

***Preparing E-Tutors for Success:
A Qualitative Analysis of a Community Management Training Module for Students***

Lisa-Marie Langesee, Technische Universität Dresden, Germany
Nick Volkmann, Technische Universität Dresden, Germany
Alexander Clauss, Technische Universität Dresden, Germany
Laura Hilse, Technische Universität Dresden, Germany

The Asian Conference on Education 2023
Official Conference Proceedings

Abstract

The role of corporate community managers, who facilitate digital and cross-location collaboration within corporate communities, is comparable to that of e-tutors, who moderate and assist virtual group work in the university context. E-tutors have a variety of tasks that go beyond merely monitoring their supervised groups. They need to be equipped with numerous competencies to ensure successful e-tutoring. However, current literature only partly addresses how e-tutors build the required understanding and competencies. This study investigates the gap of how a qualification module for e-tutors should be designed to prepare them best. For this purpose, seven participants in an e-tutor qualification module were interviewed. It became apparent that the qualification module had gaps, especially in the training of intercultural competencies, which in turn influenced the interviewees' readiness to become e-tutors. Additionally, beneficial formats for competence development were identified. The study found that Virtual Collaborative Learning (VCL) is a helpful format for developing several competencies, particularly media competencies. In addition, certain framework conditions must be given to attract students to the module, e.g., practical relevance. Based on the findings, the study provides recommendations for designing a qualification module for e-tutors, including the importance of addressing intercultural competencies, incorporating e-tutor tandems, and providing VCL opportunities. Additionally, the study analyzes the consequences arising from its findings, explicitly focusing on their direct impact on succeeding cohorts of e-tutors. This study provides significant insights into developing competencies for e-tutors while offering practical recommendations to enrich their e-tutoring experience.

Keywords: Flipped Classroom, E-Tutors, Competencies, Competence Development, Higher Education, Virtual Learning, Qualification, Collaborative Online Learning

iafor

The International Academic Forum
www.iafor.org

Introduction

As digital education continues to expand and adapt to our interconnected world, the role of e-tutors is more important than ever (Martin-Cuadrado et al., 2021; Raviolo et al., 2023; Schneider & Preckel, 2017). Like corporate community managers navigate the world of virtual collaboration in companies, e-tutors moderate and support virtual group work, but within the context of higher education (HE). Their broad range of responsibilities (Langesee, 2022) is central to the quality of digital learning experiences, highlighting the need for adequately trained e-tutors (Kopp et al., 2012).

However, little study has been done on the qualification process for e-tutors with this understanding. Even though Heuel & Feldmann (2013) discussed a standardized European e-tutor qualification, they focus on the e-learning competence of traditional teachers and professional tutors. To the best of our knowledge, there are no standards for how e-tutors acquire the competencies and expertise they need to support virtual group work. In addition to analyzing the basic qualification of e-tutors, the focus will also include the subsequent development and reinforcement of competencies. This extended approach can address competence deficits in a more long-term manner.

This presents us with the critical question of how the qualification of e-tutors should be designed to prepare them for practical application (RQ1). This question spotlights a gap in current research and suggests a need for a practical exploration of an effective structure and content for an e-tutor qualification module.

In addition to RQ1, this study proposes two additional research questions. First, “How does the e-tutor qualification module affect the development of e-tutoring competencies?” (RQ2). This question aims to assess the strengths and weaknesses of the existing module from students’ perspectives.

The third research question probes into the possibility of tandem e-tutoring: “What are the participants’ anticipations and perceptions regarding the potential implementation of e-tutor tandems, and what aspects do they foresee as potentially positive or negative?” (RQ3). This question aims to understand the participants’ expectations and perceptions about introducing e-tutor tandems in the supervision phase, as the tandem approach was already successfully tested for e-tutors (Langesee & Ukhova, 2023).

This study aims to analyze the readiness of e-tutors for their roles regarding key competencies. Furthermore, it investigates the potential of different formats in further developing competencies for e-tutors. This study’s contribution lies in critically examining the e-tutor qualification module by interviewing the participating students post-module. After a qualitative content analysis, the paper provides practical recommendations and identifies areas for improvement to enhance the overall quality and effectiveness of e-tutoring, potentially impacting the next generation of e-tutors.

Theoretical and Conceptual Background

This chapter delves into the theoretical and conceptual background supporting the paper, setting a baseline for a more nuanced understanding of the subject matter.

E-Tutors

Central to this paper are e-tutors and the qualification process to become one. However, clearly defining “e-tutor” can be challenging due to its various interpretations and synonymous terms. E-tutors may also be identified as e-moderators, e-coaches, distance learning instructors, or online tutors. According to de Metz & Bezuidenhout (2018), e-tutors are primarily involved in offering support to distance learners. However, Jödicke & Teich (2015) offer a more fitting definition for this research as they identify e-tutors as facilitators whose role is to aid students in achieving their learning objectives in current virtual learning frameworks. Unlike traditional tutors, e-tutors supervise, support, and direct the learning journey rather than deliver knowledge directly.

In addition, e-tutors act as students’ first contact and help with diverse aspects of the learning experience. The support activities range from technological to organizational, from content-related to interpersonal challenges (Jödicke & Teich, 2015). To summarize, e-tutors can be viewed as facilitators of learning who fortify virtual learning processes within today’s HE landscapes.

Qualification Module

To be able to support students in such a setting, the e-tutors need to qualify first. There is a broad range of scenarios where e-tutors can be deployed. However, only a few publications shed light on the concrete qualification of e-tutors in HE (e.g., Adamus et al., 2009; Doukakis et al., 2013; Heuel & Feldmann, 2013). In the context we investigated, e-tutors are supportive moderators in VCL modules (Clauss et al., 2019).

The VCL concept is a student-centered approach in higher education where students work in groups to solve realistic case studies using collaborative technology, e.g., MS Teams. It involves synchronous and asynchronous activities and requires a case study, learning platform, pedagogical support by e-tutors, and learning analytics (Clauss et al., 2019; Schoop et al., 2010).

In this paper’s context, the e-tutors’ training occurs in a semester-long master’s module utilizing a flipped classroom approach. Employing the flipped classroom approach, the module incorporates e-lectures for content delivery, in-person seminars for reinforcing the content, and a four-week VCL phase on MS Teams.

The VCL allows students to experience a collaborative virtual learning environment first-hand. During this period, students are grouped into teams of four to six, working on weekly tasks drawn from a realistic case study. Students must assume various roles, such as project manager, reporter, and expert for Business Administration, technology or human resources. Qualified e-tutors accompany the VCL phase.

The module comprises six main themes, specifically tailored to cater to the roles and responsibilities of e-tutors while also addressing the basics of community management. It incorporates lessons and tasks on organizational support, technical support, group-related support, subject-related support, feedback, and assessment. They learn to manage learning activities, handle and solve conflicts proactively, develop intercultural skills, and provide effective feedback. Adding to this, students gain a glimpse into the day-to-day operations of

an e-tutor, facilitated by real-life experiences shared by active e-tutors. Upon successful module completion, students are qualified to become e-tutors.

The module's thematic focus areas are illustrated in Figure 1.



Figure 1: Content of the E-Tutor Qualification Module

Competencies

To match the multifaceted role of an e-tutor, specific competencies are necessary. During a qualification tailored to the tasks of e-tutors, exactly these should be addressed.

Fulfilling the diverse roles of an e-tutor requires distinct competencies that differ significantly from those needed for traditional face-to-face tutoring (Langesee et al., 2022). Despite numerous discussions, a universal definition of competence remains elusive. Generally, competence combines knowledge, skills, and attitudes (Bartman & de Bruijn, 2011; Le Deist & Winterton, 2005). These competencies, while identifiable and measurable through behavior (Rowe, 1995), are not static attributes but can be developed.

Another established definition by North (2021) explains competencies as personal abilities that can be cultivated to act suitably in given situations. It is a well-rehearsed process to stimulate, direct, and utilize personal resources, ensuring effective handling of intricate scenarios, tasks, and actions. These elements are intrinsically tied to performance and can be enhanced through educational interventions (Parry, 1998). This perception of competencies provides a basis for the discourse in this paper.

A comprehensive exploration of the specific competencies required by e-tutors to effectively supervise student groups was carried out in Langesee (2022; 2023). This study identified the following key areas of competence: pedagogical, professional, social, intercultural, media, communication, organizational, individual, and evaluative. Notably, these nine competence areas overlap considerably with 21st-century skills.

A competence-oriented qualification is an important approach in HE that aims to develop students' knowledge, skills and attitudes that are relevant to their personal and professional development in the 21st-century. This qualification focuses on the learning outcomes and the ability to apply them in different contexts rather than on the input or content of the curriculum. It can enhance graduates' employability, mobility and lifelong learning, as well as their social responsibility and civic engagement (Brauer, 2021).

Therefore, adequately addressing the underlying competencies is essential to succeed in the modern work environment (Bourn, 2018). A recent work by Pérez-Sanagustin et al. (2022) also states that HE institutions must address the reality of post-Covid-19 more than ever, including competence-oriented teaching (Dlouhá et al., 2019).

Methodology

This chapter offers an in-depth look into the research methods utilized in the study, namely semi-structured interviews and qualitative content analysis, clarifying the systematic approach taken for data collection and interpretation.

Semi-Structured Interviews

The qualitative data collection in this study was anchored in semi-structured interviews, a method widely recognized in social science research (Magaldi & Berler, 2020). The interview guide was meticulously crafted to frame the questions and systematically structure the research process, allowing a beneficial balance between comparability and the capacity to glean additional, valuable insights (Kallio et al., 2016).

This guide comprised four thematic blocks. The initial block communicated the interview's objectives within the introduction (Helfferich, 2010), while the second aimed to foster a pleasant atmosphere for the interviewee, promoting openness for the duration of the interview (Edwards & Holland, 2013). The main part of the interview was occupied by the third and fourth thematic blocks, focusing on assessing nine specified competencies (Langesee, 2022) and the effectiveness of seminars, e-lectures, and the VCL as teaching formats.

The final block also provided opportunities for suggestions for module improvement, with open-ended questions allowing interviewees to offer detailed insights and suggestions (Kallio et al., 2016). The interview guide was pre-tested and refined based on feedback (Weichbold, 2022).

Seven students, who were active participants in the course, were involved in the interviews (Table 1). This selection criterion ensured the interviewees had firsthand experiences and knowledge of the module. To maintain a diversified view, interviews were conducted by two researchers (Graneheim & Lundman, 2004).

The interviews were recorded using MS Teams, which also facilitated automatic transcription. The final transcription adhered to Dresing and Pehl's (2018) guidelines, ensuring anonymity in line with Elo and Kyngäs' method (2008) for the coding process.¹

¹ The interview guideline and transcripts can be found in the online appendix: <https://tud.link/hp24>

Variable	Characteristics	Frequency (N=7)	% of N
Age	23	2	28,6
	24	1	14,3
	25	3	42,9
	26	1	14,3
Course of Study	Business Administration	4	57,1
	Business Information Systems	1	14,3
	Business Engineering	1	14,3
	Business Education	1	14,3
Semester (Master or Diploma)	3	2	28,6
	5	2	28,6
	9	2	28,6
	11	1	14,3

Table 1: Overview - Demographics of Interviewees

Qualitative Content Analysis

According to Elo & Kyngäs (2008), a qualitative content analysis was conducted to extract the relevant information from the interviews to answer the research questions. It consists of three phases: preparation, organization, and reporting. The preparation phase focuses on defining the study object - in this case, the interviews. The qualitative data is analyzed using the selected method during the organization phase. This study used a combined deductive-inductive approach (Ravindran, 2019) to code interviews, leading to twelve main categories from the interview guide. Post-deduction, interview-based coding began, and independent subcategories were inductively formed.

After initial coding, the subcategories underwent discussion for quality validation, resulting in 41 subcategories (Graneheim & Lundman, 2004). Subsequently, the distribution of the subcategories was discussed. Afterward, the researchers reviewed each other's work to ensure quality. The detailed category assignment can be found in the online appendix.²

Seven main categories are of main interest for answering the research questions and are therefore presented in detail. The remaining five main categories are integrated into the analysis as they foster the understanding of certain results and help to put them into context. An overview of the main categories can be found in Figure 2. The green-colored main categories are discussed in more detail in the upcoming section.

² <https://tud.link/hp24>

Biographical Data	Previous Pedagogical Training	Qualification Framework	Prior E-Tutor Activity
Pre-Module Competencies	Post-Module Competencies	Influence of Formats	Wishes
Learning Analytics, Gamification, Chatbots	Expectations and Challenges	E-Tutoring and Community Management	E-Tutor Tandem

Figure 2: Overview of Main Categories

Results

This chapter presents the results of thematically relevant thematic blocks three and four from the interview guide and its deductive-inductive categories, according to the final phase of qualitative content analysis by Elo & Kyngäs (2008).

Pre-module Competencies

To evaluate and document the competence level before the module, participants were initially queried about their pre-module competencies in the opening segment of the interview.

Four participants (I2, 3, 5, 7) specified they had notable social competence prior to participating in the module, enhanced through previous group work instances. Pedagogical competence was found exclusively in students with business education or those who attended modules specifically focusing on pedagogy (I1, 4, 7). One participant (I2) explained that their first exposure to feedback was only through schooling.

Three participants (I1, 3, 5) affirmed pre-existing professional competence, particularly in the realm of virtual collaboration, prior to the module. The majority (I1, 3, 5, 6, 7), because of their experience as working students, exhibited varying levels of organizational competence involving methodologies such as SCRUM (I1).

Similar to their organizational competence, most of them (I1, 3, 4, 5, 7) also showed a well-developed media competence, especially in using Microsoft 365, including MS Teams, which are commonly used in business settings. Three participants (I2, 5, 7) reported having distinct communication competence before the module.

Intercultural competence was reported by only one participant (I1), although it was somewhat subdued, primarily due to language constraints. Individual competence was generally well-developed among some participants (I1, 2, 7). One interviewee (I1) named their creative work environment a contributing factor. However, only one participant (I3) claimed to have evaluation competence, which they attributed to their prior education.

Post-module Competencies

Participants particularly highlighted the development of pedagogical competence (I1, 2, 4, 5, 7). Although it was not the module's direct focus, it was refined during the intense virtual collaboration phase, with the reflection on individual and group methods emerging as a significant contributing factor (I5).

The participants described a positive development of their media competence (I1-7), primarily attributed to compulsory involvement with the collaboration platform and various MS Teams tools, such as the "Praise" function and the Planner (I5). However, data analysis abilities remained underdeveloped or non-existent (I2).

The interviewees experienced a development of their communication competence (I1, 2, 3, 4, 6, 7), although unevenly across participants. The rationale for this development lies in intense group work and the unique demands posed by virtual communication (I1, 6). A participant's role within the team also played a key role, with project managers developing this competence more than regular project members (I3).

The interviewees mentioned that they positively developed evaluation competence by giving each other feedback and (jointly) reflecting on the feedback received (I1, 2, 3, 4, 6, 7). The interviewees reported being frequently encouraged to engage in self- and group reflection.

Participants described that multiple factors facilitated the development of social competence (I1, 2, 3, 5, 6, 7), including accommodating diverse personalities and work styles within group work (I1). Essential collaborative tasks also fostered intensive teamwork, positively impacting social competence. The creation of the group contract emerged as another contributing factor (I6).

Additional information on the collaboration platform helped some participants to develop professional competence (I1, 3, 5, 6, 7). The module, described as a "protected area" by one participant (I6), offered a safe space for experimenting with MS Teams, a common collaboration platform in many companies. Autonomously handling tasks and researching group work topics also enriched professional competence (I1).

However, growth in organizational competence was described less (I1, 2, 7), with the role of the project manager lauded for making group-based organizational decisions (I6, 7). The structuring of learning activities also contributed to its development (I2).

The interviewees reported that they did not develop individual competence independently but that it was encompassed within other competencies, such as virtual communication improvement (I1, 3, 4, 6, 7). Nevertheless, creativity, an attribute of individual competence, was not addressed.

Regarding intercultural competence, participants reported no significant development (I1, 2, 3, 4, 6, 7). Only one noted having a non-native speaker in the team (I5), which presented opportunities to enhance intercultural competence to a certain extent, for instance, by rephrasing tasks for unified comprehension.

Influence of Formats on Competence Development

The study found that participants identified VCL as the most conducive teaching-learning format for competence development. However, it was noted that it was not a single format but a mix that often contributed to competence development. For instance, a blend of e-lecture, seminar, and VCL was instrumental in fostering pedagogical competence (I1, 2, 4, 5, 7), with the e-lecture for initial knowledge transfer, the seminar for consolidation, and VCL for application.

Media competence was initially addressed through e-lecture and subsequently enhanced through practical usage in the VCL (I1-6). For communication competence, participants highlighted intensive seminar discussions and VCL experiences as catalysts for development (I1, 2, 3, 5, 7).

The merging of the three teaching-learning formats helped to enhance professional, individual, and evaluation competencies (I1-7). Like communication competence, social competence primarily advanced through the seminar and VCL activities (I1-6).

Organizational competence was primarily developed via VCL (I1, 2, 4, 5, 6), with two respondents noting that the degree of improvement varied based on roles (I1, 5).

Regarding intercultural competence, VCL played a significant role for participants who directly interacted with non-native speakers (I2, 4, 5). One respondent added that e-lectures also provided valuable support in advancing their intercultural competence (I1).

Perceptions on E-Tutor Tandems: Benefits and Challenges

Interview outcomes on the e-tutors tandem concept presented diverse perspectives regarding group formation and task delegation (I1), underlining the significance of diversity and heterogeneity in tandem pairs (I1). To bypass redundancy, a respondent emphasized the necessity for clear roles within groups and at least one point of contact per topic (I3). Furthermore, pairing an experienced e-tutor with a novice was suggested (I5), allowing two new e-tutors to collaborate and navigate their roles together (I5).

In summarizing the interviews concerning the benefits of the e-tutor tandem model, it emerged that collaborative work and the advantage of having a second opinion were positively regarded (I1). Some interviewees also recognized the potential value of an e-tutor network, while others suggested they might prefer working independently (I2). Participants noted the supportive role and sense of security provided by e-tutors as beneficial (I3, 5). This dual supervision also opens opportunities for new methodologies, insights, and techniques (I7).

A sizable pool of qualified individuals is required to successfully deploy the tandem model to meet the learners' needs (I1). The availability of financial resources could also impact the feasibility of task distribution (I2). Some participants expressed that task sharing may only sometimes be essential and could potentially lead to resource wastage (I3, 4).

Preparing for Dual Roles in E-Tutoring and Community Management

The interviews underscored the significance of an emotional component and human touch within the e-tutor role (I1). One Interviewee differentiated the e-tutor's role as a learning process supervisor from the actual learning process itself (I2). Contrarily, some participants mentioned needing more preparation for assuming the e-tutor role (I4-7). Nonetheless, e-tutor experience could prove beneficial in undertaking the community manager position (I3).

Different views were expressed regarding the preparation for the job as a community manager. Two interviewees stated that previous work as an e-tutor could facilitate their work as a community manager (I1, I3, I6). However, some expressed a desire for more concrete insights into group assessment and a need for behind-the-scenes insight (I1, 5, 7).

Bridging the Gap Between Expectations and Challenges in the Module

Participants stressed some challenges associated with the course. One respondent struggled with language nuances, which hindered their active participation and expressed a desire for enhanced engagement opportunities in certain situations (I1). Difficulties emerged in the effort to immerse oneself in the tasks which mention diverse locations without being physically present. Another respondent highlighted issues of role distribution and encountered limitations in understanding the project manager's role (I5). The issue of unclear role assignments and specific task allocations was also a contention.

Practical relevance within the course emerged as a significant theme in the interviews. One participant expressed a desire for increased real-world applicability (I1). Another participant revealed that the course lessons significantly influenced their personal life (I4). A further wish for the inclusion of practical, situational exercises was expressed by another interviewee (I7).

Participants voiced diverse suggestions concerning the course. One respondent hoped for a more explicit definition of e-tutors and that e-tutors assume roles similar to traditional tutors (I1). A request for more tangible e-tutoring preparation emerged from another respondent (I5), while the proposal to include the course in undergraduate studies was put forth by another to engage potential e-tutors earlier in their academic journeys (I6).

Concerning roles in e-tutoring, respondents relayed a handful of criticisms. A participant pointed out varying competence requirements and attributes depending on the assumed role (I2). Another participant gave constructive feedback on project management, proposing improvements to competence identification and application (I3). Critiques of role labeling, allocation, and group hierarchy were voiced by a fourth participant (I4) and echoed by another, who further observed differences in competence promotion based on roles (I7).

The Role of Learning Analytics, Chatbots, and Gamification

Three interviewees wished to use learning analytics (I1, 2, 4). One wish is the provision of user data in a meaningful form (I1). One interviewee mentioned the implementation of gamification in this context (I7). Another described utilizing reactive and proactive chatbots for providing and showing information (I4).

Discussion and Recommendations of Action

This chapter addresses the implications of the findings and offers suggestions for improving the design of e-tutor qualification modules and competence development.

This paper presents an intriguing exploration of an e-tutor training module. One of the key takeaways from the paper is how the flipped classroom concept has proven beneficial in enhancing several competencies. The paper argues for a blended approach, where a mix of formats would enhance competence development.

However, the paper also acknowledges that not all competencies can be addressed and thus developed equally. For instance, the training module falls short of enhancing intercultural competence. One approach for improvement is integrating international students into the module, which could broaden the intercultural perspective and enhance the relevant competencies. Generally, a heterogenous group composition during the VCL phase is highly recommended.

The qualitative analysis shows that the initial qualification module lays a strong foundation for e-tutors. The paper further argues for enhancement via e-tutor tandems, which can facilitate a more profound competence development for e-tutors. The results make a compelling argument for adopting e-tutor tandems in the training module, suggesting they can provide a beneficial balance of peer interaction and work-sharing. Working in tandem facilitates a shared responsibility approach, thus alleviating the workload pressure on novice e-tutors. This distribution of tasks paves the way for more strategic planning and problem-solving, potentially improving the tutoring quality and enriching the supervised students' learning experience. The tandem arrangement fosters a supportive and secure environment, promoting competence development and building confidence.

Furthermore, innovative approaches such as learning analytics, chatbots, and gamification were called for. In addition to providing user data through learning analytics, gamification approaches can be used for appropriate representations to overview the behaviors of the student group. Additionally, they should be presented in a motivating way for the student groups to foster their engagement with them. In addition, using proactive and reactive chatbots is considered helpful for early identification of missing digital literacy and answering questions. Implementing such approaches supports e-tutors in the operational tasks and enables them to focus on the pedagogical work assignment and their competence development.

In addition, it must be noted that the examined e-tutor qualification is embedded in a formal learning setting. As discussed in Langesee & Ukhova (2023), competence development can be enhanced by informal settings, such as self-directed e-tutor tandems. Subsequent employment as an e-tutor and participation in (informal) competence-enhancing activities can promote more intensive engagement with an e-tutor's competencies.

Finally, the paper identifies tandems as particularly valuable for first-time e-tutors. They provide an additional contact person, which gives a sense of security and motivates students to become active e-tutors. It emphasizes the importance of applying theoretical knowledge from the training module in practice, enhancing the learning experience, and further addressing the key competencies.

Conclusion

This research explores an e-tutor qualification module and the potential of e-tutor tandems to enhance their competence development. Our findings yield robust answers to the proposed research questions.

Responding to RQ1 and RQ2, we observed that participation in an e-tutor module enhances vital competencies for e-tutoring, primarily through a blend of teaching-learning formats. These include a VCL phase, e-lectures, and seminars, each contributing uniquely to competence development. VCL emerged as the most beneficial format, which suggests the need to incorporate more such interactive and collaborative learning experiences into e-tutor qualification modules.

Especially regarding RQ1, our study indicates that the e-tutor qualification module positively impacts several key competencies. Participants describe a significant development in pedagogical, media, communication, evaluation, and social competencies in the post-module interviews. However, a development in organizational and individual competence was less pronounced, suggesting that these areas might benefit from additional focus in the module design. Intercultural competence did not significantly advance, indicating the necessity for future research to incorporate intercultural sensitivity in e-tutor qualification programs.

Concerning RQ3, our study reveals positive opinions about the e-tutor tandem approach. Most participants viewed it as a potentially beneficial method, allowing for collaboration, shared feedback, and security, which can lead to more confidence in e-tutoring and enhanced competence development. However, resource constraints and the risk of redundancy were cited as potential challenges. Thus, deploying e-tutor tandems requires careful planning, clear role definitions, and sufficient resources to ensure successful implementation. Additionally, personal competence development is crucial but challenging. Further addressing the individual competencies of e-tutors can be a first step in this direction while also fulfilling the objective of competence-oriented learning in HE.

As in every research, some limitations must be acknowledged in this study. One constraint is the five-month duration of the module, which may not sufficiently allow for e-tutors' competence development. A follow-up approach for competence development, like e-tutor tandems, can be used to counter this. Also, the small number of interviewees is limiting but gives exciting insights and adds to the knowledge base of e-tutoring in HE.

Inherent subjectivity in qualitative research, stemming from personal perspectives and experiences during data interpretation and analysis, can potentially introduce bias (Noble & Smith, 2015). To counteract subjective and biased evaluation and analysis, coding, analysis, and interpretation were conducted in close consultation between two researchers. Another way to mitigate this could be to apply mixed-method research using multiple perspectives and data sources (Taherdoost, 2022). The constraints mentioned might affect the generalization of results across diverse individuals and populations.

Future research should focus on several key areas. First, a follow-up quantitative evaluation should be pursued to validate the presented findings and identify broader and underlining trends. Second, examining the efficacy of the proposed recommendations in practice would solidify our understanding of competence development. Furthermore, the use of gamification and chatbots could support the positive development process of competencies.

Additionally, piloting the e-tutor tandem concept during the VCL could provide prospective e-tutors with a practical understanding of this approach. Ultimately, iterative research is essential for optimizing the e-tutor qualification process for the HE landscapes.

Overall, this research paper presents a robust analysis and contributes valuable insights to the literature on e-tutor qualification and competence development.

References

- Adamus, T., Kerres, M., Getto, B., & Engelhardt, N. (2009). Gender and E-tutoring A Concept for Gender Sensitive E-tutor Training Programs. *Proceedings of GICT 2009*.
- Baartman, L. K. J., & de Bruijn, E. (2011). Integrating knowledge, skills and attitudes: Conceptualising learning processes towards vocational competence. *Educational Research Review*, 6(2), 125–134. <https://doi.org/10.1016/j.edurev.2011.03.001>
- Bourn, D. (2018). Understanding Global Skills for 21st Century Professions. In *Springer eBooks*. <https://doi.org/10.1007/978-3-319-97655-6>
- Brauer, S. (2021). Towards competence-oriented higher Education: A systematic literature review of the different perspectives on successful exit profiles. *Journal of Education and Training*, 63(9), 1376–1390. <https://doi.org/10.1108/et-07-2020-0216>
- Clauss, A., Altmann, M., & Schoop, E. (2019). How to Design Case Studies to Foster Virtual Collaboration. *The Second International Conference and the Thirteenth National Conference on Quality Assessment in University Systems*, Shiraz, Iran.
- de Metz, N., & Bezuidenhout, A. (2018). An importance-competence analysis of the roles and competencies of e-tutors at an open distance learning institution. *Australasian Journal of Educational Technology*, 34(5), 27–43. <https://doi.org/10.14742/ajet.3364>
- Dlouhá, J., Heras, R. L., Mulà, I., Salgado, F. P. & Henderson, L. M. (2019). Competences to Address SDGs in Higher Education—A Reflection on the Equilibrium between Systemic and Personal Approaches to Achieve Transformative Action. *Sustainability*, 11(13), 3664, 1-23. <https://doi.org/10.3390/su11133664>
- Doukakis, S., Koutroumpa, C., Despi, O., Raffa, E., Chira, T. & Michalopoulou, G. (2013). A case study of e-tutors' training program. *12th International Conference on Information Technology Based Higher Education and Training*, 1-5. <https://doi.org/10.1109/ithet.2013.6671052>
- Dresing, T., & Pehl, T. (2018). *Praxisbuch Interview, Transkription & Analyse: Anleitungen und Regelsysteme für qualitativ Forschende* (8. Aufl.). Marburg: Eigenverlag.
- Edwards, R. & Holland, J. (2013). *What is Qualitative Interviewing?* Bloomsbury.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112. <https://doi.org/10.1016/j.nedt.2003.10.001>
- Helferich, C. (2010). *Die Qualität qualitativer Daten: Manual für die Durchführung qualitativer Interviews*. Springer.

- Heuel, E., & Feldmann, B. (2013). A new standardisation and certification initiative in e-learning – The qualification standard „Certified European E-tutor“. *2013 Second International Conference on E-Learning and E-Technologies in Education*, 249-253. <https://doi.org/10.1109/ICeLeTE.2013.6644383>
- Jödicke, C., & Teich, E. (2015). Konzepte für den Einsatz von E-tutoren in komplexen E-Learning-Szenarien - Ein Erfahrungsbericht. In T. Köhler, N. Kahnwald, & E. Schoop (Eds.), *Workshop Gemeinschaften in Neuen Medien (GeNeMe) 2015* (pp. 45–53). TU Dresden, Medienzentrum, Universität Siegen. <https://dl.gi.de/handle/20.500.12116/35032>
- Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965. <https://doi.org/10.1111/jan.13031>
- Kopp, B., Matteucci, M. C. & Tomasetto, C. (2012). E-tutorial support for collaborative online learning: An explorative study on experienced and inexperienced e-tutors. *Computers & education*, 58(1), 12–20. <https://doi.org/10.1016/j.compedu.2011.08.019>
- Langesee, L.-M. (2022). Future Competencies and E-Tutor Competencies: A Chance for Higher Education Institutions to Support Their Student Staff. *International Journal of Management, Knowledge and Learning*, 11. <https://doi.org/10.53615/2232-5697.11.297-314>
- Langesee, L.-M. (2023). From Qualification to Competencies: Defining a Task-Based Competency Profile for E-Tutors in Higher Education. *International Journal of Management in Education*, 17(2), 109-129. <https://doi.org/10.1504/ijmie.2023.10052682>
- Langesee, L.-M., Franke, L., & Heller, J. (2022). A Sudden Shift From Face-to-Face to Digital: What Challenges Did Tutors Face While Tutoring During Covid-19? *ICERI2022 Proceedings*, 209–216. <https://doi.org/10.21125/iceri.2022.0089>
- Langesee, L.-M., Ukhova, N. (2023). E-Tutor Tandems in a COIL Course - Design, Implementation and Evaluation. *International Journal of Research in E-Learning*, 9(1), 1-25. <http://dx.doi.org/10.31261/IJREL.2023.9.1.06>
- Le Deist, F. D., & Winterton, J. (2005). What is competence? *Human Resource Development International*, 8(1), 27–46. <https://doi.org/10.1080/1367886042000338227>
- Magaldi, D., & Berler, M. (2020). Semi-structured Interviews. In *Encyclopedia of Personality and Individual Differences* (pp. 4825–4830). Springer International Publishing. https://doi.org/10.1007/978-3-319-24612-3_857
- Martin-Cuadrado, A., Lavandera-Ponce, S., Mora-Jauregui, B., Romero, C. S., Pérez-Sánchez, L. (2021). Working Methodology With Public Universities In Peru During the Pandemic—continuity Of Virtual/online Teaching And Learning. *Education Sciences*, 11, 1-26. <https://doi.org/10.3390/educsci11070351>

- Noble, H. & Smith, J. (2015). Issues of validity and reliability in qualitative research. *Evidence-Based Nursing*, 18(2), 34–35. <https://doi.org/10.1136/eb-2015-102054>
- North, K. (2021). Wissensorientierte Unternehmensführung. In *Springer eBooks*. <https://doi.org/10.1007/978-3-658-32771-2>
- Parry, S. B. (1998). Just what is a competency? (And why should you care?) *Training*, 35(6), 58-64.
- Pérez-Sanagustin, M., Kotorov, I., Teixeira, A. L., Mansilla, F., Broisin, J., Alario-Hoyos, C., Jerez, O., Pinto, M. H., García, B., Kloos, C. D., Morales, M. A., Solarte, M., Oliva-Córdova, L. M. & Lopez, A. C. M. (2022). A Competency Framework for Teaching and Learning Innovation Centers for the 21st Century: Anticipating the Post-COVID-19 Age. *Electronics*, 11(3), 413. <https://doi.org/10.3390/electronics11030413>
- Ravindran, V. (2019). Data analysis in qualitative research. *Indian Journal of Continuing Nursing Education*, 20(1), 40. https://doi.org/10.4103/ijcn.ijcn_1_19
- Raviolo, P., Messina, S., Mauro, I., Rondonotti, M. (2023). E-tutoring Layout In Higher Education: Skills and Efficacy Perception. *Research on Education and Media*, 1(15), 80-87. <https://doi.org/10.2478/rem-2023-0011>
- Rowe, C. (1995). Clarifying the use of competence and competency models in recruitment, assessment and staff development. *Industrial and Commercial Training*, 27(11), 12–17. <https://doi.org/10.1108/00197859510100257>
- Schneider, M., Preckel, F. (2017). Variables Associated With Achievement In Higher Education: a Systematic Review Of Meta-analyses. *Psychological Bulletin*, 6(143), 565-600. <https://doi.org/10.1037/bul0000098>
- Schoop, E., Bukvova, H. & Lieske, C. (2010). Blended-Learning Arrangements for Higher Education in the changing knowledge Society. *Proceedings of the International Conference on Current Issues in Management of Business and Society Development*, Riga, Latvia. <https://nbn-resolving.org/urn:nbn:de:bsz:14-qucosa-26183>
- Taherdoost, H. (2022). What are Different Research Approaches? Comprehensive Review of Qualitative, Quantitative, and Mixed Method Research, Their Applications, Types, and Limitations. *Journal of Management Science & Engineering Research*, 5(1), 53–63. <https://doi.org/10.30564/jmsr.v5i1.4538>
- Weichbold, M. (2022). Pretests. In: Baur, N., Blasius, J. (Eds.) *Handbuch Methoden der empirischen Sozialforschung* (pp. 443-451). Springer VS. https://doi.org/10.1007/978-3-658-37985-8_28