

Issues and challenges in the implementation of micro-credential language courses: educators' perspectives

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ABSTRACT

Micro-credential language courses have gained significant attention in the field of language education due to their potential to offer targeted and flexible learning experiences. However, the successful implementation of these courses relies on understanding the perceptions of language educators and addressing the associated issues and challenges. This study aims to identify language educators' perceptions of online language learning platforms and micro-credential online language learning platforms and explore the issues and challenges in developing micro-credential language courses. Employing a quantitative approach, data was collected from 30 respondents from language educators at the centre for language learning, in a public university in Malaysia. Through survey questionnaires, quantitative insights into educators' perceptions and experiences were gathered. The survey questionnaire gathered quantitative data on educators' perceptions and experiences. This research sheds light on language educators' perceptions of online language learning platforms and micro-credentials while identifying the challenges inherent in developing such courses. The findings underscore the significance of addressing these challenges to ensure the effective implementation of micro-credential-based language courses within online education contexts.

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1. INTRODUCTION

Micro-credentials have developed as a potential strategy in language education, giving teachers the chance to improve their abilities and expertise in certain facets of language instruction [1], [2]. Micro-credentials, according to, are condensed, quick courses that provide teachers with the chance to learn new skills and prove their proficiency with a badge or certificate [3]. Language teachers may specifically address their professional development goals with the help of these qualifications, which provide a flexible and individualized learning experience [2], [4]. To properly adapt and integrate these courses into the current

language curriculum, language educators' perspectives are essential [5], [6]. Effective implementation and support of micro-credentials depend on an understanding of the problems and difficulties language instructors confront [7], [8]. The purpose of this research is threefold. First, it aims to identify the lecturer's perception of online language learning platforms. Secondly, to determine the lecturer's perception of micro-credential as an online language learning platform. Finally, to analyze the issues and challenges faced in the development of micro-credential language learning courses.

- Overview of micro-credentials in language education

Micro-credential language courses are a flexible and focused method of language instruction that has attracted a lot of interest in recent years. In the field of language teaching, micro-credentials have drawn a lot of interest as a way for teachers to advance their careers and strengthen their skills [6], [9]. Short, focused courses called micro-credentials give teachers the chance to learn specialized skills and knowledge in certain facets of language instruction [4], [10], [11]. They are a fast, flexible, and cost-effective way to update learners' skills in designated areas [12]. Many institutions offer online certificate programs that provide micro-credentials [2], [13]. The majority of these certifications are available online, allowing educators to select the courses that best suit their interests and career objectives [14], [15]. They help teachers get a deeper grasp of certain pedagogical approaches, educational technology, assessment techniques, and cultural competency [16]. Furthermore, micro-credentials can be a valuable tool for recognizing and validating educators' professional growth and expertise, as they often come with digital badges or certificates that can be showcased as evidence of accomplishment [13], [17].

- Previous studies on the implementation of micro-credential language courses

The implementation of micro-credential language courses has been the subject of numerous studies, which have emphasized various aspects of their adoption and integration [18]–[20]. For instance, discovered in a quantitative study on the use of micro-credentials by language educators that they were seen as valuable chances for professional growth [1], [21]. The study did note several obstacles, though, namely the lack of institutional support and the requirement for precise instructions on how to incorporate micro-credentials into already-existing curricula [4], [22].

- Issues and challenges in the implementation of micro-credential

The research on micro-credential language courses identifies a few problems and difficulties with their implementation [11], [23]. Refer to the Table 1 one issue that keeps coming up is language educators' ignorance of the idea and advantages of micro-credentials [22], [24], [25]. Another difficulty is incorporating micro-credentials into established language curricula [3], [26], [27]. Teachers may find it challenging to match the objectives of their curricula and learning objectives with micro-credentials [1], [7], [28]. In addition, difficulties with credit transfer and micro-credential acceptance inside formal education institutions have been noted as obstacles to its successful adoption [8], [17]. Additionally, there may not be enough support or resources available for language teachers doing micro-credential courses [26], [29]. For educators to effectively use micro-credentials in their teaching methods, there may need to be a suitable technology infrastructure, training, and mentoring [11], [29]–[31].

Table 1. Issues and challenges in the implementation of micro-credential

Reference	Author and year	Description	Issues and challenges
[32]	Ahmat <i>et al.</i> (2021)	Micro-credentials in higher education institutions: challenges and opportunities	Lack of clear guidelines and models, challenges in providing professional development opportunities
[2]	Selvaratnam and Sankey (2021)	An integrative literature review of the implementation of micro-credentials in higher education: implications for practice in Australasia	Lack of clear guidelines and models, challenges in providing professional development opportunities
[7]	Varadarajan <i>et al.</i> (2023)	A systematic review of the opportunities and challenges of micro-credentials for multiple stakeholders: learners, employers, higher education institutions and government	Varied definitions of micro-credentials, absence of accreditation frameworks, lack of organizational readiness, challenges to international standards, compatibility, and language
[22]	Ahsan <i>et al.</i> (2023)	Implementation of micro-credentials in higher education: a systematic literature review	Lack of clear guidelines and models, challenges in providing professional development opportunities
[6]	Orman <i>et al.</i> (2023)	Micro-credentials and reflections on higher education	Lack of consistency, quality, and portability of micro-credentials
[17]	Brown <i>et al.</i> (2019)	Common micro-credential framework	Lack of consistency, quality, and portability of micro-credentials
[33]	Mcnamara and Sun (2023)	Micro-credentialing in adult learning: international considerations	Challenges to international standards, compatibility, and language

2. RESEARCH METHODOLOGY

This research adopts a quantitative approach to gather comprehensive insights into the issues and challenges in implementing micro-credential language courses based on the perception of language educators

[34], [35]. Quantitative methods allow for a holistic understanding of the topic and provide a rich dataset for analysis [35]. Figure 1 shows the research methodology phase.

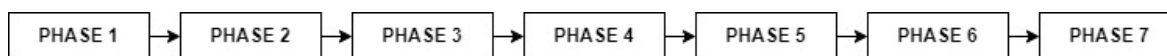


Figure 1. Research methodology phase

2.1. Phase 1: identify the research goal and objectives

In this phase, the research goal is defined, focusing on understanding the challenges in implementing micro-credential language courses. Specific objectives are established to explore key factors impacting these courses, particularly through the perceptions of language educators. This foundation guides the study in identifying critical areas for improvement in language-based micro-credential programs.

2.2. Phase 2: define the population and sample for the study

In this phase, the demographic and study sample are established. Participants consist of lecturers from the center for language learning at a public university in Malaysia, who are also language educators. The purposive sampling method ensures a diverse range of participants with various teaching backgrounds and experiences [36]. Thirty respondents were selected from a total of 37 language educators who participated in the survey. Recruitment occurred through professional networks, language education associations, and online platforms.

2.3. Phase 3: decide on the type of survey method for the study

In this phase, the researchers decided to use online surveys to collect data from language educators. This choice was informed by the study's objectives and the feasibility of reaching participants efficiently. The quantitative approach recommended for this type of research also influenced the decision.

2.4. Phase 4: design and validated instruments

During this phase, instruments for the study were designed and validated. This included creating survey questions or interviewing procedures that accurately reflected the problems and difficulties faced by language educators. Piloting and expert reviews ensured the reliability and validity of the instruments.

2.5. Phase 5: distributed the survey and collected data

Researchers sought language educators' perceptions of micro-credential language courses through questionnaires. Clear instructions were provided to participants to ensure ethical data collection. Surveys featuring closed-ended questions and Likert-scale items were used to gather quantitative data on perceptions and experiences with micro-credential language courses.

2.6. Phase 6: analyzed the data

During this phase, the analysis of the accumulated data involved utilising quantitative methodologies. Specifically, statistical software was harnessed to derive descriptive statistics from the survey data, effectively summarizing participants' responses in frequencies and percentages. Inferential statistical tests were also conducted to identify significant relationships and differences within the data. This approach ensured a comprehensive interpretation of the findings, providing a solid foundation for addressing the research questions.

2.7. Phase 7: reported the findings

This includes outlining the study process, presenting the analytical results, and discussing the findings thoroughly. The quantitative data will give a thorough picture of the concerns and obstacles that language instructors experience when teaching micro-credential language courses. The report addresses the study purpose and goals explicitly, highlights major difficulties and obstacles encountered and makes suggestions or implications for practice or future research.

3. RESULTS AND DISCUSSION

Based on language educators' perceptions, the data obtained via surveys give useful insights into the concerns and obstacles of implementing micro-credential language courses refer to Table 2. The quantitative survey data was processed using statistical software, which generated descriptive statistics such as

frequencies and percentages. These data summarize the replies of the participants and offer an overview of their perceptions and experiences with micro-credential language courses.

Table 3 shows a sample of 30 language teachers from the center for language learning in a public university in Malaysia. Participated in this study. There were 66.7% female participants and 33.3% male participants. Regarding age, 16.7% fell within the 25 to 30 years range, another 16.7% were between 31 to 40 years old, and equal percentages of 33.3% were in the 41 to 50 years and 51 years and above categories. Regarding race, the participants consisted of 86.7% Malay, 10.0% Chinese, 3.3% Indian, and none from other races. The teaching experience of the participants revealed that 16.7% had 1 to 10 years of experience, while the majority (83.3%) had 11 to 20 years of experience. Further in this section, discussion on the results obtained after analysing the data are presented with regards to the three research questions devised for the study, and finally we conclude the discussion with implications and recommendations.

Table 2. Demography of the participants (n=30)

Item	Characteristics	n (%)
Gender	Male	33.3
	Female	66.7
Age	25 to 30 years	16.7
	31 to 40 years	16.7
	41 to 50 years	33.3
	51 years and above	33.3
Race	Malay	86.7
	Chinese	10.0
	Indian	3.3
	Others	0
Teaching experience	1 to 10 years	16.7
	11 to 20 years	83.3
	21 years and above	0

Table 3. Lecturer's perception of online language learning platforms

Item ID	Item	Mean	SD	%
OLP1	Online language learning platform increases the effectiveness of my classroom.	3.67	0.52	91.67
OLP2	Online language learning platforms will improve the efficiency of identifying problematic students.	3.17	0.75	79.17
OLP3	Online language learning platforms will not change the instructional strategies of my classroom.	3.17	0.75	79.17
OLP4	Online language learning platforms will have a positive impact on high-achieving students.	3.17	0.41	79.17
OLP5	Online language learning platforms will have a positive impact on lower-achieving students.	3.33	1.03	83.33
OLP6	Online language learning platforms will increase student technology literacy.	3.67	0.52	91.67
OLP7	Online language learning platform is not as effective as traditional classroom instruction.	3.17	0.98	79.17
OLP8	Online language learning platforms will need more time for me to do the instructional preparation.	3.50	0.55	87.50
OLP9	Online learning language platforms will be useful for teaching new skills.	3.50	0.84	87.50
OLP10	Online language learning courses increase the uncertainty about students' understanding of the learning content.	3.33	0.82	83.33
OLP11	Online language learning courses will limit student engagement.	2.83	1.17	70.83
OLP12	I feel comfortable about the implementation of the online learning platform.	3.50	0.55	87.50
Total average		3.48	0.55	80.87

3.1. Research question 1: what are the lecturer's perceptions of online language learning platforms?

Table 3 shows the descriptive statistic based on the lecturers' perception (n=30) of online language learning platforms. Based on the survey results, lecturers generally have a positive attitude toward the effectiveness and potential benefits of online language learning platforms. Respondents show a high level of agreement that these platforms can enhance classroom effectiveness (OLP1), increase technology literacy (OLP6), and be useful for teaching new skills (OLP9). There is also a consensus that using such platforms might require more time for instructional preparation (OLP8). However, opinions are more divided when it comes to whether online platforms can positively impact both high-achieving (OLP4) and lower-achieving students (OLP5) equally, their potential to change instructional strategies (OLP3) and concerns about student engagement (OLP11) and understanding (OLP10). Some respondents' express uncertainties about the impact of online platforms on student engagement (OLP11), content understanding (OLP10), and whether they might be less effective than traditional classroom instruction (OLP7). While a significant percentage (79.17%) agreed that online platforms could enhance the identification of problematic students (OLP2), the moderate mean score and standard deviation suggest that some lecturers might have reservations about this effectiveness. This could be due to concerns about how accurately online platforms can identify issues as compared to traditional classroom methods. These aspects seem to generate a more varied range of viewpoints among participants.

3.2. Research question 2: what is the lecturer's perception of micro-credential as an online language learning platform?

Table 4 shows the descriptive statistic based on the lecturers' perception (n=30) of micro-credential as an online language learning platform. The survey results suggest that there is a generally positive perception of micro-credentials as an online language learning platform among lecturers. Respondents believe that micro-credentials are suitable for online language learning (MCLP1), provide value by demonstrating competence (MCLP2), offer flexible access to learning materials (MCLP3), and are a means of recognizing developed language skills (MCLP4). Additionally, participants agree that the value of a micro-credential is tied to its requirements (MCLP5) and that it can serve as a tool for applying language teaching strategies (LTS) (MCLP6). However, there is slightly more diversity in opinions when it comes to the use of micro-credentials as a teaching strategy for specific language skills and their suitability for learners with different language learning strategies (LLS) (MCLP7). Overall, the responses indicate that micro-credentials are seen as valuable tools in the context of online language learning and professional development for language educators (MCLP8).

Table 4. Lecturer's perception of micro-credential as an online language learning platform

Item ID	Item	Mean	SD	%
MCLP1	Micro-credential is a suitable platform for online language learning.	3.67	0.52	91.67
MCLP2	Micro-credential is valuable if it is based on demonstrating competence in particular language skills.	3.33	0.52	83.33
MCLP3	Micro-credential allows access to learning materials anywhere and anytime.	3.67	0.52	91.67
MCLP4	Micro-credential is a good way to be recognized for the language skills they have developed.	3.67	0.52	91.67
MCLP5	The value of a micro-credential is dependent on what needs to be done to earn it.	3.50	0.55	87.50
MCLP6	Micro-credential is a valuable teaching strategy for language learning skills (listening, reading, speaking, and writing).	3.17	0.75	79.17
MCLP7	Micro-credential is suitable for learners with different LLS.	3.33	0.52	83.33
MCLP8	Micro-credential provides development tools for me to apply LTS.	3.50	0.55	87.50
Total average		3.48	0.55	80.87

3.3. Research question 3: what are the issues and challenges faced in the development of micro-credential language learning courses?

Table 5 shows the descriptive statistic based on the lecturers' perception (n=30) of issues and challenges in micro-credential development of language courses. The survey results indicate that there are several challenges and issues in the development of micro-credentials for online language learning courses (ICMC1). Respondents are concerned about limitations in online assessment and activity tools (ICMC2), a lack of clear models (ICMC3) and guidelines (ICMC5) for appropriate teaching and learning strategies (ICMC4), challenges in ensuring ethical behaviour (ICMC6) in online assessments (ICMC7) and a shortage of suitable online tools (ICMC8). Additionally, concerns are raised about internet access (ICMC9), educators' knowledge of educational technology (ICMC10), educators' expertise in developing online language learning courses (ICMC11) and the workload associated with online teaching (ICMC12). The high mean scores and low standard deviations across most items suggest a strong consensus among participants regarding these challenges. It is evident that addressing these issues is crucial for the effective and efficient development and implementation of micro-credential-based language courses in online environments. The study identified significant challenges in creating online language courses, including assessment practices, individualized learning, course material adaptation, interactive language activities, and educator training. To enhance micro-credential language courses, educators should address these issues by developing efficient models, resources, and online evaluation tools. Figure 2 visualizes the issues and challenges concluded based on the findings of this study.

3.4. Implications and recommendations

The study's conclusions highlight the need for comprehensive guidelines and resources aligned with language teaching methodologies in micro-credential language training. The absence of efficient models and tools for language-based micro-credentials underscores the importance of creating user-friendly and flexible technical resources, especially for online language assessment and activity tools. To overcome these challenges, collaboration among educators, designers, and technology specialists is essential in developing relevant models and methods. Investing in online language assessment tools can enhance micro-credential course delivery. Future research should evaluate the effectiveness of these models and explore ways to integrate micro-credentials into language curricula, considering teacher perspectives and experiences to improve student engagement and motivation.

Table 5. Issues and challenges in micro-credential development language course

Item ID	Item	Mean	SD	%
ICMC1	There are limited online language assessment tools that can be used by micro-credential developers in achieving micro-credential learning outcomes.	3.83	0.41	95.8
ICMC2	There are limited online language activity tools that can be used by micro-credential developers in achieving micro-credential learning outcomes.	3.50	0.55	87.5
ICMC3	There is a lack of a clear model that supports language micro-credential developers to ensure appropriate online teaching strategies are used.	3.83	0.41	95.8
ICMC4	There is a lack of a clear model that supports language micro-credential developers to ensure appropriate online teaching strategies are matched with the student's learning strategies.	3.83	0.41	95.8
ICMC5	There is a lack of clear guidelines that support language micro-credential developers to use appropriate online language learning tools.	3.83	0.41	95.8
ICMC6	It is difficult to ensure that students obeyed the ethics of students in incompleteness of assignments thru online learning.	3.67	0.52	91.7
ICMC7	It is difficult to monitor the integrity of students in the incompleteness of assessments online.	3.83	0.41	95.8
ICMC8	There are limited online tools suitable for developing online language learning courses.	3.83	0.41	95.8
ICMC9	There is an unsatisfactory internet access connection for online teaching and learning.	3.67	0.52	91.7
ICMC10	Educators have limited knowledge of educational technology in developing online language learning courses.	3.67	0.52	91.7
ICMC11	Educators lack expertise in developing online language learning courses.	3.50	0.55	87.5
ICMC12	Online teaching creates an additional workload for language teachers.	3.50	0.55	87.5
Total average		3.69	0.48	82.7

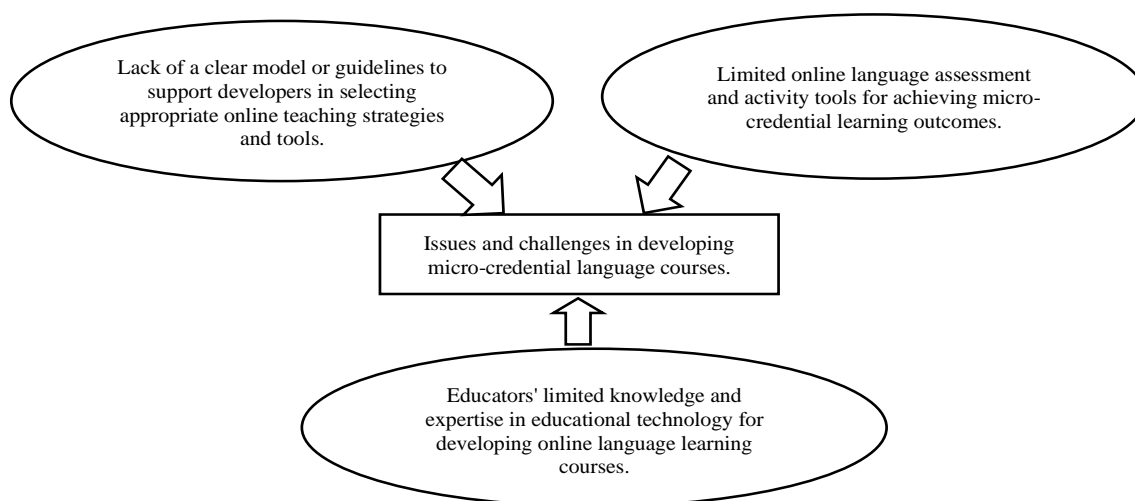


Figure 2. Issues and challenges faced by educators in developing micro-credential language courses

4. CONCLUSION

This research sheds light on the significant challenges in implementing micro-credential language courses, particularly the absence of effective models and tools for developing language-based micro-credentials. The study underscores the limitations in available online language assessment and activity tools, which impede the success of these courses. Furthermore, it reveals the pressing need for targeted professional development and training for language educators to empower them in designing and implementing effective micro-credential programs. The importance of this research lies in its detailed identification of these obstacles, which have critical implications for both language educators and educational institutions. By addressing these challenges, there is potential to enhance the effectiveness of language education through micro-credentials, ultimately benefiting learners and advancing the field. Future research should focus on developing and validating comprehensive models and tools tailored to language-based micro-credentials. Additionally, efforts should be made to explore and implement innovative online assessment strategies. By doing so, educational institutions can better support language educators in navigating the evolving landscape of micro-credentialing, ensuring the successful integration of these programs into modern language education.

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