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Transforming Assessment Mindsets: Professional development in early English language education through a blended MOOC and an online community of practice

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Abstract:

The Transforming Assessment Mindsets (TAM) project aims both to research and support teacher training in the real-world context of professional development (PD) in early English language education using a blended Massive Open Online Course (bMOOC). The use of technology in teachers' PD is recognised as being effective and meaningful and bMOOCs have the potential to widen participation and disseminate innovation. Additionally, bMOOCs associated with online or virtual communities of practice (vCoPs) have been shown to reduce professional isolation, foster engagement and result in higher rates of course completion. The bMOOC Classroom-based assessment in primary English education has been developed with a learning environment design that follows adult learning theories, combining cognitivist and social learning with socio-constructivism and is directed to Portuguese Primary English Teachers. This paper presents the results of the first iteration cycle analysing the pre-bMOOC survey and post-bMOOC survey replies with a focus on the content and structure of the bMOOC. These show general satisfaction with the course but also point out some dimensions that should be enhanced in further iterations, as the navigation and orientation through the different online spaces of the online environment. One major additional finding is that participants reported using regularly Gen AI-supported tools for fine tuning their writings, finding further information and summarising responses

Keywords: Blended Massive Open Online Course, Community of Practice, Assessment on Primary English Teaching, Teacher Training

Introduction

The Transforming Assessment Mindsets (TAM) project explores a holistic approach to professional development (PD) in early English language education by combining research with teacher education in a real-world context. This is conducted through the development of a blended Massive Open Online Course (bMOOC) integrated with an online or virtual community of practice (vCoP). The use of technology in teachers' PD is recognised as being effective and meaningful and bMOOCs have the potential to widen participation and disseminate innovation. When associated with vCoPs, bMOOCs have been shown to reduce professional isolation, foster engagement and result in higher rates of course completion. The bMOOC Classroom-based assessment in primary English education has been developed with a learning environment design that follows adult learning theories, combining cognitivist and social learning with socio-constructivism and is directed at Primary English Teachers (PETs) in Portugal. The rationale supporting its structure and content is the assumption that teacher education works best by focusing on practice supported by meta-cognition, so the bMOOC alternates modules of theory and practice for PETs to engage with theory then plan for, implement, and reflect on mini-classroom-based interventions. The bMOOC includes features typical of a formal online

learning experience, e.g. videos of good practice, examples of resources, peer assessment and e-portfolios and task structures are interactive, practical and exploratory and supported by reflection.

The TAM-bMOOC project responds to an identified need in PE teachers' PD. The planned educational innovation using a bMOOC and follow-up facilitated CoP will contribute to transforming teaching and learning cultures and contribute to improved knowledge around PETS' classroom-based assessment practices, PD MOOCs and CoPs in language education. The bMOOC thus creates novel conditions for learning that theory suggests might be productive but presently are not common or well understood. The project aims to investigate the effectiveness of the instructional design features of the bMOOC to stimulate a change in mindsets and classroom practices and to foster the development of a community of practice. The project has the following main Research Questions:

- RQ1: How does the participation in the bMOOC and follow-up CoPs influence teachers' CbA practices and combat their professional isolation?
- RQ2: What is an optimal design for a bMOOC to support PE teachers' professional development in assessment literacy and how can the follow-up CoP also contribute to combating professional isolation?

In this paper we present the theoretical background for the research, describe the development and structure of the course, as well as the methods used to collect data, and discuss the main results related to the content and structure of the bMOOC so far.

Theoretical Background

Classroom-based assessment (CbA) is seen as “principled ways of collecting and using evidence on the quality and quantity of people's learning” (Rixon & Prošić-Santovac 2019, p. 1). Regarding early language learning (ELL), traditional assessment methods associated with tests are considered problematic because they do not contemplate attitudinal and motivation goals, oral skills, or intercultural communicative competence. Assessment practices have not accompanied the introduction of English at earlier ages, and assessment remains troublesome (Rixon & Prošić-Santovac 2019). This is due to inadequate planning during policy implementation, assessment being at odds with the playful, oral-based approaches of ELL programmes and the influence of general education which overlooks the specificities of ELL (Mourão, et al.,2021). Teachers play a crucial role in the decision-making process which impacts on CbA, and improved assessment literacy can overcome negative mindsets towards assessment amongst teachers and stakeholders (Papp, 2019). Despite being one of the most relevant aspects of teacher education, it has been a pressing issue for decades and teachers continue to require a deeper understanding of “the purposes of and social role of assessment in education” and to grasp “the link between various assessment purposes, tools or instruments, methods and the curriculum” (Papp, 2019, p. 400). Research in Portugal (Mourão et al., 2025) has identified an incongruence between teaching and learning goals in PETS' CbA practices, which is confounded by an absence of training in assessment, misunderstanding learning outcomes, traditional cultures of assessment and professional isolation (Mourão et al., 2021). Recommendations highlight the need for an effective, nationwide intervention to upgrade the assessment literacy of Portuguese PETS that changes mindsets and CbA practices and counters professional isolation.

Effective professional development in ELL should combine practice-related tasks and reflection, experimentation and dialogue to increase awareness of the theory-practice nexus and support the development of action plans for future practice (Rich 2019). Effective PD is content focused; incorporates active learning; supports collaboration; uses models of effective practice; provides coaching and expert support; offers feedback and reflection and is of sustained duration (Darling-Hammond et al., 2019).

Massive Open Online Courses (MOOCs) have the potential to widen participation and disseminate pedagogical innovation (Teixeira et al., 2015). Richer MOOC design approaches, such as the iMOOC (Teixeira et al., 2013) which is inspired by the connectivist theory approach, make full use of networking and task-based approaches together with other features typical of a formal online learning experience, and consider many of the above-mentioned effective PD features in their equitable learning environments. These MOOCs combine “autonomous and self-directed learning with a strong social dimension and the interaction that make learning experiences richer and more rewarding” (Teixeira et al., 2015, p. 146). MOOCs are relatively under-researched for PD (Orsini-Jones et al., 2018), yet they have proven to enhance pedagogical knowledge, improve classroom practices, promote collaborative learning and contribute to continuous PD (Teixeira et al., 2018). They facilitate

peer exchange, contribute to building a community, involve peer review activities, use content as a trigger for learning through reflection, sharing and exchange, facilitate transfer to practice and are flexible (Herz et al., 2021). Of particular interest to the development of the TAM-bMOOC are the short videos, with demonstrations of assessment practices which develop capacities of noticing and reflection in teacher participants (Marsh & Mitchell, 2014). Additionally, as approaches to assessment in MOOCs are formative and involve peer-assessment this allows for “a reverberation between process and content” (Woodward, 2003, p. 303) in PD that targets assessment literacy. In hybrid or blended MOOCs, their association with communities of practice (CoPs) (Wenger et al., 2002), have been shown to combat professional isolation, foster engagement and result in higher rates of course completion (Hertz et al., 2021).

CoPs are communities of practitioners who support each other in learning to develop their craft – they involve the establishment of mutual engagement, a joint enterprise and the building of a shared repertoire (Wenger et al, 2002). The technological affordances of a MOOC can sow the seeds for the start of such a community (Jones et al., 2016), which can further develop and grow once the MOOC has been completed. Trust and Horrocks (2019) make recommendations for the sustainability of (blended) CoPs, that start with organizational support, and include leadership roles, personalized learning, guiding principles, social learning and purpose. A clear structure that facilitates the move from sensemaking towards critical reflective learning with the support of administrators, teacher educators and or researchers has shown to be influential in educational contexts (Ng & Tan, 2009). Fostering a safe environment for ‘sharing, daring and support’ (Hadar & Brody, 2010, p. 1649) in CoPs contributes to breaking isolation and reinforcing professional identity, which is central to teacher development.

Development and Structure of the bMOOC

The bMOOC Classroom-Based Assessment in Primary English Education was developed in response to challenges identified in a nationwide study about assessment practices in primary English teaching in Portuguese schools (Moreira et al, 2021). English became part of the primary curriculum in 2015, but most primary English teachers are requalified secondary teachers with limited training in age-appropriate pedagogy. Their classroom practices rely heavily on summative assessment and focus primarily on reading and writing, disregarding national guidelines that emphasize formative approaches and the development of listening and speaking skills. The fact that many of these teachers are professionally isolated, lacking opportunities for collaborative learning or professional dialogue, is also a relevant factor.

To address these issues, the bMOOC was designed as a real-world intervention to support teachers' professional development in a scalable and flexible way. As a closed 50-hour course each edition is planned for the participation of 150 primary English teachers accompanied by 10 teacher educators as online facilitators. Grounded in adult learning theory, the bMOOC integrates cognitivist, social, and socio-constructivist principles. Its aim is to enhance formative assessment literacy among primary English teachers while fostering reflective, practice-oriented learning in a supportive online community.

Consisting of nine modules, it begins with an introductory Bootcamp, followed by a foundational module on classroom-based assessment. The next six modules are grouped into three pairs, each focusing on a different oral skill: listening, spoken production, or spoken interaction. Each pair includes a theory module—where teachers explore relevant pedagogical and assessment concepts—and a practice module—where they plan, implement, and reflect on a classroom-based activity. Interactive tasks, good-practice videos, activity and assessment tool models, peer feedback, guided reflection, and collaborative discussions are integral to each phase (Darling-Hammond et al., 2019). The final module supports participants in preparing for future changes through action planning (Rich 2019).

The course is delivered via two integrated platforms: a traditional xMOOC platform (Open Edx) on NAU and a Community Platform (developed in WordPress). This dual structure supports both content delivery through the NAU platform and the development of an online community of practice, enabling sustained professional engagement beyond the course itself on the Community Platform – where the forums were placed. A third platform, Padlet, ensures that teachers have a structured space for their e-portfolios which are part of the assessment process, necessary for the course to be accredited for career progression.

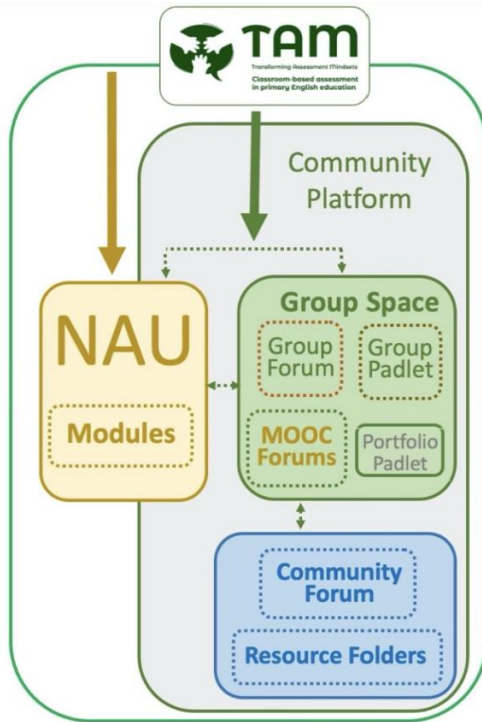


Figure 1: The TAM bMOOC ecosystem (<https://www.tambmooc.com/the-tam-bmooc-ecosystem>)

Method

Applying a design-based research (DBR) methodology that is highly relevant in an educational context where authentic, real-world interventions aim at changing practice, the TAM-bMOOC project encompasses the inter-relationships of theory, designed artifacts, and practice. The iterative DBR cycle, that includes i) enactment in context, ii) analysis and iii) redesign, will take place in 3 iterative intervention cycles over approximately 2 years. Each cycle is an 8 week-long enactment in context (the bMOOC intervention) and 16 weeks of analysis and redesign (total 6 months). The TAM-bMOOC project integrates the iterative approach of DBR following the cycles of analysis/exploration, design/construction and evaluation/reflection recommended by McKenney and Reeves (2012) and the two main RQs are structured around these cycles. Although the project intends to use several data collection methods (e.g., surveys and focus groups) and data analysis techniques (e.g., social network analysis, content analysis, statistical analysis), in this paper we only address the bMOOC surveys (data collected using SurveyMonkey) from the course first edition and analyse their results statistically and through content analysis (analysed using MAXQDA).

Results and Discussion

Two surveys were designed and integrated into the bMOOC for all course participants to complete, in the Bootcamp and immediately after the completion of the course.

Pre-bMOOC Survey

The pre-bMOOC survey had the following objectives:

- To characterize the participants' professional situation.
- To gather information about participants' online professional development experience.
- To identify the participants' views about teaching and assessing listening and speaking in primary English classes.

A total of 107 participants answered the pre-bMOOC survey, of which 90 (84%) completed the course. The respondents were 96% women and 4% men. Most of them (69%) were in the 41-50 age group and 21% were between 51-60 years old. As for their education, 69% declared having a master's degree or equivalent, and 30% a bachelor's degree or equivalent.

Main objectives for enrolling in the course

Regarding this item, the three most chosen options were: 1st: To learn more about the topic for my professional development (34,6%), 2nd: To connect and interact with other primary English teachers (24,2%) and 3rd: To get accreditation for my professional development (23,9%). The main objectives of the participants for enrolling in the online course align therefore with the project objectives, namely, expanding knowledge for professional development and connect and interact with other teachers. Of course, getting accreditation for professional development and progression is a main drive, but not the top one.

Prior experience with open and online education

The participants' experience as online students is not substantial and even very low regarding MOOCs. The majority of the participants Low (fewer than 5 courses, 43%) to Medium (between 5-10 courses, 45%) experience as online students. Most participants' experience was both in e-learning and b-learning formats (52%), with 41% having experience only in e-learning format, and 65% had already participated in a course with official accreditation for professional purposes. Nevertheless, 69% of the participants replied that they had no experience as a MOOC participant, and only 22% registered participating in, at least three MOOCs.

Experience with platform and software

In what regards the **experience as a user of the NAU courses' platform (Open EdX)**, where the course was delivered, 71% replied they had no experience with the platform, with only 24% reporting they had some experience due to participation in some courses provided by NAU. By the contrary, 60% of the participants reported having some **experience using Padlet** and 26% reported being very experienced users of the app. Interestingly, about 80% of the participants reported having no **experience with the WordPress platform**, with only 19% reporting they had some experience with WordPress.

What participants value most about MOOCs

Regarding **what participants valued most about MOOCs**, the most referred items were 1st: Course available online (16,2%), 2nd: Self-paced course (15%), 3rd: Focusing on developing specific skills (14,3%), 4th: Course with no fixed schedule (12,1%). In what refers to the form of professional development preferred, 59% of the participants chose e-learning format, 19% b-learning format and 14% face to face.

Post-bMOOC Survey

The post-bMOOC survey had the following objectives:

- To gather information about participants' perceptions about the bMOOC online environment (course and vCoP).
- To collect information about the impact of the course on participants' teaching practice. The data collected corresponding to this objective is not analysed in this paper, which focus mostly on the course content and structure rather than the perceived learning.

A total of 71 participants answered the post-bMOOC survey out of the 88 that completed it. The age and gender demographics were similar to the pre-bMOOC survey. Concurring with the MOOC experience reported by the participants, 68% reported this was their first experience participating in a MOOC.

Satisfaction with the online platforms

The global satisfaction about the use of the three platforms of the bMOOC concurred with the users' previous experience of using them, with Padlet having the highest scores followed by NAU Platform. The **Padlet Platform** had averages between 4,62 and 4,73. The evaluation of the quality of the **NAU Platform** and its content was also rather positive (the averages ranging from 4,48 to 4,75), in particular the videos. Some participants remarked minor problems with the videos' captions.

Although still positive, the **WordPress Community Platform** had the lowest scores (averages between 3,75 and 4,52). Asked to explain their evaluation, a relevant number of responses referred to difficulties in navigating the WordPress Community Platform at least in the beginning. The participants referred to navigation not being intuitive and difficulties using the message system (only one file as attachment). In the forums, they mentioned navigation issues when there were a lot of messages. Some mentioned also that using three platforms was too many spaces to manage.

Course evaluation

Regarding the **quality of the pre-course preparations**, the TAM-bMOOC website and the pre-course information sent by email were rated positively, with averages of 4,3 and 4,6. The same happened with the **Introductory Bootcamp Module**, rated with an average of 4,6. The **theory modules** had excellent scores (between 4,7 and 4,8), and the same happened with the **practice modules** (averages between 4,70 and 4,75). Asked to explain their evaluation, the participants offered some suggestions in particular needing more time/too much workload in the Practice Modules weeks. The **satisfaction with the alternation between theory and practice** was also positively rated (average of 4,7), with some more mentions to needing more time in the explaining options question.

The **quality of course support** was also positive (averages ranging from 4,29 to 4,48). Nevertheless, some participants remarked they would have liked more feedback. Regarding **interaction with peers**, the forums that the participants used more for interacting were the Module Forums and the MOOC Group Forum all housed in the WordPress Community Platform. Asked if they used **other channels of communication** (like WhatsApp or email) most of the participants stated that they did not, having used mainly the communication spaces provided in the course.

Use of Gen AI Tools

Respondents indicated having used Gen AI-supported tools to conduct several tasks. Mostly they reported making use of these tools for three types of tasks: ***fine tuning something you had written*** (32,0%), ***finding further information about a topic*** (28,0%), and ***summarising a response*** (26,0%). Significantly, course participants who responded the survey didn't value the use of Gen AI tools for **check your response to a question prompt** (2,0%) and even less so to ask for **help to complete a course task** (0%). This indicates that the use of these tools, which was neither banned nor suggested, has clearly to become mainstream within the PETs community.

What participants valued most and least in the bMOOC

The features participants considered more positive in the bMOOC were the development of specific skills/knowledge on English Teaching (21,7%) and the opportunity to learn more and rethink about assessment (21,1%), two of the main course objectives. In third place, they reported interaction and sharing with peers (14,3%), even with the reported difficulties by some on using the learning environment(s). The participants also referred the course flexibility (8%), enabling them to work at their own pace and time, and being online as positive aspects.

On the opposite, the main aspect that participants considered negative was the course high workload for the time available (47%). The fact that there were too many platforms and spaces (12,8%) and they found, at least in the beginning, some difficulty navigating throughout the various platforms (6,8), were referred as the next negative aspect. There were also some references to Feedback and Peer assessment issues.

Recommendations for improvement

The main recommendations of the course participants were to adjust workload and course structure to time to take course (25,9%), and to reduce number of platforms or interaction spaces (19,6%). Some suggestions were also made to Improve the course structure and to Improve moderators support and feedback.

Conclusions

The TAM-bMOOC project was designed in response to the need for improving PETs' PD opportunities, especially in what concerns learning assessment methodologies. The approach used intended to ensure a more effective link between research, pedagogical innovation and the transformation of teacher practices. To achieve this, it is critical to support immersive teacher training in real contexts of educational practice. Literature shows that the development and use of a bMOOC associated to vCoP could reduce professional isolation, foster engagement and result in higher rates of participation and course completion. The results of the 1st iteration cycle of the TAM bMOOC, seem to prove this assertion. The participants report general satisfaction with the course and the impact of the training in the transformation of their teaching practices. Nevertheless, there are some dimensions which need to be improved in further iterations of the bMOOC, such as the navigation and orientation through the different spaces of the online environment and the adequation of the course structure and participants' expected workload to its pace and duration. One major additional finding is that participants who at first expressed low levels of digital literacy reported after completing the course the use of digital technologies to conduct their professional tasks. The survey shows that PETs regularly use Gen AI-supported

tools for fine tuning their writings, find further information and summarise responses. The next iterations of the bMOOC will be fundamental to assess if the vCoP is sustainable in the long run and if it is able to promote a continuous reflective PD of PETs as aimed by the project.

Competing interests

The authors have no competing interests to declare.

Ethics and consent

The research was conducted and published according to recognised international standards, e.g. the Declaration of Helsinki. The identity of the research subjects was anonymised. Free, prior and informed consent to participate in the study was obtained from the respondents to the study. The research received the approval of the Ethics Committees of both the NOVA University of Lisbon and the Laboratory of Distance Education and eLearning – LE@D.

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