
Understanding ESL Students' Motivations to Increase MOOC Accessibility

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Abstract

Massive Open Online Courses (MOOCs) have the potential to bridge education and literacy gaps by offering high quality, free courses to anyone with an Internet connection. MOOCs in their present state, however, may be relatively inaccessible to non-native English speakers, as a majority of MOOC content is in the English language. While a potential solution is to translate all MOOC content into all languages, it is not known whether this solution will satisfy the learning goals of all English as a Second Language (ESL) speakers. Through a series of interviews, we investigate ESL speakers' motivations for taking MOOCs and other online courses. Our findings show that ESL speakers have a variety of motivations for taking online courses that are not captured in current surveys, which implies that current one-size-fits-all approaches to increasing MOOC accessibility for learners with a first language other than English may not be effective. Rather, offering learners individualized tools based on their motivation and needs may be more effective.

Author Keywords

MOOCs; English as a Second Language; MOOC Accessibility; Learning Motivations.

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Name & Age	Native Language	Current Country
Alina: 50s	Russian	USA
Filip: 30s	Polish	UK
Maria: 30s	Spanish	USA
Amit: 20s	Hindi	India
Carmen: 40s	Spanish	USA
Andrej: 20s	Serbian	Serbia
Jose: 30s	Spanish	USA
Ali: 20s	Urdu	Pakistan
Pooja: 20s	Hindi	India
Diego: 20s	Spanish	Peru
Minjun: 20s	Korean	USA
Aditi: 40s	Hindi	USA

Table 1. Participant pseudonym, age, native language, and current country of residence.

Introduction

Massive Open Online Courses (MOOCs) are online-only educational courses meant to provide open access to all learners, regardless of their educational background or geographic location [1]. However, issues such as a lack of infrastructure, digital literacy, and English language proficiency have been found to hinder MOOC adoption in developing areas [2]. Additionally, most MOOCs are aimed at English-speaking audiences. A review of all publicly available MOOC courses as of October 2015 reveals that about 75% of MOOC courses are offered in English [5], while native English speakers are only 6% of the world's population [4].

This disparity between worldwide native language populations and the language of MOOC content is well known, and there are ongoing efforts to make MOOCs more accessible to audiences for whom English is not a native language [6]. At the same time, a large percentage of current English-language MOOC users are non-native English speakers, also called English as a Second Language (ESL). By understanding the motivations of ESL learners who are already engaged with English-language MOOC content, we can better evaluate existing interventions for ESL MOOC accessibility, and design future interventions that address what ESL learners actually need.

To our knowledge, there are currently no research studies that propose generalizable design or implementation changes to MOOCs based on empirical knowledge of the actual needs and motivations of ESL learners. Additionally, these motivations may be difficult to obtain from analyzing ESL student behavior within MOOCs, as such motivations may not be observable in their MOOC activity. To address some of these gaps, we interviewed 12 online learners for whom

English was not a first language, regarding their needs and motivations for taking MOOCs and other online courses. We look at the complexities of these learners' motivations and experiences to give us insights into designing the kinds of interventions that may be effective at supporting non-native English speakers in MOOCs.

Methodology

We conducted semi-structured interviews with 12 learners who were non-native English speakers, who had previously participated in MOOCs or online courses. Subjects were recruited through local community groups, Craigslist, and Facebook. Table 1 shows participant pseudonyms, ages, native languages, and current country of residence. The semi-structured interviews lasted roughly 35 – 60 minutes, were conducted in English, and took place in person or over Skype. We questioned participants about their motivations for participating in MOOCs and other online courses, their experience while taking these courses, and their learning needs. All interviews were audio-recorded and transcribed by the research team for analysis. The data was repeatedly reviewed and iteratively coded for themes around different motivations for participating in MOOCs. The codes and themes were continuously reviewed, until agreed upon by the entire research team.

Results and Discussion

The most salient themes of our analysis were the motivations that our ESL learners expressed, which we present here identified by the learners who discussed them. We additionally discuss implications for MOOC design and study, which these motivations suggest.

Motivation 1: Career Advancement by Mastering Course Material (Pooja, Diego, Andrej, Ali, Aditi, Amit)

One motivation for people to take online courses is to improve their knowledge of the subject area, which we observed in half of our participants (and which is shared by many non-ESL learners). For ESL learners with this motivation, however, it is important to design MOOC interventions that present the MOOC content with very little additional cognitive strain due to language. Presenting MOOCs in local languages, localizing examples, content and context dictionaries, or designating language-specific discussion forums may be particularly effective for supporting these participants' motivation to learn.

Motivation 2: Career Advancement by Obtaining MOOC Certificates in English (Jose, Carmen, Filip)

In contrast to those whose main goal was primarily to master the course material (irrespective of language), these participants enrolled in MOOCs to acquire English vocabulary in a specialized domain and obtain the course certificate for that specific content in English. This certificate would allow learners to demonstrate their mastery - which they may already have in their native language - in English. For such learners, administering placement tests when beginning the course to determine existing knowledge, providing non-linear navigation options to skip known content, or perhaps providing an additional certification verifying that all course content was completed in English may be more effective to better match their goals.

Motivation 3: Career Advancement for Future Opportunities and Geographic Mobility (Jose, Pooja)

Some of our participants sought out MOOCs or other online courses as a way of improving their geographic

mobility. The MOOC served as an opportunity to engage with course content, but not for a specific test or milestone; rather, learners engaged with course content because they thought it would support them in an eventual move to an English-speaking country. MOOCs could intelligently match these learners with people who live or work in the countries they hope to move to, either on discussion boards or in live chat, so that they can learn about local culture and possibly even build useful contacts.

Motivation 4: Learning the English Language for Career Advancement (Jose, Maria, Diego)

These participants took MOOCs to improve their *general* English language abilities, as they needed mastery of the language to communicate and obtain the jobs they desired. Some fulfilled this need by taking English language courses, while others chose to simultaneously improve their subject area knowledge and their English language skills by enrolling in courses on topics of interest to them, which were offered in English. For such learners, studying in an English-language MOOCs is an additional chance to practice their language skills. This experience could be enhanced with tools such as language captions, content and context dictionaries, and spell-check enabled textboxes.

Motivation 5: Managing Daily Life (Jose, Alina)

Two learners enrolled in MOOCs not to master course content or to improve their academic English skills, but instead to improve their ability to manage the regular, unpredictable experiences of daily life such as going to get haircuts, shopping, or even talking to neighbors. This need encompassed both English language and culture, and was particularly relevant for ESL speakers already living in an English-speaking country. These

learners are very likely to benefit from support groups within MOOCs that allow people in a certain geographic location to meet and share their experiences adapting to a new culture, or to practice language together face to face. For these learners, it may be beneficial to introduce content in simple English and provide examples in the courses that will demonstrate how to navigate real life situations, rather than abstractions or examples only applicable to the workplace.

Motivation 6: Building Relationships (Pooja, Alina, Minjun)

Although MOOCs can emphasize content over fostering online relationships, for some learners, MOOCs served as a way of transcending cultural barriers and accessing a more valued community – one where they could achieve the class status or professional connections they sought. Course content was secondary to forming relationships with the “right” kind of person, or to transforming existing relationships by becoming the “right” kind of person oneself. Incorporating lessons from Connectivist MOOCs (cMOOCs)- where courses do not run on a single website or with a centralized core of content, and participants are encouraged to meet in locations of their choosing and organize themselves [3]- may be more appropriate to address this motivation.

Conclusion

Non-native English speakers are motivated to take MOOC courses for a diverse set of reasons – all factors that can potentially impact the ways to best scaffold their learning needs. Their needs are as diverse as the learners themselves, and our findings show that it is not sufficient to broaden MOOC accessibility by using one-size-fits-all approaches such as translating all

MOOC content to learners’ local languages. Instead, researchers must understand and support students’ needs, presenting them with necessary and appropriate interventions to accomplish their goals.

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References

1. Tharindu Rekha Liyanagunawardena, Andrew Alexandar Adams, and Shirley Ann Williams. 2013. MOOCs: A systematic study of the published literature 2008-2012. *The International Review of Research in Open and Distributed Learning* 14, 3: 202–227.
2. J. Nyoni. 2013. The viral nature of massive open online courses (MOOCs) in open and distance learning: discourses of quality, mediation and control. *Mediterranean Journal of Social Sciences* 4, 3: 665.
3. Carol Yeager, Betty Hurley-Dasgupta, and Catherine A. Bliss. 2013. cMOOCs and Global Learning: An Authentic Alternative. *Journal of Asynchronous Learning Networks* 17, 2: 133–147.
4. 2015. English-speaking world. *Wikipedia, the free encyclopedia*.
5. Find MOOCs By Languages. *MOOC List*. <https://www.mooc-list.com/languages?static=true>
6. A new partnership to bring Coursera to the hundreds of millions of Chinese learners across the world. <http://blog.coursera.org/post/63406806112/a-new-partnership-to-bring-coursera-to-the>