ISSN 1392-0340 (Print) ISSN 2029-0551 (Online) https://doi.org/10.15823/p.2025.157.2

**Pedagogika** / Pedagogy 2025, t. 157, Nr. 1, p. 19–44 / Vol. 157 No. 1, pp. 19–44, 2025



# Designing MOOC Support for University Students: A Case Study From 2022–2024

#### Michal Černý

Masaryk University, Faculty of Arts, Department of Information Sciences, 1 Arne Nováka St., CZ-602 00 Brno, Czech Republic, mcerny@phil.muni.cz

Annotation. The study analyses the experiences of learners who have taken part in a university course with a MOOC (massive open online course) component and provides practical insights that MOOC have a place in formal education and are associated with a sense of freedom, autonomy, and empowerment for university students. At the same time, however, to complete them, they need to acquire specific experiences and skills related to time management, self-management, and learning competencies.

**Keywords:** *MOOC*, *online learning, emancipation, student's motivation, learning diary, tutoring.* 

#### Introduction

Open online courses for many learners have fundamentally changed how online education can be viewed and what is important (Chen et al., 2022; Mackness & Bell, 2015; Susilo et al., 2013). MIT OpenCourseWare (Massachusetts Institute of Technology provided this course) can be seen as a first step in shaping what we now think of as MOOC (massive open online course). The basic idea behind this project was the openness of educational resources and the belief that there are ways and methods of teaching that allow learning design to be carried out so that the number of learners does not matter. In 2010, a significant advancement in technological possibilities occurred, making it feasible to make the most exciting university speakers accessible through video lessons. This was manifested by the course 'Justice' by Michael J. Sandel, which contained no feedback or interactive elements but only a series of videos (Diaz-Sprague & Sprague, 2024).

At the turn of 2011 and 2012, a new technological and educational concept of online education was rapidly developed, and the emergence of platforms such as Open edX, Coursera, and Udacity (Novella et al., 2024; Reich, 2015; Stracke et al., 2019). These platforms were based on the idea that there were other elements of learner interaction and activation to work with beyond video lessons, so they started to introduce the possibility of working with peer-assessed assignments, tests, or the obligation to use discussion forums or participate in webinars where questions are asked (Korableva et al., 2019; Mamgain et al., 2014). The search for appropriate methodological approaches is simultaneously linked to identifying approaches to monetisation and economic sustainability of these educational activities.

Two distinct MOOC concepts appear in the literature – cMOOC and xMOOC (Hampel & Stickler, 2024). cMOOC, or connectivist MOOC, are based on connectivism, a learning theory that emphasises individual students' learning autonomy and integration into online learning communities (Bozkurt et al., 2016; Mackness & Bell, 2015). At the core of such education is creating a personal learning environment. On the other hand, xMOOCs, or extended MOOCs, are a conception of courses built around guided content (often in the form of video lessons) and the completion of well-defined tasks for all learners (Sharzehee et al., 2024).

2012 has been hailed as the year of the MOOC, as a significant amount of content from universities (often highly selective and topping University Rankings lists) has emerged. At the same time, there has been a rapid expansion of various learning platforms. On the one hand, the result has been an educational optimism that all people can study at good universities without paying tuition fees (a dimension of social and economic inclusion), and, on the other, a particular fear that universities as institutions will disappear. Both turned out to be unfulfilled expectations. A key aspect of MOOC is the high drop-out rate, around 90%, depending on the measurement methods (Benoit et al., 2024; Bost & Riccomini, 2006; Chen et al., 2022; 2024).

MOOCs, which have undergone many changes since 2012 – micro-certificates, online degrees, paid courses, and the search for commercialisation – do not seem to have had a significant positive impact on the COVID-19 pandemic (Lozada-Tequeanes et al., 2024), which has forced a large proportion of the world's universities to teach online, often without preparation of both teachers and learners (Adnan & Anwar, 2020; Camacho-Zuñiga et al., 2021). Despite all the problems of emergency teaching (West, 2023), this fact shows that many learners may find access to this form of education problematic and challenging.

As part of our university curriculum, the idea of allowing learners at the university to take MOOC courses from other universities was conceived. The motivation is to complement and extend the curriculum with courses that we cannot teach ourselves (for example, because of the small number of potential learners), to promote internationalisation and learners' experience of different environments, and to develop

learning competencies linked to MOOC courses and online learning as such (Al Oraini, 2024; Hendriks et al., 2024). A course has been developed that combines support and development of learners at the home university who are directed to MOOCs from other universities.

The topic of integrating artificial intelligence into MOOCs is not new (Yu et al., 2017) but has been gaining importance in recent years. AI can be incorporated into efforts to improve learning skills and understanding of student progress (Becerra et al., 2024). It can be used to understand large groups of students based on analysis of their texts (Yee et al., 2023). There is debate about the adaptability of content for specific target groups (Dhungel et al., 2021) or the possibility of combining AI and MOOCs into new learning concepts (Zhang, 2024). A key question is whether AI can replace human tutors (Baillifard et al., 2025). We seem to be at the beginning of a revolution in this issue of transforming the design of custom MOOCs (Anoir et al., 2024; Baillifard et al., 2025; Rothkrantz et al., 2024).

This study will aim to present selected results of our design work over the last three years – the autumn semesters of 2022, 2023, and 2024. The course is organised as shown in Figure 1 in the Methodology chapter. It aims to develop students' ability to study MOOCs, give them support and motivation to study, and enable them to participate in this form of distance learning in an environment. An important motivation for the research is dropout reduction.

This study aims to provide answers to the following questions:

- 1. What is the student's perception of the learning process in MOOC? What obstacles do they encounter in this form of autonomous online learning?
- 2. How can a university course be designed to develop competencies, experiences, or skills (empowerment) that enable students to complete a MOOC successfully?

The research combines quantitative methods (online questionnaire) and qualitative analysis of the student diaries (autumn 2023) to provide a sound basis for thinking about possible forms of education in this area.

# ISKM61 MOOC: Learning Online

The university course ISKM61 MOOC: Learning online (ISKM61 is the university course code). The prefix ISK denotes the department or degree program. Information Studies and Library Science, M is a course designed primarily for continuing graduate students, and 61 is the course sequence within this code set. It is based on a scheme where learners are asked to study MOOC courses for ten weeks and reflect on their learning in journals. The first three to four weeks are devoted to courses selected by the tutors, which have a general, often not content-intensive basis; most focus on online learning competencies. In the second part (6 –7 weeks), learners study courses at their discretion concerning home discipline.

In the university environment, they receive support in the plane:

- Three synchronous consultations: an introductory organisational, after a general short MOOC course, and a final reflective.
- Learners keep a reflective learning diary on which they receive weekly feedback
  from the course tutor. The tutor also works with learners having problems during the semester, sending regular reports and keeping learners on the course.
- Online study material with literature, organisational guidelines, and instructions on how to study online is available for learners to use.

The *ISKM61 MOOC: Learning Online course* is taught once a year and corresponds to Figure 1. Although we reflect on the last three years of study in this study, a similar course has a relatively long tradition in the department – it was first taught in 2013.

**Figure 1**Course Structure



The course is listed as an elective for students across the university and a required elective for Information Science and Library Science students. The course is designed for a maximum of 27 learners so that the tutor can give sufficient time for feedback from individual learners. Increasing the capacity would necessitate working with more tutors.

Learners complete a questionnaire at the beginning of the course to help them reflect on their learning situation and, at the same time, to give the course tutors an overview of the student's capabilities and competencies, the problems they will encounter and the type of support they are likely to need during the semester.

The tutor (Gyampoh et al., 2020; Pereira et al., 2024) is consistently chosen as a continuing master's student, which should create a lower social distance between the tutor and the learner. The design goal was that students would not be afraid to approach the tutor about typical student issues and would feel a sense of shared experience and a higher level of empathy. At the same time, the course is supervised by a senior academic who manages synchronous meetings, assigns grades, supports the tutor, creates study materials, and is responsible for resolving course disputes or problems.

# Methodology

Our research has the character of a case study (we focus on the course and its design) with elements of action research (Hunziker & Blankenagel, 2024; Mertler, 2024). We implement the data and experiences from each course and run into its modifications in the following years. The research combines two sources of data – a Google Form that students fill out before the start of the semester (Kumar et al., 2024; Lee & Bonk, 2024) and qualitative research built on top of an analysis of all student log entries in the academic year 2023. The concept of action research is fulfilled in three areas – 1) The questionnaire allows the tutor to design communication with the group based on the questionnaires. 2) The research diary allows the tutor to vary the individual approach to the student and offer individualised support and feedback. 3) Adjustments to tutoring strategies are made over the years based on analysing the questionnaires and diaries (e.g., better support in study skills, better selection of introductory MOOC, etc.).

### Research Sample

Our research sample is course enroller in the fall semesters of 2022–2024. Table 1 shows the data for this period. The success rate is not a crucial parameter, given the sample size. However, combining MOOC and university courses achieves better results than studying the MOOC alone.

The course is taught in English, and in each course, some students did not have Czech as their mother tongue, so all the communication in the course and all the meetings were in English. The number of learners from other faculties roughly corresponds to the number of international learners. It is a relatively strong predictor of non-success, which does not necessarily mean that the learner will not complete the MOOC but that they will not complete the course, for example, because they are returning home after a placement abroad.

**Table 1** *Numbers of Learner* 

Year	Number of learners	Questionnaire responses	The success rate in completion	Completion of the questionnaire	Ratio of students studying FA: Other faculties
2022	20	18	90 %	90 %	16:4
2023	25	15	72 %	75 %	15:9
2024	27	15		56 %	21:6

*Note.* The table captures the completion rate covered in the course. FA - Faculty of Arts. The 2024 completion rate is unknown because the study was developed for the semester.

#### Research Tools

We use two research tools. The first is Google Forms, which students fill out at the beginning of the semester before studying. It contains open and closed questions about the possibility of being included in the research – the questionnaire combined open and closed questions and included consent to participate in the study. The questionnaire explored issues related to learners' feelings and experiences entering the study. At the same time, we were interested, for example, in language competence, as one of our assumptions (which was not confirmed) was that lower levels of language competence would present a barrier to study.

The second research tool analysed the students' diary entries (Janssens et al., 2018; Wilkinson et al., 2005). Learners keep an online blog or portfolio (Al-Hawamleh et al., 2022; Marinho et al., 2021) in which they are required to reflect on their studies with the following assignment:

Be specific and descriptive in your learning process description:

- What are you feeling?
- What did you learn?
- What progress have you made?
- What problems are you solving?

Learners can have this journal set to be public or private so that it is only available to the course instructors. The only condition is that comments can be added under the posts, which the course tutor handles. Although this specification is relatively precise, how learners approach journal creation varies considerably. Learners mostly used the platforms WordPress, Strikingly, Blogspot, and Notion. A total of 170 learner entries were analysed. Some learners did not wish to analyse parts of their entries at all. Some hid only part of them. This is how we came to investigate just such records. At the same time, some learners did not complete the study although they started it.

# Data Analysis

24

The data from the questionnaire were analysed by simple descriptive analysis. Due to the sample size, we use only descriptive data description and data presentation for quantitative questions. We used simple open coding for qualitative questions to process the results (Bingham, 2023; Thomas, 2011). We used the Taguette tool for the coding process (open coding has been used), established the basic categories, and presented the results (Huang & Jew, 2024).

We read the individual entries for the diaries and evaluated them in the following categories. Ideally, each entry has three codes assigned to it, corresponding to the three elements of the evaluation. The choice of codes combines the expected content with some experience in creating codes. Their final form was determined after the first five learners had read and processed them, so they were created abductively and openly.

Contents of the journal post:

FEEL – code indicating that the post focuses on the learner's experience or feelings. CONT – a code indicating that the post is focused on educational content.

F/C – code indicating that the contribution has both components equally represented.

Interactivity with the tutor:

TUT – code indicating that the post contains student interaction with the tutor.

IND – code indicating the post does not contain student interaction with the tutor.

 $NTUT-a\ code\ indicating\ that\ the\ post\ contains\ student\ interaction\ with\ the\ tutor;$  however, the learner exhibits features of expected interaction with the tutor in the post.

Structuring of the journal post:

FORM – the contribution is as concise as possible and has such scope and depth to meet the formal mandatory features.

MOTI – the paper contains distinct elements of motivation for the student to reflect on their studies, to connect them with their life, and to reflect beyond the mandatory framework.

Next:

X – the code indicates a paper that is non-returnable, has been hidden by the student, deleted, or the student did not wish to be included in the research.

The results of the codes were then entered for each week and student into a spreadsheet where the student agreed with the researcher's treatment of their responses.

## Ethics and limits of research

In the data processing, we proceed by selecting from the research sample learners who do not wish to be included in the research. Participation in the study was optional and was obtained in two ways: for self-reflective questionnaires through a question in Google Forms for reflective diaries by affirmative consent. Students were informed that participation had no bearing on the final assessment (indeed, it was not procedurally related to it in any way) and was strictly voluntary. In the second step, we perform anonymisation by removing identifying data so that we work with anonymous data in the case of the questionnaire. In the case of student diary evaluation, such a procedure is impossible. Thus, we used a coding process whereby a different researcher carried out the code determination and the first reading of the record rather than the interpretation of the data, which was linked to the already anonymised table with the code designations of the learners. The choice of codes (see the Data Analysis section) corresponded to what we were interested in researching – the interaction with the tutor to form a reflection on the study and the student's degree of formality or motivation. Thus, the focus was on study skills, reflection ability, and the mode of interaction with the tutor, whom we consider to be the mainstay of the course. The fact that all the

learners wrote in English and communicated in English should remove the problem of gender or cultural similarity.

The research shows three significant limitations to be aware of in processing and interpreting data. Firstly, the sample of learners is relatively limited – if we had a larger sample of students or students from more than one university, it would be possible to eliminate some of the effects of chance – a specific lecturer, university system, or selection of learners. At the same time, we need to reflect that learners have voluntarily chosen such a course, and it is not entirely clear that they have a representative learning profile to the population as a whole.

The second limitation concerns the processing of qualitative data from the study diaries, where all data were processed by one researcher, which can manifest itself in a certain degree of subjective categorisation of sub-elements.

A third limitation of the research is that we cannot measure only the impact of a particular course on learners' academic success or feelings, as they are in a complex university education space, some of them in a linguistically and culturally different environment. This means that a much larger number of factors than this study can describe and analyse may influence learners' work and feelings, as well as their ability to complete a course successfully.

The data for 2022 were published in a separate study (Černý, 2023) and are partially reused in this study.

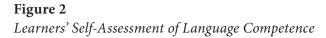
#### Results

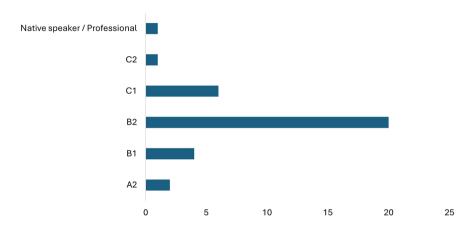
For clarity, we divide the presentation of the results into two parts – the first focuses on the data from Google Forms, and the second on the analysis of the logs.

# Descriptive Analytics: Google Forms Data Aggregated for Semesters 2022-2024

Regarding the students' gender, 22 identified as female, 11 as male, and one did not fit into any categories. A small sample size can be problematic in terms of reliability. On the other hand, 33 learners correspond to 46% of the students. The survey was voluntary, and the return rate is realistically high, considering the number of students who completed the course. Some students – see Table. 1, did not consent to participate in the research.

For language competence, it is noticeable that most students (Figure 2) are at the B2 level, at least in terms of their perception. At the same time, the pre-screening sessions show that most students have no problem talking about their studies in English, reflecting on them, or verbally describing what they have learnt. In this respect, their self-assessment can be characterised as relatively credible. Only two students had an A2 level, corresponding to the sum of C2 and native speakers.

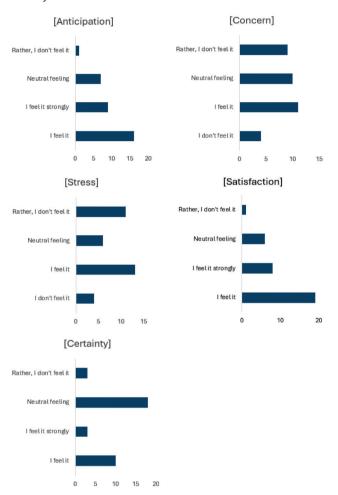




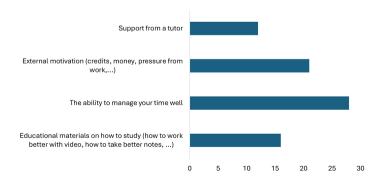
The second set of questions was projective and related to the emotions that learners expect to feel while working with MOOC (Figure 3). The strongest emotions declared were Anticipation and Satisfaction. Approximately half of the learners felt Stress. These data show that learners are relatively motivated to study, are linguistically prepared at the time of enrolment, and at the same time expect that studying will bring them some form of satisfaction. Thus, in terms of expected learning, this is a very appropriate mix of input emotions to work with further in the course.

Figure 4 shows the learners' stated needs as they expect them during their studies (they could select multiple values). An interesting finding is the low demand for a tutor, which is lower than the demand for study support materials. There is a relatively strong need for extrinsic motivation, especially credit motivation, in the case of the course. By far the most potent issue or demand is the ability to work with managing one's own time. The students also continuously reflect on this in the midterm and final meeting. Working with one's own time is a crucial competence for learners to implement their MOOC studies successfully.

Figure 3
Emotions Felt by Students



**Figure 4**The Stated Needs of Students in Support of MOOC Study



If we look at the qualitative part of Google Forms, learners indicate several areas of focus for motivation related to MOOC learning. The referencing of individual students corresponds to the row in the table where they are randomly sorted. The researcher does not know the identity of the individual students to link to their responses. The first one is the addition of topics that are missing from the university offer:

I can learn things others would wave their hands over and determine whether I enjoy the course. (learner 21)

I want to learn new skills that are not taught in my studies. (learner 5)

I want to study topics that are not available at my university and I do not have the patience and self-discipline to learn only from books. (learner 25)

These statements show that learners may find the content interesting, which is also mentioned by other learners in their responses (often by enumeration). Specific to this is the motivation to learn associated with the MOOC format, which is different from conventional university education and allows learners to have a different learning experience.

I want to learn and understand which learning style suits me best. (learner 29)
I can learn whenever possible because it is more persuasive teaching than in-person. (learner 30)
I want to see if I can learn something independently, even if no one is watching me. (learner 32)
I find studying MOOCs much more convenient and, in some fields, better. (learner 15)

These answers relate not only to the form but also to another important aspect of studying in a university environment, namely freedom; it seems that MOOCs are emancipatory in terms of motivation, allowing students to choose the time and content of their studies and, above all, to take responsibility for them. Taking responsibility for learning may be one of the essential arguments in the debate about whether and to what extent MOOCs belong in the university environment – learners, at least in our research (across years), emphasise the development of learning skills and freedom to learn as an essential element of motivation.

At the same time, it can be said that they are returning to considerations of time management, which they see as one of their weaknesses that they are trying to work on:

Because I am going to have to organise my time well. (learner 15)

I want to be more productive and also have better study methods. (learner 27)

I did not have much time for the courses last year and wish to return to it. (learner 24)

One of the problems in my academic career is time management. (learner 20)

It is, therefore, a challenge and a task simultaneously. As we have shown above, these answers form a particular ambivalent discursive field – on the one hand, learners want freedom and autonomy to have a choice, but they are not ready for it. They lack study skills and the ability to manage their time, and MOOCs allow them to saturate

this perceived problem in a certain way. It seems clear that university education should aim to develop these skills in learners across the curriculum. Our analysis suggests that the choice of MOOCs manifests the need to gain freedom and competence, arguably more than an interest in this learning form.

At the same time, however, we can say that the new form may be attractive to some learners:

```
I want to try new things that I wouldn't have tried otherwise. (learner 22) I find them interesting, and I like the concept. (learner 2) It's something new. (learner 25)
```

It is clear from these responses that students find the question of novelty or new forms appealing, allowing them to step out of the stereotype of education that - in the context of other responses – does not always suit them. From the reflections we conducted with students, it appears that for some students, this form of education is attractive compared to regular university education, especially when personal reasons do not allow them to study full-time (e.g., because they are worried about a family member).

Moving on to the next question, we can analyse what learners think about MOOCs. Again, the answers will offer us a broader field of thought for further educational considerations. When learners reflect on MOOCs as such, they often describe the anxieties that come with them as they realise that their learning is not as easy as it might seem at first sight:

With MOOCs, for example, I lack personal contact with teachers and colleagues, which can be demotivating. (learner 30)

It sounds interesting, but it will require a lot of discipline and motivation. (learner 29)

It's hard to find the motivation to finish the course. (learner 31)

MOOCs are not available to everyone and are probably more likely to appeal to people with academic degrees. (learner 7)

The learners are thus aware of the risks (motivation, time management), which they reflect in the quantitative data. At the same time, they work with the dimension of a particular social exclusivity that real MOOCs bring. In this respect, it is interesting that they situate them while enumerating the positives in perception in a solid framework of occidental liberal values:

```
It's good because I can choose when I want to study. (learner 20)
```

I think it's great because people can study at less cost, regardless of time and space. (learner 13) The course allows me to choose what we want to teach ourselves. (learner 25)

These answers relate to what we have already identified in the previous question as the space of freedom and emancipation. For some learners, formal education's formal cohesiveness and rigidity is a barrier they perceive as powerful and from which they want to break free. This aspect is interesting in that our research sample, however, also works with the structure of credit and (in some ways, the formal and power functions of the educational environment).

For some learners, the opportunity to improve their career profile is also crucial:

They allow people to attend courses and learn skills in fields that would otherwise be closed to them.

*I can choose the field of study I want.* (learner 2)

This is an excellent opportunity to access quality teaching materials at the university level. (learner 25)

*I think it can be a powerful tool to enrich your resume.* (learner 20)

These answers shape two important career lines of study. The first is the conviction that education can have a dimension of leisure, of self-realisation, of something that does not generate economic profit but, at the same time, allows one to achieve some self-knowledge. While conventional "study" needs to be more economically sophisticated, MOOCs are an entry into leisure education. The second dimension is just the opposite – they allow one to gain elements for a CV (as the last respondent in the excerpt says) that can be used for job gain or career advancement.

#### Data from the analysis of student diaries - semester 2023

As we reported in the methodology – the semester 2023 was chosen for coding the individual diary entries because it reflected the didactic adjustments already made to the course and the instructions for tutors and learners, and at the same time (unlike the semester 2024, it was already completed at the time of the study). Individual learners are captured by letter coding in Table 2 in Appendix II. The descriptions of each abbreviation are provided in the study methodology, with a dash indicating that the learner did not submit the assignment.

The first area we can analyse is the content of the contributions in terms of whether they focused more on emotions and feelings from the study or educational content. Most learners can reflect on the content from the data, but working with multiple affective structures is challenging to perform and become aware of during education.

FEEL – occurs in 22 papers that were analysed, with nine learners. Except for learner U, this form of reflection appears mainly in the first part of the course. This could indicate both a gradual gain of confidence and a gain of a specific routine of studying, where learners no longer need to reflect on their feelings and can concentrate more on the content.

CONT – suggests (with its 98 occurrences) that it is the educational content that is of primary interest to learners, which is surprising given the design of the course, but less so in light of the responses in the qualitative part of our analysis – the course is

not just for learning skills, but for gaining knowledge and skills of their own, which the university does not offer. So, learners went for them.

F/C – occurs in 13 learners and is the primary targeted learning category, reflecting both the knowledge gained and the learners' feelings. The total number of occurrences is 48 and covers all weeks of study relatively evenly. Thus, the course does not led to the development of this reflective domain, although the question is whether learners are interested in it.

The structure of the paper was analysed in two categories – the course tutor made all the students who had completed the course produce posts at least in the FORM category, i.e., meeting the minimum parameters necessary for recognition of reflection within the study. The second category allows monitoring the student's ability or willingness to work more deeply with the reflection.

FORM – this category of reflection is interesting in that it allows for tracking some progression of learners over the semester. Short and straightforward reflections occur dominantly in the first week (6 out of 33), and three learners form the dominant approach to producing their papers (A, F, R). Interestingly, learner's approach started with more formal brief papers and was able to abandon them gradually.

MOTI – the targeted form of post-creation appears as dominant in our research sample with 134 occurrences and forms a numerically complementary structure to the previous code.

The last part of our analysis focuses on tutor interaction, which we differentiated into three categories. We assumed that the absence of a tutor is a significant barrier to learners' ability to complete courses. However, at the same time, it is not clear what kind of interaction they need.

The TUT is a key and desired aspect of the interaction between the tutor and the learner. However, it only occurs on five occasions, mainly at the end of the semester (the last week has three occurrences). The second variant is NTUT, where the learner expects the interaction. However, it is not present in the paper – usually because it occurred in another setting (tutorials, emails) and is found in two instances. Thus, the IND is quite dominant, with 163 occurrences, showing the independence of the learner and the tutor. While learners perceive the tutor (see our 2023 study) as a necessary part of the course, they do not seem to expect direct interaction in the diaries, however much it is given to them each week. Thus, the student dominantly writes a paper and receives feedback but does not continue the dialogue.

#### Discussion

Our data show that the university environment and tutoring are essential for reducing drop-out. Gütl et al. (2014) report that only a limited number of learners in

mainstream courses (they report 22%) plan to complete them, and less than half of them succeed. Our course is specific in that learners are motivated to complete courses to a considerable extent (in our research, realistically outside B, L, and P). However, the number of those who do not refer to completing the course successfully is minimal (N, V). The two unsuccessful learners in our research were able to produce learning logs above the required minimum level but did not respond to tutor feedback. It might be expected that their learning failure may not be fixated on this course alone but on a broader learning change, which would again be consistent with the findings of Gütl et al. (2014). A sense of discussion, self-reflection, and working with a tutor is essential for academic achievement (Wei et al., 2023).

From the qualitative part of the research, it seems essential that learners acquire study skills, which in the context of MOOCs are often linked to the ability to self-regulate and self-manage their studies (Albelbisi & Yusop, 2019; Hendriks et al., 2020; Zhu, 2021). However, our data suggest that this is a broader phenomenon and that self-regulation plays only a partial role; broader skills for online learning are also essential (Li et al., 2023; Linde et al., 2023). Learners need to be able to manage their time management (Wei et al., 2023; Zeng & Xin, 2023).

In terms of broader social perspectives, it is significant that the course has created an environment in which learners can achieve good academic outcomes in terms of drop-out and, at the same time, experience what they perceived as essential in their descriptions of their motivation – that is, liberation from a particular power discourse of universities (Blackledge, 2012; Saarinen, 2008) despite the technological solution to the problem, which is sometimes associated with an emphasis on a new discourse of power (Burns, 2020; Fairclough, 2023). Learners have a strong understanding of education as an emancipation from standard learning practices and their associated expectations, referring to current predictions of the development of tertiary education (Pelletier et al., 2023; 2024), even though interest in MOOCs as a form of education is clearly past its peak of popularity globally (Stracke et al., 2019).

The study showed that although there may be some scepticism in academic discourse about how MOOCs can enter the educational process, they have significant value for students. However, for them to fulfil this stated role, they must be linked to the building of a deliberate, thoughtful, and comprehensive educational infrastructure on the part of their home university that enables them to gain the experience, skills, and confidence towards the possibility of learning in this (or other online independent forms). Using MOOCs in the university curriculum diminishes the discourse of power (Foucault, 1977; Ryan, 1991), a general value university should strive for.

We find this sociological aspect educationally interesting and broadly consistent with the Horizon Report (Pelletier et al., 2023; 2024), which places technological change in the context of political and social factors as determinants of education. Although our sample selection is not representative – it is a sample of students who

want or want to study MOOCs – it shows a strong potential for this form of learning, which in many ways goes beyond the common phrases about openness, free or low barriers to learning (Clarà & Barberà, 2013; Siemens, 2005).

#### Conclusion

We can refer to the individual research questions to summarise the study results.

# What is the student's perception of their learning process in MOOCs? What obstacles do they encounter in this form of autonomous online learning?

In this question it is possible to see both a sociological and technological dimension. Students must take a course with a certain degree of freedom, with a different learning style and related to subjects that their study profile does not offer. It is an inevitable stepping out of the supervisory discourse of the parent educational institution. It is essential to keep this dimension in mind if we include courses – such as ISKM61 – in the formal curriculum at university.

The second dimension is education – students must overcome obstacles of two kinds. First is the lack of or weak time management, which they mentioned in the research and the colloquia during the semester. The inability to manage time well is very problematic for studying MOOC. Therefore, university support should also focus on this aspect. The second is general study skills and experience of self-study. Independent study is challenging if a student does not know how to study an MOOC successfully. Thus, the goal of the design of the educational support should be to create an educational situation leading to the gain of self-empowerment based on experienced success.

# How can a university course be designed to develop competencies, experiences or skills (empowerment) that enable students to complete a MOOC successfully?

The extant data indicates the importance of utilising design support that fosters a positive experience (empowerment). It is important to note that this cannot be set universally. However, it can be clearly stated that the human tutor has a central role in the process of empowerment and reflection of learning in MOOC. The tutor plays a vital role in motivating students, creating a sense of self-confidence and support, and maintaining a sense of interest in their studies journey. On the one hand, it can be seen as a form of external motivation. As a fundamental element in developing learning competencies associated with the process of self-directed learning. From our research, it is essential to emphasise the term "process" to view the complex structure of the tutor and his/her work. The "process" is based on the knowledge of the student's initial capabilities and leads them to achieve maximum performance. The tutor's work here is not focused on the outcome (product) but on each student's individual progress.

It seems helpful to work with elements that facilitate the process of self-directed learning and thus to gradually dose or divide the demands on students who acquire them. This may include pre-selecting subjects, helping with learning strategies, and pointing out common mistakes and obstacles.

What seems crucial is the realisation that this kind, of course, is not "credit monetisation" – that is, it does not serve to delegate learning to someone else and let students' study independently, but in a gradual, systematic building of their skills and competency capacities.

This research has identified some crucial elements that could be transferable to other universities that want to run courses of this kind. At this point, we take the liberty of presenting them as short recommendations:

- Tutoring is essential for academic success.
- It is essential to link MOOC learning with the development of learning and self-management competencies, although the forms may vary.
- For learners, time management is a critical factor that they describe as a barrier to successful study. However, this is perhaps a more general issue that university education should address (Binkley et al., 2012; Nieuwoudt & Pedler, 2023; Zimmerman et al., 1994).
- MOOCs are attractive to learners primarily because they allow them to learn more freely – in content and form – to experience autonomy and self-direction. This is an aspect that universities could and should implement in the regular curriculum.
- Experiencing MOOC courses in a controlled university space can increase confidence in one's learning progress.
- It is advisable to help students choose courses that complement or extend their study profile, which is often non-traditional or sub-standard. This support could include study consultants or tutors selecting and describing individual recommended courses.
- At the same time, for some students, the feeling of free choice may be so important that they demand university support in their studies, but they need to be able to have their own "uncontrolled" study activity.
- The design of learning support should lead to empowerment in self-study.
- The development of technology seems to make it possible to overcome language barriers that students do not describe at all. Thus, if we see MOOCs as part of the internationalisation of the curriculum, it is possible to work with their high linguistic inclusiveness.
- Students need to gain experience of success with MOOCs. This then reflects positively on their empowerment.

However, the fundamental recommendation is quite general – students want MOOCs in university education because they create a space for alternative educational paths and freedom. Based on our data, can also help develop actual competencies for self-directed online learning, which we consider to be essential input into the competency profile of a university graduate. At the same time, considering the research findings, online MOOC learning is not self-evident, and learners need to be supported and systematically helped to acquire the appropriate competencies for learning.

# Acknowledgement

I acknowledge Tereza Karlová for coding Table 2, Nikola Svobodová for tutoring in 2023 and 2024, and Tereza Kořínková for tutoring in 2022. I also thank the students for kindly allowing me to do the research.

#### References

- Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: students' perspectives. *Online Submission*, 2(1), 45–51. https://doi.org/10.33902/JPSP.2020261309
- Al Oraini, B. (2024). Self-determination and intention to adopt massive open online courses (MOOC) for professional development. *E-Learning and Digital Media*, 20427530241256338. <a href="https://doi.org/10.1177/20427530241256338">https://doi.org/10.1177/20427530241256338</a>
- Albelbisi, N. A., & Yusop, F. D. (2019). Factors influencing learners' self –regulated learning skills in a massive open online course (MOOC) environment. *Turkish Online Journal of Distance Education*, 20(3), Article 3. <a href="https://doi.org/10.17718/tojde.598191">https://doi.org/10.17718/tojde.598191</a>
- Al-Hawamleh, M. S., Alazemi, A. F., & Al-Jamal, D. A. H. (2022). Digital portfolio and self-regulation in speaking tasks. *Asian-Pacific Journal of Second and Foreign Language Education*, 7(1), 1–19. https://doi.org/10.1186/s40862-022-00141-w
- Anoir, L., Khaldi, M., & Erradi, M. (2024). Intelligent tutor systems and the personalization of pedagogical objects in adaptive e-learning. In C. S. Gosavi, G. Bhunkar, A. B. E. Eilu (Eds.), *Interactive media with next-gen technologies and their usability evaluation*. Chapman and Hall/CRC.
- Baillifard, A., Gabella, M., Lavenex, P. B., & Martarelli, C. S. (2025). Effective learning with a personal AI tutor: A case study. *Education and Information Technologies*, 30(1), 297–312. https://doi.org/10.1007/s10639-024-12888-5
- Becerra, Á., Mohseni, Z., Sanz, J., & Cobos, R. (2024). A generative AI-based personalized guidance tool for enhancing the feedback to MOOC learners. *Proceedings of 2024 IEEE Global Engineering Education Conference (EDUCON)*, 1–8. <a href="https://doi.org/10.1109/EDUCON60312.2024.10578809">https://doi.org/10.1109/EDUCON60312.2024.10578809</a>

- Benoit, D. F., Tsang, W. K., Coussement, K., & Raes, A. (2024). High-stake student dropout prediction using hidden Markov models in fully asynchronous subscription-based MOOCs. *Technological Forecasting and Social Change*, 198, 123009. <a href="https://doi.org/10.1016/j.techfore.2023.123009">https://doi.org/10.1016/j.techfore.2023.123009</a>
- Bingham, A. J. (2023). From data management to actionable findings: A five-phase process of qualitative data analysis. *International Journal of Qualitative Methods*, 22. <a href="https://doi.org/10.1177/16094069231183620">https://doi.org/10.1177/16094069231183620</a>
- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., & Rumble, M. (2012). Defining twenty-first century skills. In P. Griffin, B. McGaw, & E. Care (Eds.), Assessment and teaching of 21st century skills (pp. 17–66). Springer Netherlands. <a href="https://doi.org/10.1007/978-94-007-2324-5">https://doi.org/10.1007/978-94-007-2324-5</a> 2
- Blackledge, A. (2012). Discourse and power. In M. Handford & J. P. Gee (Eds.), *The Routledge handbook of discourse analysis* (pp. 616–627). Routledge. <a href="https://doi.org/10.4324/9780203809068">https://doi.org/10.4324/9780203809068</a>
- Bost, L. W., & Riccomini, P. J. (2006). Effective Instruction: An inconspicuous strategy for dropout prevention. *Remedial and Special Education*, 27(5), 301–311. <a href="https://doi.org/10.1177/07419325060270050501">https://doi.org/10.1177/07419325060270050501</a>
- Bozkurt, A., Honeychurch, S., Caines, A., Maha, B. A. L. I., Koutropoulos, A., & Cormier, D. (2016). Community tracking in a cMOOC and nomadic learner behavior identification on a connectivist rhizomatic learning network. *Turkish Online Journal of Distance Education*, 17(4).
- Burns, R. (2020). A COVID-19 panacea in digital technologies? Challenges for democracy and higher education. *Dialogues in Human Geography*, 10(2), 246–249. <a href="https://doi.org/10.1177/2043820620930832">https://doi.org/10.1177/2043820620930832</a>
- Camacho-Zuñiga, C., Pego, L., Escamilla, J., & Hosseini, S. (2021). The impact of the COVID-19 pandemic on students' feelings at high school, undergraduate, and postgraduate levels. *Heliyon*, 7(3). <a href="https://doi.org/10.1016/j.heliyon.2021.e06465">https://doi.org/10.1016/j.heliyon.2021.e06465</a>
- Černý, M. (2023). MOOCs as part of the university curriculum: A case study. *Journal of Applied Technical and Educational Sciences*, *13*(1), Article 1. <a href="https://doi.org/10.24368/jates343">https://doi.org/10.24368/jates343</a>
- Chen, J., Fang, B., Zhang, H., & Xue, X. (2022). A systematic review for MOOC dropout prediction from the perspective of machine learning. *Interactive Learning Environments*, 0(0), 1–14. https://doi.org/10.1080/10494820.2022.2124425
- Chen, J., Fang, B., Zhang, H., & Xue, X. (2024). A systematic review for MOOC dropout prediction from the perspective of machine learning. *Interactive Learning Environments*, 32(5), 1642–1655. https://doi.org/10.1080/10494820.2022.2124425
- Clarà, M., & Barberà, E. (2013). Learning online: Massive open online courses (MOOCs), connectivism, and cultural psychology. *Distance Education*, 34(1), 129–136. <a href="https://doi.org/10.1080/01587919.2013.770428">https://doi.org/10.1080/01587919.2013.770428</a>
- Dhungel, A.-K., Wessel, D., Zoubir, M., & Heine, M. (2021). Too bureaucratic to flexibly learn about AI? The human-centered development of a MOOC on artificial intelligence in and

- for public administration. *Proceedings of Mensch Und Computer 2021*, 563–567. <a href="https://doi.org/10.1145/3473856.3473998">https://doi.org/10.1145/3473856.3473998</a>
- Diaz-Sprague, R., & Sprague, A. P. (2024). Embedding moral reasoning and teamwork training in computer science and electrical engineering. In E. Hildt, K. Laas, E. M. Brey, & C. Z. Miller (Eds.), *Building Inclusive Ethical Cultures in STEM* (pp. 67–77). Springer International Publishing. <a href="https://doi.org/10.1007/978-3-031-51560-6">https://doi.org/10.1007/978-3-031-51560-6</a> 5
- Fairclough, N. (2023). Technologization of discourse. In N. Fairclough (Ed.), *Texts and Practices Revisited* (2nd ed.). Routledge.
- Foucault, M. (1977). Discipline and punish: The birth of the prison. Pantheon Books.
- Gütl, C., Rizzardini, R. H., Chang, V., & Morales, M. (2014). Attrition in MOOC: Lessons learned from drop-out students. In L. Uden, J. Sinclair, Y.-H. Tao, & D. Liberona (Eds.), *Learning technology for education in cloud. MOOC and big data* (pp. 37–48). Springer International Publishing. <a href="https://doi.org/10.1007/978-3-319-10671-7">https://doi.org/10.1007/978-3-319-10671-7</a> 4
- Gyampoh, A. O., Fosu-Ayarkwah, C., Ntow, S., Akossah, J., Gavor, M., & Vlachopoulos, D. (2020). Tutor perception on personal and institutional preparedness for online teaching-learning during the COVID-19 crisis: The case of Ghanaian colleges of education. *African Educational Research Journal*, 8(3), 511–518. https://doi.org/10.30918/AERJ.83.20.088
- Hampel, R., & Stickler, U. (2024). *The Bloomsbury handbook of language learning and technology.* Bloomsbury Publishing.
- Hendriks, R. A., de Jong, P. G. M., Admiraal, W. F., & Reinders, M. E. J. (2024). Motivation for learning in campus-integrated MOOCs: Self-determined students, grade hunters and teacher trusters. Computers and Education Open, 6, 100158. <a href="https://doi.org/10.1016/j.caeo.2023.100158">https://doi.org/10.1016/j.caeo.2023.100158</a>
- Hendriks, R. A., Jong, P. G. M. de, Admiraal, W. F., & Reinders, M. E. J. (2020). Uncovering motivation and self-regulated learning skills in integrated medical MOOC learning: A mixed methods research protocol. *BMJ Open*, 10(10), e038235. <a href="https://doi.org/10.1136/bmjopen-2020-038235">https://doi.org/10.1136/bmjopen-2020-038235</a>
- Huang, H., & Jew, L. (2024). Exploring the factors affecting massive open online course learning in higher education. *International Journal of Educational Reform*, 10567879241228253. <a href="https://doi.org/10.1177/10567879241228253">https://doi.org/10.1177/10567879241228253</a>
- Hunziker, S., & Blankenagel, M. (2024). Single case research design. In S. Hunziker & M. Blankenagel (Eds.), Research design in business and management: A practical guide for students and researchers (pp. 141–170). Springer Fachmedien. <a href="https://doi.org/10.1007/978-3-658-42739-9">https://doi.org/10.1007/978-3-658-42739-9</a> 8
- Janssens, K. A. M., Bos, E. H., Rosmalen, J. G. M., Wichers, M. C., & Riese, H. (2018). A qualitative approach to guide choices for designing a diary study. BMC Medical Research Methodology, 18(1), 140. <a href="https://doi.org/10.1186/s12874-018-0579-6">https://doi.org/10.1186/s12874-018-0579-6</a>
- Korableva, O., Durand, T., Kalimullina, O., & Stepanova, I. (2019). Studying user satisfaction with the MOOC platform interfaces using the example of Coursera and open education

- platforms. *Proceedings of the 2019 International Conference on Big Data and Education*, 26–30. https://doi.org/10.1145/3322134.3322139
- Kumar, H., Xiao, R., Lawson, B., Musabirov, I., Shi, J., Wang, X., Luo, H., Williams, J. J., Rafferty, A. N., Stamper, J., & Liut, M. (2024). Supporting self-reflection at scale with large language models: Insights from randomized field experiments in classrooms. *Proceedings of the Eleventh ACM Conference on Learning @ Scale*, 86–97. <a href="https://doi.org/10.1145/3657604.3662042">https://doi.org/10.1145/3657604.3662042</a>
- Lee, H., & Bonk, C. J. (2024). Fostering self-directed learning competencies among preservice teachers through reflective practice and technology-mediated collaborative learning. *Technology, Pedagogy and Education*, 33(5), 595–611. <a href="https://doi.org/10.1080/147593">https://doi.org/10.1080/147593</a> 9X.2024.2362853
- Li, H., Zhu, S., Wu, D., Yang, H. H., & Guo, Q. (2023). Impact of information literacy, self-directed learning skills, and academic emotions on high school students' online learning engagement: A structural equation modeling analysis. *Education and Information Technologies*, 28(10), 13485–13504. https://doi.org/10.1007/s10639-023-11760-2
- Linde, I., Sarva, E., & Daniela, L. (2023). The impact of an online professional development course on teachers' comprehension and self-efficacy in developing students' self-regulated learning skills. *Sustainability*, *15*(12), Article 12. <a href="https://doi.org/10.3390/su15129408">https://doi.org/10.3390/su15129408</a>
- Lozada-Tequeanes, A. L., Rosas Magallanes, C., Spielman, K. L., & Bonvecchio Arenas, A. (2024). Massive open online course on breastfeeding during the COVID-19 pandemic in Mexico. *Global Health Promotion*, *31*(4), 131–141. https://doi.org/10.1177/17579759241248171
- Mackness, J., & Bell, F. (2015). Rhizo14: A rhizomatic learning cMOOC in sunlight and in shade. *Open Praxis*, 7(1), 25–38. https://doi.org/10.5944/openpraxis.7.1.173
- Mamgain, N., Sharma, A., & Goyal, P. (2014). Learner's perspective on video-viewing features offered by MOOC providers: Coursera and edX. 2014 IEEE International Conference on MOOC, Innovation and Technology in Education (MITE), 331–336. https://doi.org/10.1109/MITE.2014.7020298
- Marinho, P., Fernandes, P., & Pimentel, F. (2021). The digital portfolio as an assessment strategy for learning in higher education. *Distance Education*, 42(2), 253–267. <a href="https://doi.org/10.1080/01587919.2021.1911628">https://doi.org/10.1080/01587919.2021.1911628</a>
- Mertler, C. A. (2024). Action research: Improving schools and empowering educators. SAGE
- Nieuwoudt, J. E., & Pedler, M. L. (2023). Student retention in higher education: Why students choose to remain at university. *Journal of College Student Retention: Research, Theory & Practice*, 25(2), 326–349. https://doi.org/10.1177/1521025120985228
- Novella, R., Rosas-Shady, D., & Freund, R. (2024). Is online job training for all? Experimental evidence on the effects of a Coursera program in Costa Rica. *Journal of Development Economics*, 169. <a href="https://doi.org/10.1016/j.jdeveco.2024.103285">https://doi.org/10.1016/j.jdeveco.2024.103285</a>

- Pelletier, K., McCormack, M., Muscanell, N., Reeves, J., Robert, J., & Arbino, N. (2024). 2024 EDUCAUSE Horizon Report: Teaching and Learning Edition. Educase. <a href="https://library.educause.edu/-/media/files/library/2024/5/2024hrteachinglearning.pdf">https://library.educause.edu/-/media/files/library/2024/5/2024hrteachinglearning.pdf</a>
- Pelletier, K., Robert, J., Muscanell, N., McCormack, M., Reeves, J., Arbino, N., & Grajek, S. (2023). 2023 EDUCAUSE horizon report, teaching and learning edition. Educase. <a href="https://library.educause.edu/-/media/files/library/2023/4/2023hrteachinglearning.pdf">https://library.educause.edu/-/media/files/library/2023/4/2023hrteachinglearning.pdf</a>
- Pereira, A. J., Gomes, A. S., Primo, T. T., Queiros, L. M., & Moreira, F. (2024). Anticipating tutoring demands based on students' difficulties in online learning. In P. Zaphiris & A. Ioannou (Eds.), *Learning and Collaboration Technologies* (pp. 321–332). Springer Nature Switzerland. <a href="https://doi.org/10.1007/978-3-031-61691-4">https://doi.org/10.1007/978-3-031-61691-4</a> 21
- Reich, J. (2015). Rebooting MOOC research. *Science*, 347(6217), 34–35. <a href="https://doi.org/10.1126/science.1261627">https://doi.org/10.1126/science.1261627</a>
- Rothkrantz, C., Fitrianie, S., & Rothkrantz, L. (2024). A MOOC for exam training mathematics using intelligent tutoring. *Proceedings of the International Conference on Computer Systems and Technologies* 2024, 221–226. https://doi.org/10.1145/3674912.3674928
- Ryan, J. (1991). Observing and normalizing: Foucault, discipline, and inequality in schooling: Big brother is watching you. *The Journal of Educational Thought (JET)/Revue de La Pensée Educative*, 104–119.
- Saarinen, T. (2008). Position of text and discourse analysis in higher education policy research. *Studies in Higher Education*, *33*(6), 719–728. <a href="https://doi.org/10.1080/03075070802457090">https://doi.org/10.1080/03075070802457090</a>
- Sharzehee, F., Khatib Zanjani, N., Masoomifard, M., Pour Asghar, N., & Sarmadi, M. R. (2024). Identify the components of personalized learning in engineering education with hybrid MOOC technology. *Iranian Journal of Engineering Education*, 26(101), 107–128. <a href="https://doi.org/10.22047/ijee.2024.424972.2026">https://doi.org/10.22047/ijee.2024.424972.2026</a>
- Siemens, G. (2005). Connectivism: A theory of learning for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1). <a href="http://itdl.org/Journal/Jan\_05/article01.htm">http://itdl.org/Journal/Jan\_05/article01.htm</a>
- Stracke, C. M., Downes, S., Conole, G., Burgos, D., & Nascimbeni, F. (2019). Are MOOCs open educational resources? A literature review on history, definitions and typologies of OER and MOOCs. *Open Praxis*, 11(4), 331–341. https://doi.org/10.5944/openpraxis.11.4.1010
- Susilo, A. P., Merriënboer, J., Dalen, J., Claramita, M., & Scherpbier, A. (2013). From lecture to learning tasks: Use of the 4C/ID model in a communication skills course in a continuing professional education context. *The Journal of Continuing Education in Nursing*, 44(6), 278–284. https://doi.org/10.3928/00220124-20130501-78
- Thomas, G. (2011). A typology for the case study in social science following a review of definition, discourse, and structure. *Qualitative Inquiry*, 17(6), 511–521. <a href="https://doi.org/10.1177/1077800411409884">https://doi.org/10.1177/1077800411409884</a>
- Wei, W., Liu, J., Xu, X., Kolletar-Zhu, K., & Zhang, Y. (2023). Effective interactive engagement strategies for MOOC forum discussion: A self-efficacy perspective. *PLOS ONE*, *18*(11), e0293668. <a href="https://doi.org/10.1371/journal.pone.0293668">https://doi.org/10.1371/journal.pone.0293668</a>

- West, M. (2023). An ed-tech tragedy? Educational technologies and school closures in the time of COVID-19. UNESCO. https://doi.org/10.54675/LYGF2153
- Wilkinson, T. J., Wells, J. E., & Bushnell, J. A. (2005). Using a diary to quantify learning activities. *Medical Education*, 39(7), 657–664. <a href="https://doi.org/10.1111/j.1365-2929.2005.02196.x">https://doi.org/10.1111/j.1365-2929.2005.02196.x</a>
- Yee, M., Roy, A., Perdue, M., Cuevas, C., Quigley, K., Bell, A., Rungta, A., & Miyagawa, S. (2023). AI-assisted analysis of content, structure, and sentiment in MOOC discussion forums. *Frontiers in Education*, 8. <a href="https://doi.org/10.3389/feduc.2023.1250846">https://doi.org/10.3389/feduc.2023.1250846</a>
- Yu, H., Miao, C., Leung, C., & White, T. J. (2017). Towards AI-powered personalization in MOOC learning. *Npj Science of Learning*, 2(1), 1–5. https://doi.org/10.1038/s41539-017-0016-3
- Zeng, H., & Xin, Y. (2023). Comparing learning persistence and engagement in asynchronous and synchronous online learning, the role of autonomous academic motivation and time management. *Interactive Learning Environments*, 1–20. <a href="https://doi.org/10.1080/10494820.2024.2344033">https://doi.org/10.1080/10494820.2024.2344033</a>
- Zhang, X. (2024). Improving english teaching strategies from the perspective of college students' mental health. *Journal of Cases on Information Technology*, 26(1), 1–18. <a href="https://doi.org/10.4018/JCIT.342090">https://doi.org/10.4018/JCIT.342090</a>
- Zhu, M. (2021). Enhancing MOOC learners' skills for self-directed learning. *Distance Education*, 42(3), 441–460. https://doi.org/10.1080/01587919.2021.1956302
- Zimmerman, B. J., Greenberg, D., & Weinstein, C. E. (1994). Self-regulating academic study time: A stratégy approach. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulation of learning and performance: Issues and educational applications* (pp. 181–199). Lawrence Erlbaum Associates, Inc.

# Appendix 1

### Google Forms

- MOOCs are a phenomenon you've probably heard of... try to describe what you think of it.
- Why do you want to study MOOC courses? What do you want to learn from them?
- What emotions do you associate with MOOCs: [Anticipation, Concern, Stress, Satisfaction, Certainty]
- What would you need to feel you will study well in MOOC courses? [Support from a tutor, External motivation (credits, money, pressure from work,...), Educational materials on how to study (how to work better with video, how to take better notes, ...), The ability to manage your time well, Other]

- Try to specify the previous question. What would help you specifically?
- What is your previous experience with MOOCs? Try to describe them.
- I consent to my anonymous answers being used in anonymised research (you can withdraw your consent at any time): [Yes, including other information from the course. / No]
- Rate your level of English: [A0..C2]
- I am ... [Man, Woman, Diferent]
- I am: ... [LIS student, Student of Faculty of Arts, Foresign Student]
- Have you taken a course of your choice that you would like to recommend to students for next year's enrollment? If you want to share your experience, please post a link to the course and a two-sentence recommendation here. We will share them with next year's students.
- Space for your messages and comments:

# Appendix 2

### Spreadsheet With Data Analysis of Student Contributions

**Table 2**Analysis of the Content and Form of Learners' Diary Entries in the Autumn Term 2024

Student	week 1	week 2	week 3	week 4	week 5	week 6	week 7	week 8	week 9	week 10
	FEEL-	CONT-	F/C-	F/C-	CONT-	CONT-	F/C-	F/C-	CONT-	CONT-
A	IND-	IND-	IND-	IND-	IND-	IND-	NTUT-	IND-	IND-	TUT-
	FORM	MOTI	MOTI	MOTI	MOTI	FORM	FORM	FORM	FORM	MOTI
В	-	-	-	-	-	-	-	-	-	-
	FEEL-	FEEL-	FEEL-	FEEL-	CONT-	F/C-	F/C-	CONT-	F/C-	F/C-
C	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-
	MOTI	MOTI	MOTI	FORM	FORM	MOTI	MOTI	MOTI	MOTI	MOTI
	CONT-	CONT-	CONT-	CONT-	CONT-	CONT-	CONT-	CONT-	CONT-	CONT-
D	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-
	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI
	FEEL-	CONT-	CONT-	F/C-	CONT-	CONT-	CONT-	CONT-	CONT-	CONT-
E	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-
	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI	MOTI
	FEEL-	F/C-	FEEL-	F/C-	FEEL-	CONT-	CONT-	CONT-	CONT-	F/C-
F	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-	IND-
	MOTI	MOTI	MOTI	MOTI	FORM	FORM	FORM	FORM	FORM	FORM
G	-	-	-	-	-	-	-	-	-	-
Н	CONT- IND- X MOTI		X X	CONT-	X-IND- FORM	CONT-	CONT-	CONT-	FEEL-	F/C-
		X		IND-		IND-	IND-	IND-	IND-	IND-
			MOTI	I	MOTI	MOTI	MOTI	MOTI	MOTI	

I	-	-	-	-	-	-	-	-	-	-
J	F/C- IND- Moti	CONT- IND- MOTI	FEEL- IND- Moti	F/C- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	F/C- IND- MOTI	F/C- IND- Moti	CONT- IND- MOTI	CONT- TUT- MOTI
K	X	X	X	X	X	X	X	X	X	X
L	-	-	-	-	-	-	-	-	-	-
M	CONT- TUT- FORM	CONT- IND- MOTI	CONT- IND- MOTI	CONT- TUT- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	FEEL- NTUT- MOTI
N	CONT- IND- MOTI	F/C- IND- Moti	F/C- IND- Moti	-	-	-	-	-	-	-
О	F/C- IND- Moti	F/C- IND- MOTI	F/C- IND- MOTI	FEEL- IND- MOTI	FEEL- IND- MOTI	CONT- IND- MOTI	F/C- IND- MOTI	F/C- IND- FORM	F/C- IND- FORM	F/C- IND- MOTI
P	-	-	-	-	-	-	-	-	-	-
Q	F/C- IND- Moti	F/C- IND- Moti	F/C- IND- Moti	F/C- IND- MOTI	F/C- IND- Moti	F/C- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	F/C- IND- Moti
R	FEEL- IND- FORM	F/C- IND- Moti	FEEL- IND- FORM	F/C- IND- FORM	CONT- IND- FORM	CONT- IND- FORM	CONT- IND- FORM	CONT- IND- MOTI	CONT- IND- FORM	CONT- IND- FORM
S	CONT- IND- FORM	CONT- IND- FORM	CONT- IND- MOTI	CONT- IND- FORM	CONT- IND- MOTI	F/C- IND- MOTI	F/C- IND- Moti	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI
Т		CONT- IND-X	CONT- IND-X	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- FORM	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- TUT- MOTI
U	FEEL- IND- Moti	FEEL- IND- FORM	FEEL- IND- Moti	FEEL- IND- Moti	FEEL- IND- Moti	FC-IND- MOTI	FEEL- IND- FORM	F/C- IND- Moti	F/C- IND- Moti	F/C- IND- Moti
V	CONT- IND- FORM	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	-	-	-	-	-	-
W	CONT- IND- FORM	F/C- IND- Moti	F/C- IND- Moti	F/C- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI
X	F/C- IND- Moti	CONT- IND- MOTI	CONT- IND- MOTI	F/C- IND- Moti	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	F/C- IND- MOTI	F/C- IND- Moti
Y	X	X	X		X	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	CONT- IND- MOTI	F/C- IND- Moti

# MOOC projektavimas kaip parama universitetų studentams: 2022–2024 m. atvejo analizė

Michal Černý

Masaryko universitetas, Menų fakultetas, Informacijos mokslų katedra, Arne Nováka g. 1, CZ-602 00 Brno, Čekija, mcerny@phil.muni.cz

#### Santrauka

Šiame tyrime analizuojami duomenys, surinkti iš 2022–2024 m. baigusiųjų universiteto kursą (iš viso treji metai), į kurį buvo įtrauktos masinio atviro internetinio kurso (angl. MOOC) studijos. Tyrime analizuojami universiteto studentų mokymosi motyvai ir priežastys, platesnis jų požiūrio į mokymąsi konceptualizavimas ir supratimas, ką reiškia mokytis internetu. Tyrimo metodika – tai mišrus dizainas, derinantis klausimyno duomenų analizę ir studijų dienoraščių analizę. Tyrime naudojami trejų metų po studijų baigimo studentų duomenys, kurie atskleidžia atvirųjų masinio nuotolinio mokymo kursų (MOOCs) studijų priežastis – laisvės mokytis įgijimą, galimybę mokytis, mokymosi įgūdžių ugdymą, emancipaciją nuo universitetinės aplinkos ir unikalų turinį. Studijų dienoraščio dalyje išanalizuoti 177 dienoraščio įrašai nuo 2023 m. Be duomenų interpretavimo, svarbus papildymas – tyrėjo patirtis, įgyta semestro metu vykstančiuose refleksyviuose susitikimuose. Tyrimo pabaigoje pateikiamos praktinės rekomendacijos. Jos gali būti naudingos ir kitiems universitetams, rengiantiems panašiai orientuotus kursus. Rekomendacijos apima kryptingą mokymosi įgūdžių ugdymą, dėstytojų paramą studentams arba savęs orientavimą ir laiko valdymą, kaip studentų mokymosi įgūdžius, kurie būtini siekiant ugdyti savarankiško mokymosi įgūdžius MOOC.

Esminiai žodžiai: MOOC, mokymasis internetu, emancipacija, studento motyvacija, mokymosi dienoraštis, kuravimas.

Gauta 2024 10 21 / Received 21 10 2024 Priimta 2025 03 10 / Accepted 10 03 2025