

International Business Education: How to enhance the employability of students by e-learning through MOOCs

A case study of an Austrian university

Abstract

Business Schools have the mandate to educate students for successful careers. Thus, business schools have to focus on the employability of their graduates. The labor market requires not only hard skills of business graduates but also “generic skills”. In particular in international business, “soft skills” include language skills, intercultural competences and leadership.

This paper discusses the concept of employability as objective of higher education in the light of societal developments, such as migration and new media. The core of this paper deals with an innovative teaching method to achieve the skills required in the labor market for international business activities. This teaching method – a Massive Open Online Course (MOOC) on competences for global collaboration (www.cope15.at) – is presented. The method was evaluated by the authors applying qualitative and quantitative empirical methods. The paper shows that MOOCs can support learners in obtaining skills and competences for international business, if the instructors engage intensively with students and support them in their learning process. The paper also discusses the limitations and necessary conditions of this teaching scenario.

Key words: Business education, distance learning, employability

Introduction

Universities and, in particular, business schools worldwide compete for the best applicants. The decision for applying to a particular school depends on numerous factors, including the ranking

of schools, the image of the higher education institution and the career prospects offered through the specific programs run by the university. The perceived quality of a university and/or a specific study program from the point of view of applicants is closely related to the expected benefits gained from the education at a specific institution (*Warn/Trater 2001; Mizikaci 2006*). This paper first discusses crucial developments in higher education, in particular in business schools, with respect to the employability of university graduates and challenges and opportunities for business schools. The authors put emphasis on curriculum design and methods of teaching with respect to learning outcomes and skills and competences related to the labor market.

Secondly, the paper describes an innovative teaching method for international business education conducted at an Austrian university, namely a "Massive Open Online Course" (MOOC) aiming to convey „Competences for Global Collaboration“. The authors have evaluated this teaching method by applying quantitative and qualitative instruments. In addition, the authors applied a special tool for the illustration and evaluation of a learning process, namely "Footprints of Emergence" (*Williams et al 2012*). The paper shows the results of the evaluation and discusses implications for business schools.

Dimensions of Quality in Higher Education

The quality of education cannot easily be defined. The quality can be measured by input factors, such as the adequacy of the resources provided (both with respect to the number of faculty and other resources, such as rooms, equipment, labs and other facilities), the qualifications of faculty, the processes at the university, such as admissions, examinations and other similar parameters. Other dimensions of quality would relate to output factors, such as consistency between assessment and course objectives, value for money and fitness of purpose (*Warn/Tranter 2001; Mizikaci 2006*).

Education is a credence good. While learners trust in the value of their education, they cannot directly assess the specific quality. Rankings of higher education institutions and accreditation have an impact on the trust of those who select their educational institution. Therefore, it is adequate to look at *perceived quality* of higher education. The value of the learners' investments becomes evident only later, when they apply the knowledge and the skills acquired. In the context of this paper, the authors focus on the *fitness for purpose* dimension of higher education. This is linked to the transformative model of quality, which implies that the value to students stems from their learning experience (*Harvey 1995; Warn/Tranter 2001*). The fitness for purpose approach is closely related to the employability of graduates, since the quality of the educational process shall lead to skills and competences which are demanded on the labor market.

Employability of university graduates

Education shall enhance the employability of human beings. „Employability“ is defined as „the ability to gain initial employment, to maintain employment, and to be able to move around within the labor market“ (EHEA 2014). Employability is a student centered concept. This means that the student is regarded as the core subject of the educational process. The individual skills and competences which students need to successfully apply for employment or to successfully start their own business and the skills needed to maintain a position in a company and to have a career are at the core of attention within the education.

A study conducted in several countries has revealed that employers do not only expect field related competences from university graduates (*Azevedo et al 2012*). In addition, employers seek „generic competences“ of university graduates, such as problem solving skills, time management, leadership, team work, social skills, the ability to communicate effectively in the

native language and at least one foreign language, IT skills, intercultural competences and many more (*Warn/Tranter 2001*). Therefore, education should not only support students in their learning of field related competences, but furthermore students are expected to develop generic skills during their studies.

Education for (international) business: Challenges and Opportunities for universities

If a university claims that its objective is to educate students for their future careers and lives, then the mission of university has to be directed at making sure that students possess the necessary skills and competences when entering the labor market. The goal to enhance the learners' employability throughout the educational process is even more difficult to reach nowadays since numerous dynamics have strongly influenced the higher education area.

Migration makes the student and faculty population increasingly diverse, which implies that intercultural competences and awareness of diversity are key competences of students and faculty. Since more and more students continue their education while working, especially in graduate schools, the situation that students have limited time resources for their studies creates the challenge of ensuring a high quality of education. Furthermore, technological developments have had a large impact on the lives of people and on their communication behavior. Therefore, ensuring employability of graduates, dealing with an increasing diversity of students (and faculty) and using new media in education are among the most relevant factors in modern business schools.

Curricula have to be adapted to make sure that the learning outcomes lead to a development of those abilities which are relevant for employment in a certain profession. Developing university curricula which meet the demand of the labor market is challenging for several reasons. First of all, expectation of employers with respect to relevant skills and competences change rather fast due to the dynamic development on the labor market. Therefore, a periodic review of

curricula is necessary. University curricula have to be designed in a way that students do not only learn field specific competences, but that they have a chance to develop generic competences as well. Secondly, curriculum design and implementation of new study programs by university boards is not sufficient for ensuring that graduates will be employable. Instead, a commitment of the entire faculty is necessary, because each course taught has to comply with the employability objectives. Therefore, education will only lead to employability of university graduates if the faculty is able and willing to change their way of teaching so that the courses become student centered. Each course should focus on the learning outcomes of the students. Instructors have to shift from the traditional teacher-centered to a learner-centered approach (*Chang/Smith 2008*).

Business schools have applied various methods for achieving learning outcomes of students, both as regards field related competences and “generic skills”. Many schools have turned to online education since this creates various advantages for learners, such as flexibility when it comes to time and place of studies. In the next section of this paper a special version of an online course is presented: Massive Open Online Courses (MOOCs). The authors describe the notion of MOOCs and illustrate the use of MOOCs in international business education based on an example which was evaluated by interviews with faculty and questionnaires distributed to the learners.

Massive Open Online Courses (MOOCs)

Since about ten years various institutions and universities have been offering “Massive Open Online Courses” (MOOCs). These courses are “massive” because often hundreds or thousands of learners study in a particular course. The courses are open in the sense that everybody can enroll. They are fully online. The “Khan Academy” (<https://www.khanacademy.org/>) constituted one of the early versions of MOOCs and soon prestigious universities, such as Stanford University, followed (*Beckett 2011*). MOOCs constitute new forms of learning. Each individual

with online access can have access to education, to knowledge networks and tools of learning; for free. Especially in the area of life long learning and adult education, MOOCs are attractive, since learners can study at the time of their convenience and in the velocity and intensity which suits them (*Yuan/Powell 2013; Aberer 2014*). One of the crucial characteristics of MOOCs is the principle of “connectivity” (*Siemens, 2005; Downes, 2012*), which implies that the learning processes on these open online courses follows a pattern where learners connect to each other and form “knots” where learning processes start and develop autonomously.

Through MOOCs universities can develop innovative teaching methods, and through MOOCs universities can reach out to learners beyond the classic groups of students. Innovative teaching methods can be used in the branding of the university (*Ramachandran 2010*).

Case study: MOOC „#cope – Competences for Global Collaboration“

One Austrian university, FH JOANNEUM University of Applied Sciences, has offered a six weeks MOOC on the topic of „Competences for Global Collaboration“. This course was first offered in 2014 and the second edition has been conducted in 2015 (www.cope15.at).

From the point of view of teaching methodology, MOOCs can follow two different approaches. So called “cMOOCs” (“connectivist MOOCs) are based on the four principles of connectivity: autonomy, diversity, openness and interaction (*Siemens 2005; Downes 2012*). xMOOCs, on the other hand, are more conservative in that they use videos extensively and give more directions to learners, in the sense of a conventional e-learning scenario with fixed assignments and a given structure. The MOOC “cope15” at FH JOANNEUM has been created as a hybrid of cMOOCs and xMOOCs, in that it was rather open, but still presented a clear structure to the learners and videos as learning material.

The purpose of the MOOC “cope15” was to educate students in areas of high relevance for international business:

- Week 1: Intercultural collaboration

- Week 2: Legal cultures and legal systems
- Week 3: International communication and negotiation
- Week 4: Doing business in Emerging economies
- Week 5: Inter-organizational relationships and networks
- Week 6: Transfer into individual contexts of the learners.

The MOOC had been created and effectuated by a multidisciplinary group of lecturers. A major contribution to the MOOC came from the e-learning center of the university, which not only created the e-learning platform for the MOOC (wordpress) and supported the lecturers in the development of the materials for the open online course. In addition, qualified staff members of the e-learning center served as moderators throughout the course. The moderators gave feedback on postings of learners, they monitored the entire learning process and they got in contact with the experts who were responsible for the content of each week to get specific input from lecturers to questions of learners, if required. This personal interaction between the instructors and the learners was crucial, because it substantially contributed to the effectiveness of the education (see *Chang/Smith 2008* and the research design and outcome of this experiment described below).

The aims of this MOOC were manifold:

1. To educate students for employment in international business
2. To explore innovative teaching methods and draw conclusions on their effect on learners; in particular, the goal was to assess how learners adapt to new teaching styles (*Salmon 2002, 2004*).
3. To research into processes of “emergent learning” (*Williams 2011*); i.e. to give room to learners to explore the unknown (even content unknown to the respective lecturers).
4. To make the university more known to new groups of learners
5. To develop training materials suitable for companies in the education of their staff members.

In the first edition of this MOOC (2014), 537 learners from more than thirty nations actively participated in the MOOC. The majority were students from the university. However, many learners who had not been students at FH JOANNEUM participated in the MOOC as well. In the second edition (2015), 460 learners from more than thirty nations participated in the MOOC. This time, the majority of students came from the university that conducted this experiment. Learners could obtain a certificate for their learning in the MOOC “cope14”. This certificate was named “badge”. Learners who were interested in a formal recognition of their learning, could submit a documentation of their activities to the moderators.

Research Design: Qualitative and quantitative evaluation and “Footprints of Emergence”

After both editions of the MOOC, the experiment was thoroughly evaluated by quantitative and qualitative methods. While the results of the MOOC 2014 evaluation are already available, the interpretation of the data generated in 2015 are still under way. This following part of this paper discusses the results of the 2014 edition of the MOOC.

Qualitative Survey with Faculty

Lecturers whose students participated in the MOOC had been interviewed on the basis of structured expert interviews; 11 interviews were conducted. In these interviews, both the perspective of teachers in methods of instruction and the perspective of strategic developments of study programs were taken into account. The main outcome of the qualitative survey with the 11 lecturers was that the new teaching methods required a time consuming adaptation of existing materials. The interaction with the learners brought new insights, especially since many learners shared interesting links which led to in depth discussions in the online platform. This outcome is consistent with research that has proven that the effectiveness of distance learning corresponds with personal interaction (*Chang/Smith 2008*).

Quantitative study with learners

The quantitative empirical study consisted of questionnaires distributed to the learners in the MOOC. They were asked about their learning experience twice; first at the end of the first week, and then again in the last week. In addition, 104 learners reflected their learning experience by comments on the e-learning platform and seventeen of them created “footprints of emergence” (Williams 2012) of their learning processes.

In a nutshell, the learners highlighted that they found the learning materials useful, the exchange with other learners supported them in their own learning process. The interaction with the moderators was perceived to facilitate the learning. The table below shows the data of the learners’ evaluation of the MOOC.

Moderators	M	SD	N
The moderators were very helpful and assisting.	3,09	,759	78
The moderators assisted me in my orientation.	2,77	,709	75
Resources, learning content			
I found the learning content most interesting.	2,79	,680	76
I found the resources informative.	3,04	,637	77
I found the resources (learning material, related links) helpful and they assisted me with my learning.	3,01	,678	77
Overview			
I find the overview chart most helpful (e.g. structure of week 1).	3,03	,683	78
Each week one gets a good overview at the website of the contents of the respective week.	2,96	,729	78
Learning Objectives			
The learning objectives are clearly formulated.	2,94	,713	77
The learning objectives are appropriately formulated.	2,92	,632	75
Videos			
I find the videos most informative.	2,88	,683	78
The videos have an optimal length.	2,69	,730	77
Assignments			
I found the assignments time-consuming.	2,99	,781	78
The assignments are clear.	2,90	,636	78
I found the assignments difficult.	2,60	,671	78
I liked the assignments very much.	2,54	,774	76
The assignments were not clearly defined.	2,04	,733	77
Participants			
The collection of the learning content, which were delivered by the other learners, were helpful.	2,92	,619	78
I find the comments of other participants most interesting.	2,83	,768	77
I do not read any comments of other participants.	1,60	,651	78

Table 1: Answers rank from “strongly agree” to “strongly disagree” (4 levels), a higher number means a higher degree of assent (M = Mean, SD = Standard Deviation) (Table 1, Jadin et al 2015)

The online reflexions of the learners revealed that they appreciated the time flexibility in the MOOC. They emphasised the point that the participation in the MOOC enhanced their

competences in online communication, in particular due to the fact that the MOOC was conducted in English language. See some of the comments of the learners:

„... the basic idea of MOOC makes this possible... so you can do your learning whenever or wherever you want...“.

„Now I feel more confident posting my thoughts and experiences through the web....“

„...the MOOC influenced my behaviour concerning comments. ...I tried to keep my comments short and reduced to the most important information, so that they stay interesting. ...“.

In addition to the expert interviews and the quantitative study with the learner sample, the research conducted when evaluating the learning processes in the MOOC cope14 included a third tool, so called “Footprints of Emergence”.

“Footprints of Emergence” are a complex, intuitive method for reflection of one’s learning experience. The learner evaluates his/her experience in four clusters (open/structure; interactive environment; agency; presence/writing). On the basis of 25 factors the learners basically estimate on how self-organized/autonomous or given/structured by external components a learning process takes place. If the learning scenario is very structured, the curve of the learning is rather at the middle of the table; if the learning scenario is very unstructured and open, the learning curve is rather at the margins. The learning process of each individual – the “emergent learning” - takes place within these two extremes. Below a footprint of one learner in the cope14 MOOC is shown.

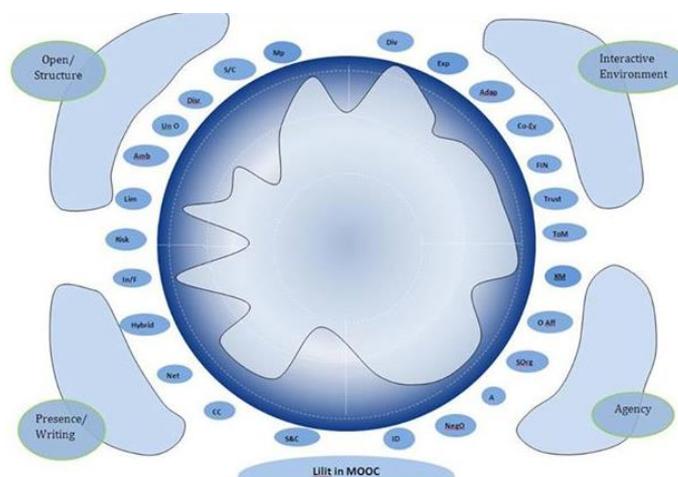


Fig. 1: Footprint of a Learner in the MOOC #cope14

This footprint of a learner illustrates that her learning process was rather open and autonomous. Especially, in the cluster “interactive environment” (see the right hand side in the upper segment) the factors diversity and frequent network interactivity were rated high.

Conclusion

Business Schools operative in a very competitive environment. The success of a school depends, *entres autres*, on the consistency of their mission and vision and their output (brand image/brand identity of a university). If a university claims to strive for excellence in teaching and learning, this claim must be consistent with the value for money of the learners. Thus, the education must be fit for the purpose, which means that the employability of the students shall increase significantly during their educational process. Since the employability of graduates is related to their field specific and generic skills and competences, universities must focus on the skills and competences of students. The learning process shall support the students in reaching the learning outcomes and obtaining key competences that are relevant for employment.

Distance learning via Massive Open Online Courses (MOOCs) can help the students to obtain key competences; in particular:

- Field specific competences in various disciplines
- Self organization, because learning in the MOOC is an independent process
- Collaborative learning and communication
- Use of new media
- Language and writing skills

Effective learning in open education is, however, strongly linked to the efforts of faculty to intensively interact with students in the distance learning scenario. This requires a thorough preparation, a huge time investment and abilities of faculty to use new media effectively.

Being part of a MOOC can be a lot of fun, too. As one learner in the MOOC “Competences in Global Collaboration” has pointed out in 2015: “My online presence changed from passive to active and from reading one article to reading many sources and creating my opinion. I can see the results and I am much more familiar with several research platforms now. I was surprised that getting in touch with completely unknown people from all over the world came naturally to me”.

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