



# Future Competencies and E-Tutor Competencies: A Chance for Higher Education Institutions to Support Their Student Staff

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**Purpose:** E-tutors often participate in collaborative online international learning (COIL) settings and guide students in group work and related learning processes. They moderate, organize, and observe the group and individual learning processes and are often students' first point of contact. This support requires several competencies, largely reflected in the so-called future skills. Thus, it seems sensible to examine these competencies more closely and promote them to enhance the course experience and support for students in COIL settings on the one hand and to make student e-tutors fit for the modern working world on the other.

**Study design/methodology/approach:** As a starting point for this project, a comprehensive systematic literature analysis on e-tutor competencies and qualifications was conducted in Langesee (2023). A competency ranking and task-based competency profile for e-tutors in higher education were developed during this research. To investigate the validity and practicability of these artifacts, an evaluation was conducted with 16 international experts and practitioners (e-tutors) using a questionnaire.

**Findings:** The competencies identified in Langesee (2023), the ranking, and the profile created were recognized as helpful and practical. Additional comments from respondents allowed both artifacts to be revised and expanded. The three most relevant competencies of the nine detected are communication, pedagogical and social competencies.

**Originality/value:** The resulting artifacts can be used in the next step as a basis for a self-evaluation tool (SET), enabling e-tutors to assess their competence equipment. Based on this, individual instruments will be recommended to initiate possible improvements.

## Introduction

Intercultural virtual collaborations are particularly suitable for equipping future business professionals with the necessary future competencies or skills (Ferreira-Lopes & van Rompay-Bartels, 2020). In precisely such virtual settings, e-tutors are employed. However, not only the students who take part in these courses and work on complex case studies in groups should benefit from the setting, but also the e-tutors who accompany them. Such programs allow both student supervisors (e-tutors) and participating students to benefit from the teaching-learning approach in this kind of module. Another aspect of why collaborative online international learning (COIL) settings are becoming more and more popular in universities is the fact that they simulate and train the work in virtual teams, support internationalization efforts, and enable students to gain various competencies, e.g., cultural competencies (Rauer et al., 2021; Vahed & Rodriguez, 2021; Zwerg-Villegas & Martínez-Díaz, 2016). Such virtual teams are a trendy topic in multinational organizations. By closely accompanying student virtual teams, an e-tutor can gather and deepen vital competencies for the modern working world. In this context, there is also talk of International Online Collaboration Competencies (Kolm et al., 2022). Students can train these competencies by participating in COIL settings. E-tutors already need a certain level to be able to accompany such a course. Still, they also benefit from improving these competencies through targeted support offers from the university or course supervisors. Evidence in the literature shows that ongoing support from e-tutors is considered necessary (see Goold et al., 2010). Still, there is a lack of structured learning opportunities or targeted

initiatives to improve their skills and, thus, their competencies. The relevance of competency improvement tools is demonstrated, among other things, by the fact that e-tutors can directly impact students' perceptions of course quality or performance (Maré & Mutezo, 2021). Away from the university, a competency-driven work environment focusing on so-called future skills prevails, for which Higher Education Institutions (HEI) should prepare students, including e-tutors, in the best possible way (Ghaith, 2010; Hernandez-de-Menendez et al., 2020). Before deriving suitable instruments for competence improvement, a theoretical basis must first be established. This publication is dedicated to evaluating an already published elaboration on the topic of e-tutor competencies. In the spirit of iterative development (Hevner, 2007), 16 experts and e-tutors were interviewed to answer the following research questions:

- How appropriate is the introduced competency ranking to map the necessary competencies of e-tutors in HE?
- Is the introduced task-based competency profile helpful in getting an overview of the necessary competencies of e-tutors to perform their role-based tasks?

In addition, this publication aims to answer the question of what similarities between future and e-tutor competencies can be identified.

## Theoretical Background

### *E-tutors*

It is difficult to draw precise lines for a broad definition of the phrase “e-tutor” since it is used in various contexts and is defined by many synonyms. E-tutors are frequently referred to as e-moderators, e-coaches, instructors for distance learning, or online tutors (Bawane & Spector, 2009; McPherson & Baptista Nunes, 2004; Vegliante & Sannicandro, 2020). De Metz & Bezuidenhout (2018, p. 29) define an e-tutor as “the person most closely involved in the support of distance students,” which provides a comprehensive definition of the concept. A more accurate description of e-tutors for this research context originates from Jödicke & Teich (2015). They describe e-tutors as people who assist students in accomplishing learning objectives in contemporary e-learning settings. This understanding of e-tutorial activities describes their support in virtual collaborative learning (VCL) projects at TU Dresden, esp. in the Chair of Information Management. They observe, support, and guide the learning processes in this situation rather than imparting knowledge as defined by, e.g., Bawane & Spector (2009). E-tutors serve as students' initial point of contact and offer assistance with technological, organizational, content-related, and interpersonal issues (Jödicke & Teich, 2015). Thus, this publication's working definition of e-tutors is as follows: *e-tutors are student learning facilitators of virtual learning processes in a modern Higher Education setting.*

### *E-tutor Competencies*

Although an e-tutor's scope of practice may be defined differently, the job essentially encompasses nine competency categories in COIL settings. These categories were researched and analyzed in detail in Langesee (2023). The following competence categories emerged: **pedagogical, social, communication, media, organizational, individual, professional, evaluation, and intercultural.** These competencies appeared in varying intensity in the literature, which allows a conclusion to be drawn about the relevance of certain competencies for the activity as an e-tutor. This differing intensity of mentions of e-tutor competencies in the literature made it possible to derive a literature-based competency ranking that was presented to experts and e-tutors for evaluation. The iterative developed version of the ranking is shown in Fig. 5. The competence categories identified in the literature are also found to a large extent in the study by Altmann et al. (2022). This study found that the pedagogical and technical/media

competencies of e-tutors are the most important for this activity. Furthermore, intercultural awareness, professional expertise, shared language, role awareness, identity awareness, previous experience, and self-motivation were identified as essential skills. These skills are also largely reflected in the descriptions of competencies in Langesee (2023), which further supports the selection of the nine competence areas.

### *Future Competencies*

While the concept of competence is used both in business practice and in (university) teaching, there is no widely accepted definition, but confusion as to what can or cannot be classified as competence (le Deist & Winterton, 2005). One well-known definitional approach combines knowledge, skills, and attitudes as competence (Stoof et al., 2002). However, these subtle differences are not always considered in the literature, which also applies here. Often it is not future competencies but future skills, 21<sup>st</sup>-century skills or global skills mentioned. This may be due to the practical reference of the word “skills”, but it makes the literary localization of the term more difficult. To draw as realistic a picture as possible for those responsible for the modules, the assumption is made that skills indirectly include or address the competencies behind them (Gerstein & Friedman, 2016). A comprehensive study aimed at identifying relevant future skills sees the focus of future skills as follows:

“In order to cope with future challenges, students need to develop curiosity, imagination, vision, resilience and self-confidence, as well as the ability to act in a self-organized manner” (Ehlers, 2020).

The term 21<sup>st</sup>-century skills is also frequently found in the literature. Here, too, there are different attempts at definitions, with the approach of the Partnership for 21<sup>st</sup> Century Learning being very well known. The organization lists three head categories and associated attributes of skills needed for education and the workplace in a framework. They classify **learning and innovation skills** (creativity and innovation, critical thinking and problem-solving, communication, and collaboration), **information, media, and technology skills** (information, media, and ICT literacy), and **life and career skills** (flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility) as 21<sup>st</sup>-century skills (Battelle for Kids, 2019).

### *Similarities Between Future And E-tutor Competencies*

As mentioned at the beginning, a substantial overlap of the future competencies with e-tutor competencies can be observed. Respectively some future skills can be found in descriptions of e-tutor competencies. As already mentioned, the assumption is made that skills are related to the competencies behind them, and thus, skills can be assigned to competency categories. Some of the described skills can be found in the competence definitions and attributes in Langesee (2023) and are briefly compared. Based on the Partnership for 21<sup>st</sup>-Century Learning’s categorization, there is overlap in all three headings. In the area of “learning and innovation skills”, communication and collaboration are particularly striking. These can be found in the competence categories “communication” and “social”. Creativity can be assigned to individual competence. The category of “information, media, and technology skills” corresponds to the media competence of e-tutors. The last category, “life and career skills,” includes a variety of skills. For example, “social and cross-cultural skills” can be found in social and intercultural competence. “Leadership and responsibility” can be located primarily in social competence.

## Methodology

This questionnaire aimed to obtain the assessment of international experts on a previously developed and published artifact and revise it afterward. This artifact consists of a competence ranking on the one hand and a task-based competency profile for e-tutors in HE on the other hand.

The questionnaire was formally designed according to the recommendations of Krosnick & Presser (2018). The “conventional wisdom” (Krosnick & Presser, 2018, p. 264) was followed, which contains, among other things, advice on questionnaires’ linguistic and content design. Consequently, attention was paid to, e.g., the use of simple syntax, the avoidance of ambiguity, and the inclusion of filter questions.

The questionnaire was named “Fit of the task-based competency profile for e-tutors in COIL settings”. It consisted of five sections, each described in detail so that the participants knew what was expected of them or which illustrations they should refer to when answering. The pretest was done with two research associates experienced in questionnaire design, but no further changes had to be made to the survey. The questionnaire was online for about three weeks, and no personal data of the participants were collected to exclude the possibility of tracing the answers back to individuals.

The expert group contacted by mail consisted of professors, research associates, and the practitioner’s group of active e-tutors. Since the respondents had to be experts in e-tutoring or active e-tutors & known to the author, this limited the population (purposeful sampling (Palinkas et al., 2015)). Nevertheless, a response rate of 66.6% was achieved (16 of 24 contacted), which allows meaningful statements to be made. The concrete composition of the participants can be found in Table 1 below.

Country	Albania		Germany		Slovenia		Sum %	Sum n
	%	n	%	n	%	n		
Occupation								
E-tutor	37.50%	6	6.25%	1	0.00%	0	43.75%	7
Professor	0.00%	0	6.25%	1	0.00%	0	6.25%	1
Research associate	0.00%	0	43.75%	7	6.25%	1	50.00%	8
<b>Sum</b>	<b>37.50%</b>	<b>6</b>	<b>56.25%</b>	<b>9</b>	<b>6.25%</b>	<b>1</b>	<b>100.00%</b>	<b>16</b>

Table 1: Country of origin and occupation of participants.

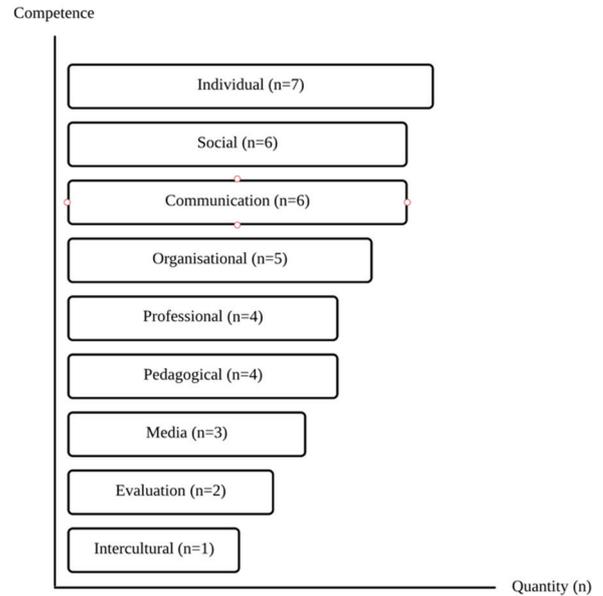
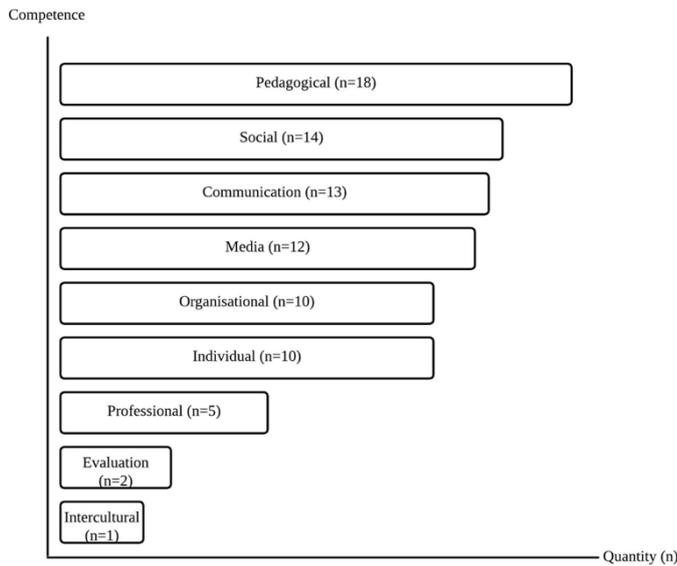
The questionnaire was analyzed descriptively, as only the experts’ and practitioners’ opinions on the artifact at hand were of interest, and neither conclusions about the entire population nor the recognition of patterns were the focus of the study (Schäfer, 2016). The data was evaluated and analyzed with the help of Excel since it was a small amount of data. Pivot tables were used to present the data. The quantitatively evaluable questions are presented and described in chapter 4.1. Chapter 4.2 represents the qualitative parts of the questionnaire in condensed form. No separate content analysis is carried out for the qualitative data (free-text comments), as the data scope is too small for a standard qualitative analysis since only a few participants used the option of free-text comments. Hence, the answers were summed up, analyzed, grouped, and described.

## Results

The questionnaire analysis is presented in this chapter to answer research questions one and two. For better comprehensibility, the quantitative and qualitative results are described separately.

**Quantitative Results**

Three figures (Fig. 1 - 3) presented in the survey are shown below to understand the following evaluations. Figure 1 shows the alpha version of the competency ranking based on a systematic literature review. The second figure shows another competency ranking derived from the competency profile, i.e., which competence is needed and how often to complete a task. The



third figure shows the alpha version of the task-

**Figure 1: Alpha version of the competency ranking (Langesee, 2023).**

**Figure 2: Second competency ranking based competency profile.**

Task category	Task	Competence								
		Pedagogical (4)	Social (6)	Communication (3)	Media (3)	Organisational (5)	Individual (7)	Professional (4)	Evaluation (2)	Intercultural (1)
Functional assistance	Answering content-related questions							X		
	Assisting in case of problems with understanding/ambiguities		X	o				X		
	Giving tips for literature, additives, working techniques, methods	o				X	X			
	Explaining tasks			X		o		o		
	Feedback about working progress and current results		X	X		o	o			
Personal and group ordered assistance	Supporting the organisation of learning activities	X	X	o		X				
	Feedback about individual's/group's learning behaviour	X	X	X			o		o	
	Assisting the handling of conflicts		X	X			o			(o)
	Caring about individual's/groups' learning problems		X				X			
Technical assistance	Support the target-oriented usage of different tools for communication and collaboration (functionality, selection, handling technical problems)				X		o	o		
Organisational assistance	Monitoring the compliance with task deadlines				o	X	o			
Assessment	Supporting assessment based on a special instrument	o			o				X	

**Figure 3: Alpha version of the task-based competency profile (Langesee, 2023).**

Now follows the **quantitative evaluation** of the survey.

Table 1 (s. above) shows the country of origin and the occupation of the respondents at the time of the survey. Of the 16 participants, nine were from Germany (56.25%), six were from Albania (37.50%), and one was from Slovenia (6.25%). The participants consisted of eight research associates (50.00%), seven practitioners, i.e., e-tutors (43.75%), and one professor (6.25%). Six e-tutors were from Albania (37.50%) and one from Germany (6.25%). Seven of the eight research associates were from Germany (43.75%). The other research associate was from Slovenia (6.25%), and the professor was from Germany (6.25%).

The type of higher education institution to which the respondents belonged can be seen in the following table (Table 2). Eleven participants belonged to a university (68.75%), four belonged to a private university (25.00%), and one participant belonged to another higher educational institution (6.25%). The professor (6.25%) and all eight research associates (50.00%) belonged to a university. Four of the seven e-tutors interviewed belonged to a private university (25.00%), two to a university (12.50%), and one to another educational institution (6.25%).

Table 2: Affiliation to an educational institution.

Educational institution	Other		Private University		University (e.g., TU Dresden)		Sum %	Sum n
	%	n	%	n	%	n		
Occupation								
E-tutor	6.25%	1	25.00%	4	12.50%	2	43.75%	7
Professor	0.00%	0	0.00%	0	6.25%	1	6.25%	1
Research associate	0.00%	0	0.00%	0	50.00%	8	50.00%	8
<b>Sum</b>	<b>6.25%</b>	<b>1</b>	<b>25.00%</b>	<b>4</b>	<b>68.75%</b>	<b>11</b>	<b>100.00%</b>	<b>16</b>

Fourteen participants (87.50%) agreed with the given definition of an e-tutor in the questionnaire (“**E-tutors are defined as learning facilitators or supporters of virtual learning processes in university teaching.**”). Two research associates (12.50%) were not sure. This question was essential to ensure that participants have an identical understanding of e-tutors in HE, as all subsequent questions referred to it. Table 3 then shows whether one has already qualified or trained e-tutors. Eight participants (50.00%) have already qualified e-tutors themselves. Of these, six respondents are in the group of academic staff (37.50%), and two respondents are e-tutors (12.50%). Seven respondents have not qualified e-tutors (43.75%), and one is unsure (6.25%). Of the eight who had already qualified e-tutors, four did so for less than five years (57.14%), two for less than one year (28.54%), and one participant between five and ten years (14.29%). One respondent did not provide any information in this regard.

Table 3: Experience in training e-tutors.

Occupation	I'm not sure		No		Yes		Sum %	Sum n
	%	n	%	n	%	n		
E-tutor	0.00%	0	31.25%	5	12.50%	2	43.75%	7
Professor	0.00%	0	6.25%	1	0.00%	0	6.25%	1
Research associate	6.25%	1	6.25%	1	37.50%	6	50.00%	8
<b>Sum</b>	<b>6.25%</b>	<b>1</b>	<b>43.75%</b>	<b>7</b>	<b>50.00%</b>	<b>8</b>	<b>100.00%</b>	<b>16</b>

The following table (Table 4) shows who has or has not personally been an e-tutor. This question was answered by 15 of 16 people, ten of whom have already worked as an e-tutor (66.67%). Of these, six were academic staff (40.00%), and four were current e-tutors (26.67%). The remaining five respondents had not previously worked as e-tutors (33.33%). Four of ten

people who had been e-tutors did so for less than five years (40.00%). Two respondents did so for less than two years (20.00%), and the remaining four did so for less than one year at the time of the survey (40.00%).

Table 4: Personal activity as an e-tutor.

	No		Yes		Sum %	Sum n
Occupation	%	n	%	n		
E-tutor	13.33%	2	26.67%	4	40.00%	6
Professor	6.67%	1	0.00%	0	6.67%	1
Research associate	13.33%	2	40.00%	6	53.33%	8
<b>Sum</b>	<b>33.33%</b>	<b>5</b>	<b>66.67%</b>	<b>10</b>	<b>100.00%</b>	<b>15</b>

Additionally, 15 out of 16 respondents indicated whether they were familiar with the necessary competencies and the rough range of tasks of e-tutors. All of them (100.00%) stated that this applied to them.

The following evaluation refers to whether the respondents considered the choice of competencies from Figure 1 as valuable for describing e-tutor competencies (Table 5). Sixteen people answered this question, and eleven considered the choice of competencies useful (68.75%). Three people, all research associates, disagreed (18.75%), and one e-tutor and one research associate were not sure (12.50%). Of the eleven people who agree with the choice of competencies, six are e-tutors (37.50%), four are research associates (25.00%), and one is a professor (6.25%).

Table 5: Evaluation of Fig. 1 - choice of e-tutor competencies.

	I'm not sure		No		Yes		Sum %	Sum n
Occupation	%	n	%	n	%	n		
E-tutor	6.25%	1	0.00%	0	37.50%	6	43.75%	7
Professor	0.00%	0	0.00%	0	6.25%	1	6.25%	1
Research associate	6.25%	1	18.75%	3	25.00%	4	50.00%	8
<b>Sum</b>	<b>12.50%</b>	<b>2</b>	<b>18.75%</b>	<b>3</b>	<b>68.75%</b>	<b>11</b>	<b>100.00%</b>	<b>16</b>

Table 6 lists the answers to the question of whether Figure 2 is more appropriate or realistic than Figure 1. Eight of the 16 respondents agreed with the statement (50.00%), of which four each belong to the group of e-tutors and research associates (25.00%). Six respondents disagreed with the statement (37.50%). Four of them are research associates (25.00%), one is a professor (6.25%), and one is an e-tutor (6.25%). Two e-tutors were not sure (12.50%).

Table 6: Comparison of the fit of Fig. 2 vs. Fig. 1 regarding e-tutor competencies.

	I'm not sure		No		Yes		Sum %	Sum n
Occupation	%	n	%	n	%	n		
E-tutor	12.50%	2	6.25%	1	25.00%	4	43.75%	7
Professor	0.00%	0	6.25%	1	0.00%	0	6.25%	1
Research associate	0.00%	0	25.00%	4	25.00%	4	50.00%	8
<b>Sum</b>	<b>12.50%</b>	<b>2</b>	<b>37.50%</b>	<b>6</b>	<b>50.00%</b>	<b>8</b>	<b>100.00%</b>	<b>16</b>

This table addresses whether the combination of competencies and typical tasks in a competency profile (Fig. 3) is helpful. Ten of the 16 participants found the competency profile helpful (62.50%). The ten individuals consisted of five research associates (31.25%), four e-tutors (25.00%), and one professor (6.25%). The remaining six individuals were not sure (37.50%). Of these, three people are in the e-tutor group and the research associate group (18.75%).

Table 7: Evaluation of the usefulness of the task-based competency profile (Fig. 3).

Occupation	I'm not sure		Yes		Sum %	Sum n
	%	n	%	n		
E-tutor	18.75%	3	25.00%	4	43.75%	7
Professor	0.00%	0	6.25%	1	6.25%	1
Research associate	18.75%	3	31.25%	5	50.00%	8
<b>Sum</b>	<b>37.50%</b>	<b>6</b>	<b>62.50%</b>	<b>10</b>	<b>100.00%</b>	<b>16</b>

Table 8 aggregates whether a competency profile like the one in Figure 3 can be used as a basis for self-evaluation of competencies by e-tutors. Eleven out of 16 respondents answered affirmatively (68.75%). These eleven respondents consist of five research associates (31.25%), five e-tutors (31.25%) and one professor (6.25%). Five respondents (31.25%) were unsure whether the competency profile could be used as a basis for self-evaluation. This group of five comprises two e-tutors (12.50%) and three research associates (18.75%).

Table 8: Use of a task-based competency profile for competence assessment.

Occupation	I'm not sure		Yes		Sum %	Sum n
	%	n	%	n		
E-tutor	12.50%	2	31.25%	5	43.75%	7
Professor	0.00%	0	6.25%	1	6.25%	1
Research associate	18.75%	3	31.25%	5	50.00%	8
<b>Sum</b>	<b>31.25%</b>	<b>5</b>	<b>68.75%</b>	<b>11</b>	<b>100.00%</b>	<b>16</b>

### ***Qualitative Results***

The following chapter describes the evaluation and changes in the competency ranking and profile artifacts in detail.

#### ***Alpha Competency Ranking***

The next section summarizes the survey's findings regarding the **alpha competency ranking** (Fig. 1).

Based on Figure 1, participants were asked if the presented choice of listed competencies made sense. Three people answered negatively and provided comments. One person made suggestions for a change in the ranking, and another respondent would like the overview to be more concise and gave the example of not knowing what professional competencies mean. To incorporate this suggestion, a transparent fact sheet was created for each of the nine competencies and will be attached to the revised ranking (s. chapter 5.2). This way, a uniform understanding of the competencies is promoted, and conceptual uncertainties are countered. The third person suggested changing the term pedagogical competencies to moderation skills and didactics. This change is not made because the category of pedagogical competencies

includes more than moderation skills and didactics. Didactics are already included in pedagogical skills, and moderation skills are assigned to communication or social skills.

Respondents were asked whether they missed essential competencies in the competency ranking (Fig. 1). Three people answered this question. One person missed moderation skills, another wanted a more precise definition of media competence, and one respondent wanted software/technical skills to be considered. The last aspect also relates to media competence, which is why the description of media competence has been changed to clarify that technical/software skills are also included. Moderation skills can be classified as communication or social competence, which is why no separate competence category was created.

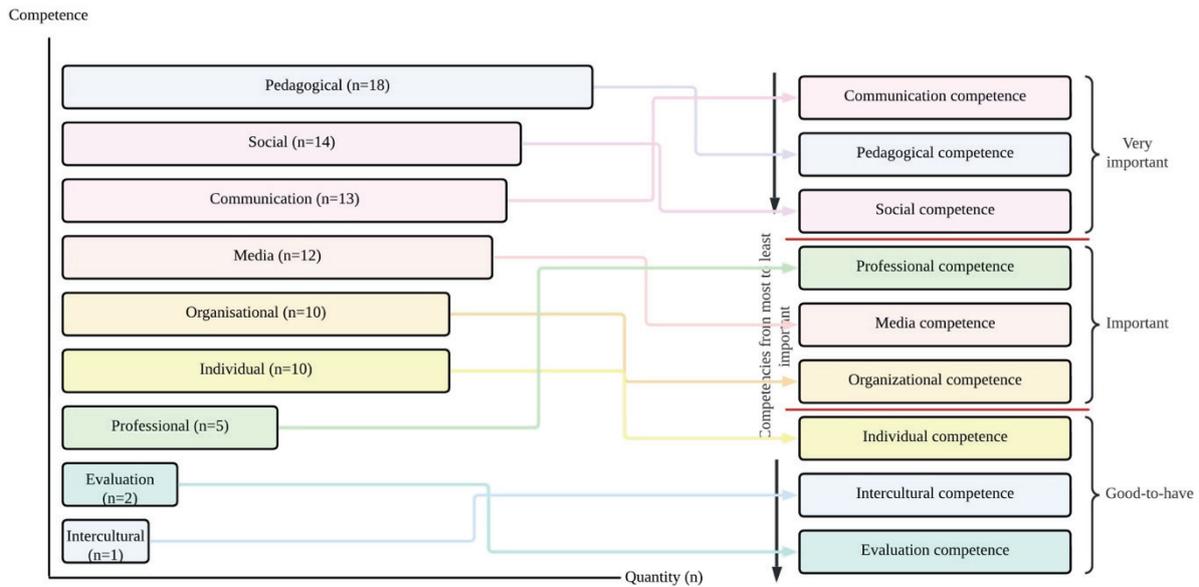
After assessing the competency ranking, respondents had to rank the nine competencies listed in order of what they thought was most appropriate for e-tutors. This resulted in 16 different competence rankings. These 16 rankings and the underlying literature-derived ranking (Fig. 1) were used to generate a revised, expert-assessed competence ranking. For this purpose, the ranking levels of each competence were added up and divided by 17 (16 rankings + 1 existing alpha ranking). The result differed from the original ranking. To illustrate the changes, the competencies of the alpha and beta competency rankings are color-coded and compared in Figure 4.

In the alpha ranking, pedagogical, social, and communication competencies were the most important. Although these three competencies are still considered the most essential, the order has changed. The revised ranking sees communicative competencies in the first place. Pedagogical and social competencies follow in second and third place.

In fourth place in the new ranking is professional competence. This place was held by media competence in the original ranking. Media competence now follows in fifth place, previously occupied by organizational competence. According to the experts, this competence is in sixth place, taken by individual competence in the initial ranking. The last three competencies in the alpha ranking were professional, evaluation and intercultural competence. These competencies are now in the bottom three places, but in a changed order: professional, intercultural and evaluation competence.

To make the importance of the identified competencies clear not only through their place in the ranking but also through an additional classification, a division into the categories of very important, important, and good-to-have competencies was made in the revised ranking. This split is intended to provide a quick overview of the most important competencies of e-tutors (Fig. 5).

Additionally, participants were asked to assess the ranking from Figure 2. Four people commented on why they found this ranking less accurate than the one from Figure 1. One person felt that media competence was placed too low in the ranking, and two noted that intercultural competencies were more important than depicted, especially for intercultural settings. The fourth person was surprised about the high ranking of individual competencies and would like an explanation of what counts as an individual competence. The final comment was implemented through the competency fact sheet.



**Figure 4: Comparison between alpha and beta competency ranking.**

### *Alpha Task-Based Competency Profile*

The following evaluations refer to the **alpha competency profile** (Fig. 3).

First, the participants were asked which aspects of the competency profile they liked. The aspect of linking competencies and tasks was mentioned several times as positive. This factor makes the profile helpful, as one can see which competencies are necessary to be able to complete specific tasks. The classification of tasks into logical groups was also positively highlighted. In addition, the profile is easy to read, concise, holistic, and adaptive. The matrix display was also considered positive.

Participants were then asked which aspects they felt were missing from the competency profile. One expert suggested creating another illustration that clearly shows which competence is a must-have and which is not. This comment was implemented in the beta competency profile using a meaningful legend to maintain the conciseness of the profile. Another person noted that colors could be used to provide a quicker overview. Because color coding could overstimulate the information presentation, the symbols of the legend were changed (from X, o to +, ~), which should also contribute to a better understanding. One person pointed out that the “Answering content-related questions” task could also be assigned to pedagogical and communication skills. After careful consideration, this suggestion was incorporated into the revised profile. One expert suggested introducing a third dimension to the matrix: the level of competence needed to complete a task. This aspect is already considered mainly through the classification into a must-have and a good-to-have competence.

### *General Comments*

Finally, participants were asked what **general comments** they had about the survey or if they had any ideas, they would like to contribute.

One person suggested rewording some competence categories to align with the KSA Framework. This framework is mainly used for job advertisements. Despite its suitability for human resource departments, it is criticized for its redundancy and the difficult distinction between **Knowledge, Skills, and Abilities** (Ahsan et al., 2013; Tripathi & Agrawal, 2014). Classification into the KSA framework is omitted to avoid additional complexity in the competence profile. However, the proposition that competencies consist of the three

components of the KSA framework is supported and is applied in the fact sheets of the individual competencies under “Exemplary attributes”. In addition, so-called anchor examples can be used to assess observable actions based on individual work performance at different proficiency levels. This suggestion will be included in the upcoming self-evaluation tool (SET) design for e-tutors.

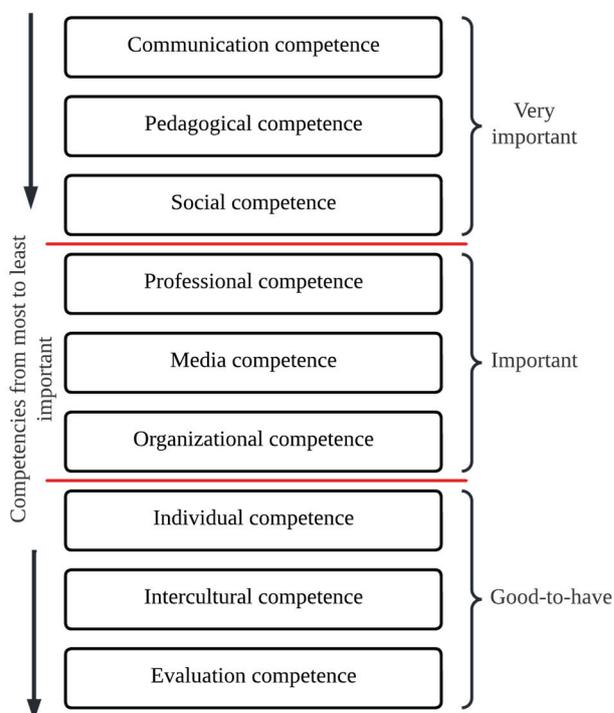
Another person noted that getting tips on what additional qualifications could increase proficiency would be helpful. For this, competence levels would have to be integrated into the profile. However, to maintain the clarity of the competency profile, fine subdivisions of the competencies are not directly integrated into the profile. However, such tips and measures for increasing competencies will play a key role in the planned SET mentioned above.

## Discussion

Through the extensive comments of the experts and e-tutors, it is possible to iteratively develop and improve both the e-tutor competencies in general and the alpha versions of the competency profile and ranking.

### *Beta Competency Ranking*

To provide a quick overview of the general competencies needed by e-tutors in COIL settings, a competency ranking was created in Langesee (2023). This alpha ranking was also evaluated by the experts and e-tutors and subsequently revised. The order of the competencies has changed slightly, but not substantially. Since the experts and e-tutors, in parallel with the literature, consider some competencies to be more relevant to the work as an e-tutor than other competencies, a subdivision into **very important**, **important**, and **good-to-have** has been made to take account of these assessments. The updated version of this ranking can be seen in Figure 5.



**Figure 5: Revised Competency Ranking.**

### Beta Competency Profile

The ranking was only slightly revised since the experts and e-tutors confirmed that the alpha version was easy to understand. The revised version can be taken from Figure 6.

Task category ↓	Task	Competence								
		Pedagogical	Social	Communication	Media	Organizational	Individual	Professional	Evaluation	Intercultural
<b>Functional assistance</b>	Answering content-related questions	+	~	+					+	
	Assisting in case of problems with understanding/ambiguities		+	~					+	
	Giving tips for literature, additives, working techniques, methods	~				+	+			
	Explaining tasks			+			~		~	
	Feedback about working progress and current results		+	+			~	~		
<b>Personal and group ordered assistance</b>	Supporting the organization of learning activities	+	+	~		+				
	Feedback about individual's/group's learning behavior	+	+	+			~		~	
	Assisting the handling of conflicts		+	+			~			~
	Caring about individual's/groups' learning problems		+				+			
<b>Technical assistance</b>	Supporting the target-oriented usage of different tools for communication and collaboration (functionality, selection, handling technical problems)				+		~	~		
<b>Organizational assistance</b>	Monitoring the compliance with task deadlines				~	+	~			
<b>Assessment</b>	Supporting assessment based on a special instrument	~			~				+	

+: must-have competence for a task

~: good-to-have competence for a task

Figure 6: Revised Task-Based Competency Profile.

### Competence Fact Sheets

A legend is added to make the competency profile easy to read and use for module supervisors, e-tutors, or interested persons who have had less contact with e-tutor competencies. This legend consists of concise fact sheets of the nine identified competence categories. These profiles contain a competence definition that can be applied to the e-tutor activity, and exemplary attributes, classified as knowledge, skill, or attitude, are assigned to the competence. Additionally, exemplary tasks that require the respective competence and a self-developed relevance classification (see 5.1) are integrated. Moreover, these short profiles achieve a uniform understanding of the corresponding competencies. For a deeper insight, Langesee (2023) can be used.

The next section introduces the brief fact sheets of the nine relevant competencies for e-tutors.

#### Communication

*Definition:* Littlejohn and Jabusch (1982) define communication competence as “the ability and willingness of an individual to participate responsibly in transaction in such a way as to maximise the outcome of shared meaning” (p. 29).

*Exemplary attributes:* Oral and written expression abilities, welcoming attitude, reaction to contributions

*Exemplary tasks:* Answering content-related questions, explaining tasks, assisting in the handling of conflicts

*Importance for e-tutors:* Very Important

### Pedagogical

*Definition:* In general, this competence describes the knowledge of teaching methodology, pedagogical psychology, and basic pedagogical knowledge (Liakopoulou, 2011).

*Exemplary attributes:* Knowledge about teaching online, distance learning, basic didactic and pedagogical principles

*Exemplary tasks:* Answering content-related questions, supporting the organization of learning activities, feedback about individual's/group's learning behavior

*Importance for e-tutors:* Very Important

### Social

*Definition:* Social competence can be described as “effectiveness in social interaction” (Rose-Krasnor, 1997, p. 111). It is the “ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and across situations” (Rubin and Rose-Krasnor, 1992, p. 285).

*Exemplary attributes:* Humanizing an online teaching environment, motivating and animating students, appropriate intervention

*Exemplary tasks:* Assisting in case of problems with understanding/ambiguities, feedback about working progress and current results, assisting in the handling of conflicts

*Importance for e-tutors:* Very Important

### Professional

*Definition:* Kane (1992) describes professional competence as “the degree to which the individual can use the knowledge, skills, and judgment associated with the profession to perform effectively in the domain of possible encounters defining the scope of professional practice” (p. 166).

*Exemplary attributes:* In-depth knowledge of the subject and content, pedagogical rationale, knowledge about suitable resources for online teaching and learning

*Exemplary tasks:* Answering content-related questions, assisting in case of problems with understanding/ambiguities, supporting the target-oriented usage of different tools for communication and collaboration (functionality, selection, handling technical issues)

*Importance for e-tutors:* Important

### Media

*Definition:* Media competence refers to the ability to “access the media; understand and (...) critically approach different aspects of media contents and institutions; create communication in a variety of contexts” (Hartai, 2014, p. 16).

*Exemplary attributes:* Basic computing skills, use of specific software, knowledge about a variety of multimedia, video, audio conferencing, and data analysis skills

*Exemplary tasks:* Support the target-oriented usage of different tools for communication and collaboration (functionality, selection, handling technical problems), monitoring the compliance with task deadlines, supporting assessment based on a special instrument

*Importance for e-tutors:* Important

### Organizational

*Definition:* Organizational or managerial competence in an educational context can be defined as the “desire and willingness to professionally manage the educational and cognitive activities of students, ensuring the achievement of personally and socially significant pedagogical results” (Bakhtiyorovna, 2020, p. 46).

*Exemplary attributes:* Strategic planning and organizing skills, establishing guidelines, project and change management skills

*Exemplary tasks:* Giving tips for literature, additives, working techniques, methods, supporting the organization of learning activities, monitoring the compliance with task deadlines

*Importance for e-tutors:* Important

### Individual

*Definition:* This competence refers to deeply personal traits. For example, a learning style or mental character can be considered an individual competence (Pask & Scott, 1972).

*Exemplary attributes:* Enthusiastic, friendly, committed to a subject

*Exemplary tasks:* Giving tips for literature, additives, working techniques, methods, caring about individual’s/groups’ learning problems, feedback about working progress and current results

*Importance for e-tutors:* Good-to-have

### Intercultural

*Definition:* Intercultural competence is “the ability to communicate effectively and appropriately in intercultural situations based on one’s intercultural knowledge, skills, and attitudes” (Deardorff, 2004, p. 194).

*Exemplary attributes:* Knowledge about efficiently managing diverse groups

*Exemplary tasks:* Assisting the handling of conflicts

*Importance for e-tutors:* Good-to-have

### Evaluation

*Definition:* This competence includes the “development, selection, and application of methods to collect, analyse, and interpret data about students’ characteristics such as tests, interviews, and observation” (Herppich et al., 2018, p. 3).

*Exemplary attributes:* Monitoring student performances, marking, submitting grades

*Exemplary tasks:* Supporting assessment based on a special instrument, feedback about individual’s/group’s learning behavior

*Importance for e-tutors:* Good-to-have

## **Conclusion**

Firstly, this work aimed to evaluate the alpha versions of the competency ranking and profile in Langesee (2023) to create an iteratively developed basis for further research projects. Secondly, the overlaps between future skills and competencies and the competencies of e-tutors should be identified and presented.

The competency profile and ranking fit were confirmed by experts and practitioners (e-tutors). All hints and assessments were considered and, in most cases, adopted. Primarily, the competency ranking was revised, which is intended to provide a quick overview of e-tutors' required competencies sorted by relevance. First, the order of the competencies changed, which led to a change in the relevance of specific competencies. Second, the presentation format was condensed and enhanced with supporting labels. The combination of tasks and competencies needed to complete them was assessed as helpful by the experts and e-tutors. The matrix representation in the competency profile was also found to be useful and will therefore be retained.

Evaluating the findings from Langesee (2023) by experts and practitioners strengthens the knowledge base regarding e-tutor competencies. The respondents confirmed the choice of the nine competency categories identified through the literature. The competency profile was only slightly revised, as it was already considered suitable and meaningful by most experts and practitioners. For example, the legend of the profile was modified to enable more intuitive navigation within the matrix. Newly added were the fact sheets per competence. These are provided in addition to the competency profile to give interested parties a quick insight into the individual components of e-tutor competencies.

In general, the evaluation showed that the artifacts developed in Langesee (2023) provide a reasonable basis for the work and qualification of e-tutors. Therefore, these findings will serve as a basis for future research on improving e-tutor competencies.

In addition, a clear overlap between future and e-tutor competencies could be shown. The parallels between future and e-tutor competencies will also be addressed in future research to provide students with opportunities to enhance their competencies next to their work as e-tutors.

At this point, it is not possible to specify different competence levels for each competence (e.g., novice, master, expert), as this would be speculative. But it seems logical that novice e-tutors have a weaker competency profile than experienced e-tutors. Hence, it is planned to create a SET for e-tutors that will give e-tutors a way to assess their competencies based on different levels. Thus, individual competence levels can be mapped, and suggestions for competence improvement can be derived from them.

Despite a classification into very important, important, and good-to-have competencies, it must be noted that all nine competencies should be present for the successful accompaniment of a virtual learning scenario.

Although the quantitative survey does not always provide reliable results with small sample sizes, valuable insights can be derived from the responses and assessments of the published artifact. First, the respondents are experts or active e-tutors who can provide a deep insight into theory and practice. Additionally, there was the possibility to leave comments, which complements and enriches a quantitative view with qualitative aspects. Based on these research results, the next step will be to develop a SET for e-tutors that will allow them to assess their competence levels and suggest appropriate ways and instruments (e.g., e-tutor tandem) to improve them.

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