

# Impact of MOOC-based professional development courses on self-directed and critical learning

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## Abstract

Recent research has revealed an increase in opportunities for MOOCs to provide students from different countries with an effective platform for learning. The main argument is that MOOCs can provide fast and easy access to western universities and their resources, and with that improve collaboration and interaction between nations. However, MOOCs have been criticized for being too challenging, specialized in certain teaching methods and not always meeting the expectations of the learners. Expectations are rooted in the way participants from different countries access and construct knowledge, and their individual way of learning may not be accounted for by the educational platform.

This paper investigates professional learning within the context of a MOOC to improve learning experiences. The study started from the assumption that learners with different cultural and educational backgrounds bring different expectations and assumptions to on-line learning. The research explores the extent to which participants' expectations, learning goals and aims have been met through examination of their criticisms, critiques and concerns of a MOOC. Brookfield's Critical Incident Questionnaire (CIQ) was used on a weekly basis to capture the experiences of six English language teachers undertaking a continuing professional development (CPD) MOOC over the span of four weeks (Brookfield, 1995). Three 'Cs', concern, critique and criticism, were used to explore learners' responses. In this study a concern is something related to an activity or content that causes learners to worry; critique is defined as the act of expressing opinion about the good and bad parts of a thing; and criticism is defined as the act of expressing disapproval and noting the faults of a thing. Findings illustrate the change in participants' expectations and show them becoming aligned with the objectives of the course, critiquing rather than criticizing. This suggests that they started to take responsibility for their own learning and they became more reflective and analytical in their learning style. A wide range of critiques and criticisms that surfaced during the study have been identified around the content of the MOOC, particularly that the knowledge provided was too basic, and did not target experienced learners. Furthermore, the course lacked sufficient differentiation to meet participants' metalanguage needs, and thus it did not account for terminology difficulties one would expect from participants with different professional backgrounds.

## Keywords

Massive Open Online Courses (MOOC); The three big Cs, Activity theory. Professional development

## Research context

This paper is part of a wider research project to investigate the effect of cultural background and learning techniques of participating teachers in MOOC based professional development training and to assess MOOC efficiency and failures. This particular study, evaluates English teachers' experiences of engagement in a CPD course from the British council on the FutureLearn MOOC platform using the Critical Incident Questionnaire, CIQ (Brookfield, 1995). Teachers were from six different countries, with diverse educational backgrounds, and varying levels of experience teaching a wide range of language levels and age groups.

## Aims and Objectives

This study aligns with the idea that MOOCs can make a highly positive contribution to developing a virtual community where English language teachers can collaborate and co-operate in their learning on a CPD course. Although there has been a proliferation of MOOCs, these are not always internationally oriented or underpinned by an pedagogical framework which is familiar to all learners. Therefore, there is a need to develop MOOCs which address the needs of culturally and experientially diverse students so that access to international networks of learning can be enhanced.

In order to address students' needs, it is important to understand the experiences of students from a range of backgrounds who have used MOOCs. It is also important to understand how MOOCs should be scaffolded so that the benefits for student learning can be maximized. With a deeper understanding of learners' experiences, MOOC teaching and student learning could be transformed in a way that best creates a diversity of learning

opportunities and positive outcomes. This is a challenging task which requires examination of the learners' context, individual learning strategies and dispositions.

It is understandable that our learning culture and expectations are dependent upon where we are from and the pedagogy that is applied in our context. This study works from the assumption that different learners bring different expectations to on-line learning based on previous experiences and experiences of pedagogy within different contexts. An analysis could be applied that explores in what way there is a mismatch between the existing pedagogy on the platform and the learning approach they have.

Six participants were chosen from Brazil (Participant I), England (Participant N), Japan (Participant M), Mexico (Participant P), Syria (Participant Z), Tunisia (Participant R). They responded weekly to five questions from the CIQ to discover how they were experiencing the MOOC. Participant responses were recorded in sequence and analyzed on a weekly basis. Recurring themes across the dataset were identified, clustered around the impact of the learning approach of the course on their experience based on my research question: 'What are the experiences of English language teachers with diverse levels of English of the pedagogical approach of the MOOC and its impact on their learning?'

### **The Theoretical Significance of Activity Theory for this Paper**

Activity Theory (Engeström, 1987) was used to explore participants' experiences of learning on MOOCs. It provides an analytical lens for understanding the strengths and weaknesses in a system. By incorporating the Brookfield CIQ these strengths and weaknesses were explored and whether these issues arose from the MOOC itself or other factors outside the MOOC was considered. The mismatch between pedagogy on the platform and participants' own stated understandings and approaches are thus addressed.

We devote particular attention to the concept of contradiction in Activity Theory. In this, we chose the third generation of activity theory (Engeström, 2001), for it answers questions of diversity and dialogue between different traditions and perspectives. The third generation of this theory focuses on the contradiction of interdependent parts within and between systems, which plays an important role in the emergence of a new form of activity. This generation includes a minimum of two interacting activity systems. In this research, we have a network of two interacting systems:

1. The creators (educators and designers) of a MOOC for English language teaching (ELT) development.
2. The learners (English teachers) on the course.

This research aims to explore the contradictions which are expressed in forms of concern, critique or criticism between the two activity systems that can act as driving forces for transformation. Through exploring students' experience of learning, we are able to better identify and understand the differences and commonalities between these two groups.

### **Data sources**

This study focuses on a MOOC ('Teaching for success: Learning and Learners', run by the British Council), which was designed to provide CPD for individuals who are teaching English as a foreign or second language. This is an international course which attracts English language teachers from different countries. In this paper, we discuss the participants' responses to questions 2 and 4 of the CIQ:

- Q2. At what moment in the previous week's activities did you feel most distanced from what was happening?
- Q4. What activities during the previous week did you find the most puzzling or confusing?

Comments that provided evidence of problems or confusion were identified to explore the challenges that learners' faced on this course. Analysis drew on 48 responses from 6 participants over 4 weeks.

### **Findings**

In this section, MOOC participants' journeys through the four-week CPD course for English teachers are presented. CIQ was selected given its usefulness in observing changes across the weeks from one expectation to another, and looking at their impression of what has engaged and what has not engaged them. The data was analyzed by using Activity Theory. Each week common themes emerging from the CIQ responses were explored. By the end of the fourth week the themes reached their saturation point.

### **The three big Cs (Concerns, Critiques, Criticisms)**

Through participants' concerns, critiques and criticisms, it is possible to explore their stated knowledge (beliefs and assumptions). The extent to which they state that their expectations have been met or not met can also be established. When participants are critiquing, some rhetorical moves of giving feedback were observed (for instance the move starts with positive aspects and then gives positive points for improvement). The rhetorical

move highlights a cultural aspect of the pedagogy being applied. In the UK, for example, it is commonly acknowledged as best practice when feedback to students starts with positive commentary and then gives constructive comments for improvement<sup>1</sup>. In some Latin cultures this may be reversed, and this may cause cultural conflict. The reversal of rhetorical moves for critique is evidenced in participant P's response:

There was scarcely any other activity than to watch the videos or read the articles and reflect and post a comment on a specific question. Nevertheless, pondering about those subjects (such as motivation or praising) helps not to forget how important our role as humans is.

Participant P started by criticizing the lack of activities and finished by conceding that there was something useful to review. Figure 1 shows the comments related to concerns in week one which disappeared and were replaced by a substantial amount of critique in week two. The comments which can be identified as critique are at their highest level in week two. This can be seen as positive as constructive critique is often a good sign in learning. However, this high level of critique was not sustained in week three when most of the participants reverted back to no comment.

It can be observed that the comments which encompass criticism are relatively high in the first three weeks. However, in the last week, criticism is balanced out with critique. This change of replies is deemed to be associated with considerations made on the positive aspects of the course, as participants become more attuned to the learning approaches. It also suggests that participants' expectations change, and through time may become a more self-directed learner, making use of the course rather than expecting it to be taught in a didactic way.

#### Four main tendencies for Cs

Upon further analysis, four main tendencies emerged from the responses:

- A. Participants have concerns, critiques or criticisms of the MOOC.
- B. Participants show concerns, critiques or criticisms of other factors impinging upon the MOOC (i.e. internet connection, lack of time or lack of concentration).
- C. Participants engaged in self-critique.

It can be argued that self-critique is an important part of an (experienced) teacher being able to step back and evaluate their own development needs. Some participants tend to project criticisms onto themselves and their environment rather than on activities and content. For example, Participant R took responsibility to find out what summative and formative assessment meant rather than blaming the MOOC or other factors: "I felt distanced at the assessment segment. It has never occurred to me that there might be different types of assessment. But here we are talking about different types: formative and summative, etc."

Participants showed a lack of self-critique and attributed the problem to MOOC itself or peers. There are two possibilities for lack of self-critique, either they did not see it, or were introspectively engaged with self-critique but do not want to declare it due to face-saving. For instance, it is interesting to see how participant P distances herself from other participants, and she is very critical of peers rather than herself:

"I think when we were supposed to comment on the previous knowledge of our students, after it was stated that they had linguistic, world and sociocultural knowledge. The participants went on commenting only: "My students have linguistic knowledge". I think they missed the point, or I did not understand the activity. I thought the purpose of it was to elaborate on each of them..."

Among the four main tendencies for Cs, the most criticized one was the MOOC content. Five aspects of this were identified:



Figure 1. Categories (A=critique, B= criticize, C= concern, D=No concern, critique, criticism) vs number of answers per week 1 to 4.

<sup>1</sup> <https://academicism.wordpress.com>

**A1. Content was basic and did not present anything new.** For example, Participant I stated that he felt distanced in:

The building rapport part... I didn't get even involved in the discussion, because it is something that we learn by experience. ... It does not bring something new to me.

**A2. There was insufficient differentiation to meet participant's metalanguage needs.** Participant Z felt distanced by the plethora of information available, and she was unsure what to focus on. She might need additional support on the topic of pronunciation and perhaps this MOOC was not the best place to gain this. She needs incremental steps with careful and real-time tailored mediation to engage with this topic” “Teaching Pronunciation. I have never taught pronunciation, and maybe for that I felt distanced as I think I needed a little more in depth explanation of how to teach it... ”

**A3. The MOOC failed to address participants' understanding due to their incomplete teacher knowledge.**

For instance, participant R who is an inexperienced teacher, felt distanced, “The activity that was in Knowledge about language, talking about socio linguistic... It did not give me the practical thing to improve my teaching skills.”

This participant required an easy practical solution, and knowledge about language needs more time and investment. He lacks the metalanguage knowledge and may have insufficient understanding of the theory behind the practice.

**A4. Cultural aspect of MOOC content.** Although participant P was keen to be associated with the wider professional community to reinforce her professional identity, she expected to see the westernized structure of the class:

I think it was the video ..., because everything about that classroom felt weird. The students being separated by gender, wearing uniforms, answering like soldiers, the teacher paying attention almost exclusively to the male students. I had to surpass all this to achieve the concept I was supposed to observe and reflect upon.

**A5. Applicability:** Participant Z asked about a practical example and for further explanation of giving praise: “...step 1.8 talking about praise as we just heard a comment from a teacher, we saw no practical example, or had any extra info about the concept, so that just made roll on into the next step...”

The highest number of Cs (concerns, critiques, criticisms) are associated with the content being basic. The second highest number related to the issue that the MOOC did not consider that participants are varied in terms of metalanguage and some cannot engage with the proposed topic because of deficiencies in this area.

Linking back to the third generation of Activity Theory, the findings suggest that there are some potential indicators of contradictions between the two systems: the creators of a MOOC for ELT development and the students who are English Language teachers. These big three Cs focus on surface phenomena, such as frustrations and demotivation. Like steam to boiling water, these surface phenomena are not contradictions per se so much as the potential indicators of contradictions. And the biggest indicator of contradictions is associated with the content of the course being too basic.

## Conclusion

The findings showed that the participants are shifting from one expectation to another as the weeks proceed. The participants recognized that they have much more control in their learning. They demonstrate that they could critique rather than just criticizing the course or other factors outside the course. We conclude that utilizing CIQ helped them to become more self-directed and more critical in their learning. The participants mostly projected their Cs on the MOOC and on the content of the course. The highest reason for critiquing and criticizing the content was associated with the content being basic, and offering nothing new. The next step will be looking at other elements on which the participants projected their critique, concern or criticism. It will also explore themes which emerged in terms of commonalities between the participants and the course. Positive responses by

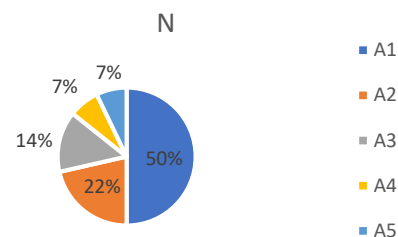


Figure 2. Categories (A1= basic, A2= insufficient differentiation to meet participant metalanguage needs on the course, A3= MOOC failed to address one's understanding due to incomplete teacher knowledge, A4= cultural aspect of the content, A5= applicability) vs number of answers per week 1 to 4.

the participants will be associated with commonalities that exist between learners and course.

### **References**

- Brookfield, S. D. (1995). *Becoming a Critically Reflective Teacher*. San Francisco: Jossey Bass.
- Engeström, Y. (1987). Learning by expanding: An activity-theoretical approach to developmental research (Helsinki, Orienta-Konsultit)
- Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14, 133-156.

### **Acknowledgment**

I wish to extend my sincere gratitude to Professor Mike Sharples and Chris Cavey, for putting me in contact with the learners on the course.