooc-list.com) showed that there were no more than 50 courses, mostly on financial statements analysis and introductory financial accounting. No MOOCs on IFRS have been designed yet. For this reason, our study provides an interesting research opportunity to learn the advantages and challenges that it would have for this specific field, from the teachers' point of view.

Thus, the overall objective of this study is to analyze the opinions of the accounting educators from different universities of Spain about the use of the MOOC for teaching IFRS. We aim to identify statistically significant differences between the preferences of educators towards such courses depending on explanatory variables, such as the priority in the use of Internet and Web tools for academic use.

After this introduction that explains the interest of the study, the second section presents a review of international literature on MOOCs. The third section describes the empirical study, followed by a final section with the analysis of the results and the main conclusions that can draw from this research.

2. Literature review

It is considered that technological advances in higher education have not been so visible until the arrival of MOOC (EUA, 2015). Its rise from 2012 occupies much of the debate in the educational and pedagogical field (Sangrà, González & Anderson, 2015) and it is seen by the global bodies as an agent of change in higher education and an opportunity for lifelong learning (European Commission, 2013; European Parliament, 2015; Ng'ambi & Bożalek, 2015; De Freitas, Morgan & Gibson, 2015).

Hollands & Tirthali (2014) and Allen & Seaman (2014) identify some institutional reasons for universities to participate in this type of innovation- i.e. increasing demand, university branding strategies and cutting costs or increasing revenues usually by means of MOOC completion certification. Ospina & Zorio (2016) find, using the fuzzy-set Qualitative Comparative Analysis (fsQCA) methodology that the absence of prestige is one of the two configurations leading to the absence of a MOOC-intensive profile.

Teaching IFRS is a remarkable emerging trend in accounting education research- see for instance the special issue of the journal *Issues in Accounting Education*, including a wide range of focus, such as the educational effects of the transition processes of local standards to IFRS in different countries, including Australia, Canada, and South Africa. It is especially challenging for teachers the change from teaching within a framework of rules-based standards to a new scenario with principles-based standards, which generates the need to design new teaching material (Jackling, de Lange & Natoli, 2013; Hilton & Johnstone, 2013; Coetzee & Schmulian, 2013). Tan Chatterjee & Bolt, (2014) analyse the literature on this particular issue in the United States and recognized the lack of resources, including IFRS-based software for effective teaching technologies and a gap in research on the perceptions of educators and students in the field. Cherry & Schwartz (2013), argue against the adoption of IFRS and highlight the opportunity they bring for better teaching based on accounting principles and not rules.

There are no specific studies on MOOCs in accounting, but existing literature acknowledges the importance of investigating which of the many resources available online will contribute more effectively to the learning process (Apostolou, Dorminey, Hassell & Watson 2013; Freeman & Hancock, 2013).

3. Empirical study: instrument, data and variables

To fulfill our research objective, a questionnaire was generated and validated by five experts. It included dichotomous and polytomous items with multiple choice questions and 5-point Likert scale affirmations, with a total of 29 questions- Six on personal variables such as gender, age, teaching experience; six questions about the priority on the personal use of the Internet and the valuation of Web tools for academic use; seven questions on knowledge and perception of the MOOCs in general terms; and 10 questions on perception of an IFRS MOOC. Reliability analysis (Cronbach Alpha 0.72) is adequate for this type of study (Jisu, Delorme & Reid, 2006).

Data were collected between December 2014 and April 2015, from 103 fully filled out questionnaires. The statistical analysis was performed using SPSS 20, a univariate analysis of frequencies and percentages and then bivariate analysis to detect statistical differences between variables.

The sample obtained, educators of different universities of Spain, mostly from public universities (98%), had balanced composition of men and women, showing a higher proportion of women in the age range between 40 and 49 years and in the case of men, a higher proportion in the range of over 50 (Table 1).

Table 1. Sample distribution by sex, age, level of qualification, type of contract and teaching experience.

Age (ranges)	Men	% within sex	Women	% within sex	Total	% of total
39 or less	5	9.6	14	27.4	19	18.5
Between 40 and 49	16	30.8	28	54.9	44	42.7
50 years or more	31	59.6	9	17.6	40	38.8
Total	52	50.5	51	49.5	103	100.0
Level of qualification						
Ph.D.	43	54.4	36	45.6	79	76.7
Degree	9	37.5	15	62.5	24	23.3
Total	52	50.5	51	49.5	103	100.0
Type of contract						
Tenure track	45	86.5	30	58.8	75	72.8
Hired	7	13.5	21	41.2	28	27.2
Total	52	50.5	51	49.5	103	100.0
Teaching experience						
Less than 15 years	10	19.2	17	33.3	27	26.2
More than 15 years	42	80.8	34	66.7	76	73.8
Total	52	50.5	51	49.5	103	100.0

4. Results and discussion

The descriptive statistics (Table 2) show that all the items related to the priority of teachers in the personal use of the Internet got an average score of 3.83 (based on a 5-point Likert scale). The e-mail is the best resource for both personal and academic use. Social networks have the lowest valuation both on personal Internet use (mean= 2.43).

4.1. Importance of Web tools for academic use

The average of the importance of Web tools for academic use (mean= 3.09) is lower than priority of teachers in the personal use of the Internet, specifically, Facebook for educational use (mean= 1.80), suggesting that there is no widespread use of Web 2.0 tools among teachers for teaching accounting. Thus, it seems logical that scholars could

see social interaction tools as less relevant for educational use (Bower, 2015). This idea is confirmed by the Kruskal-Wallis test (Table 2), as teachers giving higher priority to social networks on personal Internet use, the more important they perceive Web tools for academic use, particularly Facebook and YouTube.

Table 2. Personal use of the Internet and Importance of Web tools for academic use.

Variables		Mean	S.D.	Sig.
Priority for the personal use of the Internet	Email	4,85	0,617	
	Social Networks	2,43	1,425	
	Information search	4,63	0,657	
	Work-related	3,47	1,392	
	News	3,77	1,021	
	Global for the section	3,83	0,623	
Importance of Web tools for academic use	Email	4,55	0,837	0,051*
	Facebook	1,80	1,079	0,000***
	YouTube	2,32	1,323	0,000***
	Cloud	3,68	1,337	
	Global for the section	3,09	0,773	0,000***

Kruskall-Wallis Test. Group variable: Social Networks. ***Significant at 1% *Significant at 10%

4.2. Knowledge and perception of MOOCs

As can be seen in Table 3, more than 60% of educators knew before answering the questionnaire what a MOOC is and nearly 9% had participated already in a MOOC. Although the vast majority of educators (91%) have not participated in a MOOC already, over 80% consider them useful for learning processes (answers level 3 to 5 Likert scale), giving high importance to the criterion of flexibility. Educators whose perceived usefulness of MOOC is greater, are those with a prior knowledge of this trend, those who had participated in one and those giving more importance to Web tools for academic use.

Table 3. Frequencies of MOOC perception variables.

Already knew the MOOC phenomenon	n	%	Already participated in a MOOC		n	%								
0: No	35	34,0	0: No		94	91,3								
1: Yes	68	66,0	1: Yes		9	8,7								
Total	103	100	Total		103	100								
Usefulness of MOOC	1	2%	2	12%	3	43%	4	37%	5	6%	Mean	3,32	S.D.	0,843
Main reason to follow a MOOC	Free		Flexibility		Certification		New contacts		Other reason		Total			
	n	%	n	%	n	%	n	%	n	%	n	%		
	35	34,0	56	54,4	5	4,9	5	4,9	2	1,9	103	100		

4.3. Interest of MOOC on IFRS

As show Table 4, more than 50% of the educators consider MOOC on IFRS an advantage to share international experience on IFRS and see it positive for autonomous learning; in fact, 36% would enroll as a student of MOOC, that is a high percentage considering that between 30% and 37% expressed concern about the ability of social interaction and passivity in the learning process of participants in a MOOC. On this issue, the most recent studies show positive results (Ainin, Naqshbandi, Moghavvemi & Jaafar, 2015; Imlawi, Gregg & Karimi, 2015; Arquero & Romero, 2013). In addition, 22% of educators expressed interest in participating as an instructor of MOOC on IFRS,

which reveals an interesting fact for the discipline, because the IFRS standard-setting process is very dynamic with many revisions and new issuance of standards, which demands constant updating.

Table 4. Perceptions about a MOOC on IFRS.

Decision that would take if your Univ. offers a MOOC on IFRS	Would enroll as a student	36%
	Doing so, will prefer an initiation level	25%
	Would participate as a MOOC Instructor	22%
	Would not participate	17%
Two major advantages of a MOOC on IFRS	Encourages autonomous learning	66%
	Allows sharing international experience on IFRS	57%
Two major disadvantages of a MOOC on IFRS	Reduces the ability social interaction of participants	37%
	Encourages passive learning of the participant	30%

5. Conclusions

MOOC could be seen as an opportunity to redesign dynamic environments and teaching consistently with current learning styles. Teaching should stimulate critical thinking and not just react in response to an institutional need for updating technological teaching resources. The most important thing is how to use technology effectively in a learning environment, maintaining a critical and proactive attitude. Several studies are in favor of teaching in hybrid or mixed learning environments (Israel, 2015; Arbaugh, 2014; Freeman & Hancock, 2013; Yousef, 2012), with a blended approach together with the more traditional teaching strategies.

While in Spain and Europe there is not an adequate recognition of the role that teachers play in society (European Commission, 2013), research in this area could help to reverse that situation. Creating a MOOC on IFRS will allow to evaluate the relevance of this technological resource in the accounting context, responding to questions about the type of MOOC which is more effective for teaching IFRS, the kind of learning that this tool encourages and how MOOCs contribute to improving learning. It would also be an appropriate tool for lifelong learning. It not only helps to update knowledge but also, by taking advantage one of the main elements of the MOOC philosophy, facilitates informal networking development, improving graduates' professional perspectives.

Despite of these advantages, note that one of the issues addressed by literature on «Open Educational Resources» (Yuan, Powell & Olivier, 2014; European Commission, 2013) could affect a MOOC on IFRS. In fact to upload resources directly from the IFRS might require a copyright agreement between national accounting regulatory authorities and IFRS Foundation in order to accomplish two key features of MOOC: it is an «open and free» course.

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