Analysing Learner Motivation

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Abstract

Although Massive Open Online Courses (MOOCs) are far from new, language MOOCs (or LMOOCs as they are more commonly termed) are an increasing trend in many universities. This is so, mainly due to two factors: a) an increasing demand for high quality online course materials to cover the needs of professionals who would like to engage in lifelong learning, and b) the need for universities to be at the forefront of technological advances to gain more international visibility. This paper focuses on the author's experience designing four B2 level MOOCs for learners of English as a foreign language, which have attracted, to date, over 250,000 learners from 258 different countries. Two factors are discussed: motivation and attrition. Over 14,000 learner responses to a survey conducted longitudinally over a period of two and a half years is analysed to investigate some of the factors involved in learner motivation, expectations and learning styles. Moreover, as lack of guidance and scaffolding are factors that can lead to dropout, the solutions that were implemented in order to overcome these deficiencies will be outlined.

Keywords: *Language MOOC design, upper-intermediate English, learner motivation.*

1. Introduction

Given that there is great interest amongst MOOC designers and providers to understand what triggers learners to register for a given MOOC, how they interact with the course and, ultimately, what their opinion is in terms of effectiveness, the author implemented a Google Form questionnaire at the outset of the first of a sequence of 4 LMOOCs and another at the end of the last one. The LMOOCs in question are delivered on the edX.org platform (one of the major MOOC providers) and are offered as a "Professional Certificate" programme, that is, a "series of courses designed […] to build and enhance critical professional skills needed to succeed in today's most in-demand fields", according to the description on the edX website. This paper discusses some of the findings resulting from the survey, focussing primarily on the motivations behind the enrolments, as reported by the respondents, and the possible reasons leading to attrition, bearing in mind Xiong et al.'s [1] conclusions whereby motivation is significantly predictive of student course engagement and, in turn, engagement is a strong predictor of retention. Lastly, reference will be made to the solutions that were implemented to engage remote learners and, thus, decrease dropout rates. The 4 courses are described in the following section.

2. Upper-Intermediate English MOOC

Each of the upper-intermediate English MOOCs [2] broadly focuses on a different topic: (1) Business, (2) Modern Life, (3) Globalization and (4) Technology Today. The workload in each of these is distributed into 4 "course" units (containing theory and practice geared toward practicing the language) and 4 "tester" units (which aim at helping learners assess whether their performance complies with the target level of English). The content is structured into 5 sections: Reading, Writing, Use of Language, Listening and Speaking, all together adding up to over 100 activities with a varying number of items per MOOC. Each section is introduced with appropriate theoretical explanations followed by exercises. All theoretical content is embedded in the form of short video recorded presentations. The overall study time allocated to each MOOC is approximately 30 hours. The first MOOC was published in October 2018 and the rest followed sequentially, running on a calendar schedule. After the first run, all 4 MOOCs were made available on a self-paced basis. Learners can contact a teaching assistant via the Forum to formulate questions or doubts. To date, 15% of the enrolees have completed all 4 courses. The main reason given for not having completed the courses is allegedly due to time constraints caused by workload (77%).

3. Methodology

3.1 Participants

To date, there have been a total of 147.763 enrolments on all 4 courses. In Table 1 we can see the distribution in number of enrolees, median age, level of education, sex, and geographical spread.

Table 1. Demographics

	Enrolees	Median age	Level of education	Sex[1]	Geographical spread
MOOC 1	53,442	30	78.7% HE	F 46.1% M 53.4%	196 countries
MOOC 2	39.667	28	74.1% HE	F 52.4% M 46.8%	181 countries
MOOC 3	26.932	32	81% HE	F 47% M 52.6%	149 countries
MOOC 4	27.722	27	72% HE	F 44.7% M 54.5%	173 countries

[1]Not all respondents indicated this.

As we can see, the average enrolee was a young adult with holding a qualification in higher education (HE) based in a varied number of countries around the globe. The spread among males and females is roughly equal.

3.2 Instruments

Enrolees were requested to complete the pre-questionnaire at the beginning of MOOC 1. It was divided into 5 sections with a total of 24 questions based on a 5-point scale and 15 open-ended questions. The number of respondents amounted to 14,167.

The post-questionnaire was made available at the start of MOOC 4 and was divided into 5 sections with a total of 71 questions based on a 7-point scale and 3 open-ended questions. Unfortunately, it has been impossible to cross-reference the information from both surveys due to the fact that, owing to technical issues, only 6 enrolees were able to complete the questionnaire.

4. Results and discussion

As pointed out by Barak, [3], "motivation is conceptualized as an internal state that arouses, directs, and sustains goal-oriented behaviour", it "is defined as the process whereby goal-directed activity is instigated and sustained", and "it determines whether or not a person will have a certain interest or be engaged in a certain activity". Furthermore, "in the context of learning, motivation is conceptualized as an internal source which enhances, maintains, or mediates cognitive development". These facts led us to include 3 questions enquiring about motivation in the pre-questionnaire. These were:

- **QB8**. Rate the following factors according to how motivating they are for you to learn a language:

    a. An interest in getting to know and understand other languages and cultures
    b. A strong practical need in your life
    c. An internal drive to learn
    d. The influence of interculturality at home/ personal background/ learning community-based languages
    e. A need or willingness to communicate with people living in your area
    f. Rewards for your language learning achievements
    g. Your family background
    h. Willingness to travel
    i. Need to travel for work (current or future)
    j. Need to use other languages in the workplace (current or future)
    k. Possibility to get a (better) job

The options were: motivating (M), neutral (N) and not motivating (NM). Table 2 displays the results for each of these items.

Table 2. Results for question B8 in percentages.

a	b	c	d	e	f	g	h	i	j	k
M 87.6	M 83.8	M 71.7	M 54.4	M 49.2	M 60.8	M 22.7	M 77	M 70.7	M 83.8	**M 86.6**
N 11.1	N 15.2	N 26	N 36	N 35.3	N 30.7	N 46.6	N 19	N 22.4	N 13	N 10.7
NM 1.3	NM 1	NM 2.3	NM 9.6	NM 15.5	NM 8.5	**NM 30.7**	NM 4	NM 6.9	NM 3,2	NM 2.7

The results reveal that, out of the 11 options provided, the motivating factor that led them to enrol on the MOOC to learn English was primarily (a) a will to get to know and understand other languages and cultures, followed by (k) the prospects of being able to get a job or a better one. There is a tie in the third most popular option (b and j), each with 83.8%, which also reinforces the idea that both personal development and work-related motives are at the forefront. This is line with other studies such as [4, 5 & 6]. According to the motivational components that influence learning [3], we can therefore infer that enrolling on a language MOOC rests primarily on "personal relevance" (response a and b), which indicates the significance of learning to the learner's goals, and on "extrinsic motivation", which involves external incentives for learning, such as improving job prospects (response j and k). The least motivating indicator is (g) motivations stemming from family background.

- **QC3**. Do you think technology is more motivating than traditional language learning materials (like printed books, audio CDs, projectors, etc.)? Explain why / why not:

This open-ended question intended to seek information about the stimulation driven by using technology versus more traditional means and was analysed by first categorising the responses and then interpreting the results quantitatively. A total of 50% reported technology being a motivating factor and 42% thought it was not. Out of the negative answers (70%), the vast majority of these referred to reasons relating to lack of human interaction, especially with a live teacher. A further 8% either did not have an opinion or saw the value in both traditional methods and technology-based approaches. The patterns that arose and the frequency are displayed in Figure 1.
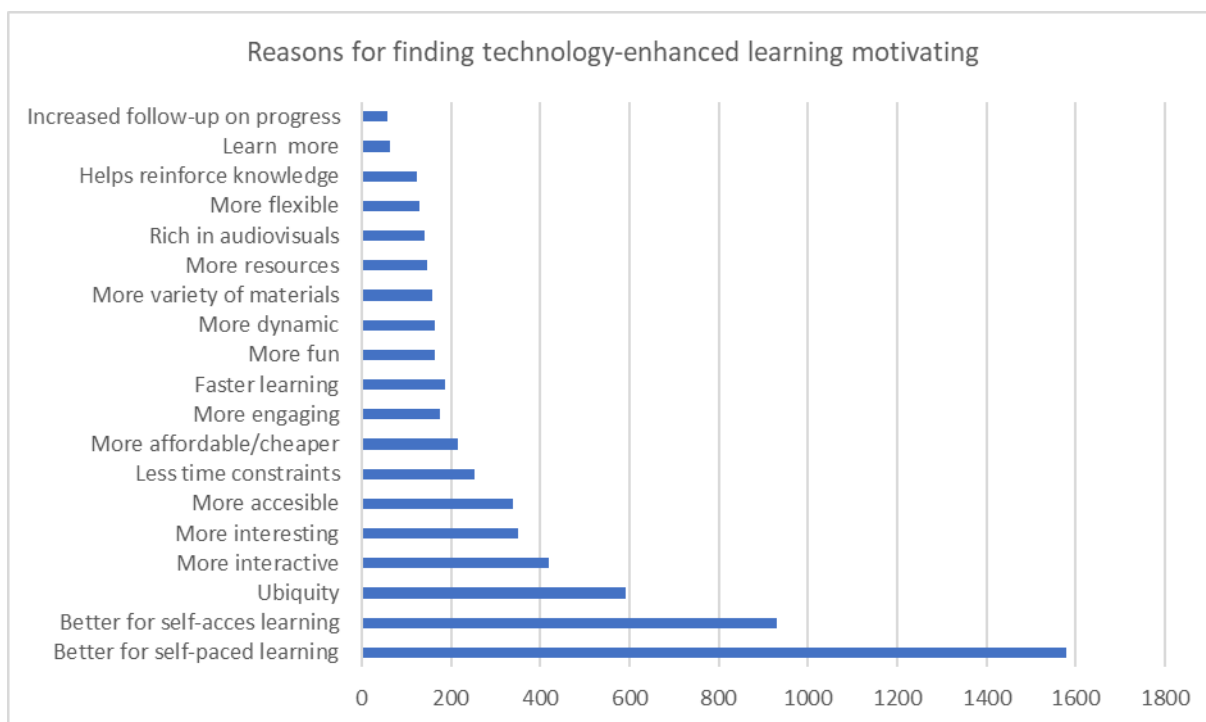

Figure 1. Responses to question C3.

Although the percentages in general were low, we were able to see several patterns emerging from the responses. The respondents indicated that technology-based materials were more motivating because they are better suited for *self-paced learning* (11.15%) and for *self-access learning* (6.57%), which is in line with the fact that they had registered on a MOOC. *Ubiquity* (3%) and *accessibility* (2.4%), together with *less time constraints* (1.78%) and *more flexibility* (0.91%), also repeatedly appeared. Cost was also indicated as many saw online materials as being *cheaper* or at least more

affordable (1.52%) than other options. Regarding content, some responded that they found these materials *more engaging* (1.24%), *more fun* (1.16%), *more interactive* (3%), *more interesting* (2.48%), *more dynamic* (1.15%), as well as *richer in resources* (1%) and *audio-visuals* (1%). Some enrolees also indicated that these materials are useful because they *help reinforce knowledge* (0.9%) and because it is *easier to follow-up on learning progress* (0.41%), probably due to the immediate feedback and scoring systems normally integrated into such online courseware. Lastly, the speed and amount of intake was also commented: 1.31% believed that *learning was faster* and 0.45%, that they *learn more* with these means.

- **QC6**. The medium of instruction influences the student's motivation to learn.

Regarding whether the medium of instruction is a decisive factor, Figure 2 illustrates respondents' opinions: 62.09% agreed and 21.71% strongly agreed that they were influenced by this fact, which indicates that a vast majority of people are lured towards learning a foreign language through technological means because it is seen to boost their will to learn. An additional 14.43% had no opinion and a neglectable 1.58% disagreed or strongly disagreed (0.19%).
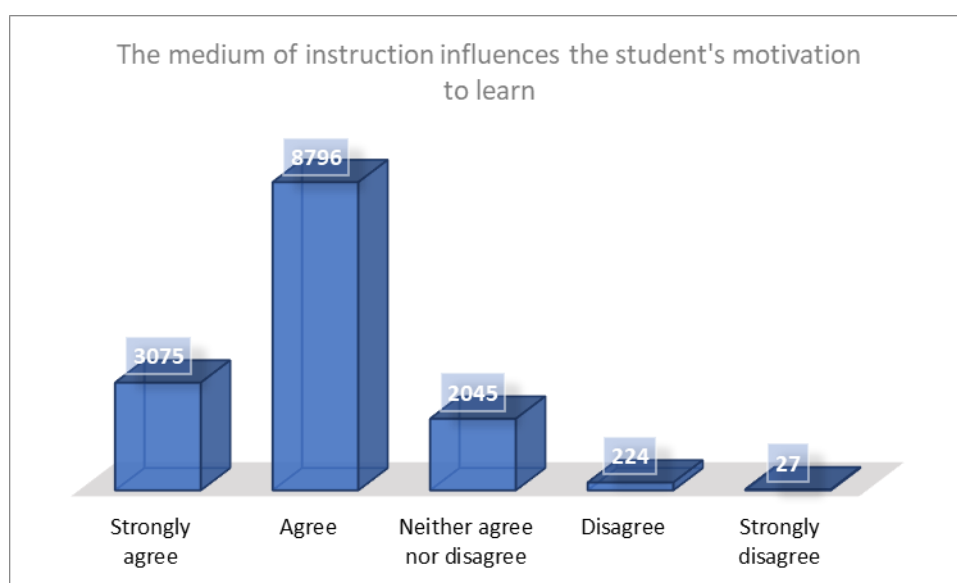

Figure 2. Extent to which the medium of instruction influences motivation to learn.

These results lead us to believe that those of us involved in MOOC materials design should take advantage of this trend and try our utmost to develop appealing and attractive content and resources so as to increasingly boost learners' motivation to take up language learning as a life-long activity, irrespective of the reasons that may drive them to this means.

5. Solutions implemented to prevent attrition

Because lack of guidance and scaffolding are factors that can lead to attrition [3], several solutions were implemented to overcome these deficiencies. In addition, because some of the more challenging areas in LMOOC design relate to providing opportunities for learners to practise speaking and writing skills, and being aware as we were that the Upper-Intermediate English MOOCs lacked real communication opportunities for the learners to produce authentic language exchanges, we designed a number of activities to support learner interaction and communication. These were programmed via Google Hangouts and conducted by postgraduate EFL teacher trainees, providing opportunities for enrolees to put into practice some of the content included in the MOOC. On the other hand, as automatic correction of written production is still not feasible to integrate, peer-assessment using specially designed rubrics was employed to evaluate open text activities, thus encouraging learners to become aware of their progress and engage in their learning process. For instance, to receive their assessment, they had to assess a minimum number of assignments written by their peers.

6. Concluding remarks

Given that acquiring a foreign language is one of the most complex processes in learning, we would like to highlight the need to enrich an LMOOC with extra resources and strategies in order to intensify

learner support, which can in turn translate into increased motivation. Additionally, self-access MOOC enrolees need to be given incentives in order to help them become efficient autonomous learners, and thus prevent current low retention rates, still oscillating in the 10% range [7].

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