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## SIMULATION-BASED LEARNING IN OCCUPATIONAL THERAPY EDUCATION (SIMBA)

### Report on Activity 2, Work Package 3:

### Usage of SBL-Assessments in current practice

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## Introduction

The ERASMUS+ funded project SIMBA (“Simulation-based learning and assessment in occupational therapy education”) aims to build a bridge between higher education in occupational therapy and the challenges of practice through simulation-based learning (SBL). Within the SIMBA project, SBL is defined as an *“array of structured activities that represent actual or potential situations in education and practice. These activities allow participants to develop or enhance their knowledge, skills, and attitudes, or to analyse and respond to realistic situations in a simulated environment”* (Lioce & Society for Simulation in Healthcare, 2020) To achieve this goal, the first step was to create a framework for the competencies of novice practitioners in occupational therapy and to develop guidelines for the requirements of possible simulation-based learning in higher education for occupational therapy (work package 2). This involved conducting literature research and focus groups included OT students, practitioners and educators and persons with specific expertise in SBL in OT education. The results were then summarized in written reports and published in the SIMBA Framework of occupational therapy competencies for simulation-based learning and SIMBA Guidelines for the implementation of simulation-based learning in OT (SimOT) in education.

Work package 3 focuses primarily on the development of an assessment that can be used to measure learning progress in simulation-based learning (SBL assessment). To develop this assessment, a systematic literature review was required to determine which assessments are currently used for SBL in physiotherapy, occupational therapy and speech and language therapy (WP3 - Activity 2; WP2-2). The results of this literature review and the findings from WP2-2 were subsequently used as the basis for 2 focus groups to explore the user experience of teachers and students with assessments currently used in simulation-based learning.

The methodological approach and the results of the focus groups are therefore presented below to gain “[a]n insight into the perspectives and views of students and health professional teachers who are experienced with SBL assessments, is gained” (SIMBA ERASMUS application, p. 44)

## Method

In the activity, it was planned to conduct a qualitative study based on 2 focus groups to record user experiences. To do this, an ethics committee first had to approve the conduct of the study. Subsequently, worldwide experts and occupational therapy students were recruited to participate in the study. The detailed methodology steps are described below.

### Ethical Approval

As this qualitative study involves the recording and subsequent transcription of sensitive data for the purpose of the study, it was necessary to obtain a positive ethics vote from the Ethics Committee for the Social Sciences and Humanities (EASHW). All necessary documents were submitted for a review in July 2023 and a positive ethics vote followed on September 13th, 2023 by the ECSH (reference: EX\_SHW\_2023\_15\_1). The documents for the ethical approval included the participants' information and the Declaration of Informed Consent (appendix) and details regarding information of the planned data collection and data analysis as stated below.

### Data collection

The study aims to conduct 2 focus groups with a total of 9-15 participants. This results in 2 focus groups with approximately 7 participants. Participants were recruited using a purposive sampling method in which potential candidates were identified based on a review of the literature examining simulation-based learning in OT education and via an open call for participation to the members of the European Network of Occupational Therapy in Higher Education (ENOTHE). Participants were invited to participate via a standardized invitation e-mail. E-mail addresses were acquired through publications (person mentioned as corresponding author) or supplied by participants answering the open call for participation.

There was a joint procedure with the researchers of WP2, who also were conducting interviews with experts in the same period, although they had a different research focus. To avoid unnecessary duplication of requests to the target group of experts who could contribute to both WP2 and WP3, close coordination between the researchers of the two work packages had been agreed. Thereby it was planned to send out joint invitations and to ask the experts for further colleagues who could contribute. Once participants are identified according to the inclusion criteria listed below, invitations were sent with possible dates to participate in the focus groups. The invitation suggested dates between August to mid-October 2023 for the focus group to be conducted.

**Table 1 Inclusion Criteria**

| SBL-assessment users  | Health Education Teachers  |
|---|--|
| Experienced using SBL assessments   | Experienced using and/ or developing SBL assessments                     |
| Fourth or sixth semester Student or recently graduated (<1 year) of physiotherapy, occupational therapy, or Speech Language Pathology | Teaching in the fields of PT, OT, and/ or Speech Language Pathology      |
| Sufficient knowledge of English to express themselves and their thoughts  | Sufficient knowledge of English to express themselves and their thoughts |

All experts identified in the literature on the topic of simulation from WP2 and WP3 were contacted via a joint email, and their feedback was systematically recorded. If necessary, reminders were sent to prompt a response. Organizing two focus groups with international experts through this approach proved to be challenging and time-consuming due to the significant variation in time zones and professional commitments of the participants. In addition, students and teachers with experience in the use of SBL had to be found, whereby the availability of students in the summer was just as limited as the availability of teachers after the start of the semester. Consequently, only one focus group was conducted online, while another was held during the annual ENOTHE meeting. Several speakers, who were invited to present on the topic of SBL at the ENOTHE annual meeting, were asked to participate in a live focus group meeting. The research team collected the contact details of these

experts and provided two dates for the focus group. The second focus group was held live on the date when most of the experts were available and were recorded using a voice recording app, which stores the audio file locally and secured with a code on the mobile phone. Directly after the meeting the audio file has been transferred to the secured file system and has been deleted on the mobile phone of the participating researcher.

Participants accepting the invitation to participate will complete and sign a standardized informed consent form prior to the focus group. Participants will be asked to fill out a demographic questionnaire. To summarize the demographic characteristics of the participants, the following data will be requested in a questionnaire prior to the focus groups after their given consent in the IC:

Country of origin

Age

Gender

Number of years in teaching OT

The questionnaires and signed consent forms will be collected and stored by the coordinator of the SIMBA-project on the secured N-server of AP University college only accessible to the project coordinator.

### Interview Guideline

The research group of WP3 uses the SPSS system (Helfferrich, 2009) as a basis for the development of the interview guide. On this basis, all relevant questions on the topic are collected.

The interview guide should not only be suitable for capturing the users' experiences, but also reflect the competency framework developed and give insights which domains of competence are relevant for SimOT and should therefore be considered to be measured in a SBL assessment.

This semi-structured interview guide should cover the following topics:

- Experiences with SBL assessments
- Advantages
- Pitfalls
- Competencies, that could be measured with an SBL assessment
- Considerations in the development of an SBL assessment

The collected questions for this topics are then clustered and sorted, resulting in a first draft of the interview guide. This draft was discussed with partners involved in work package 3 (AP and FHJ) and then adapted and finalized with their input and approved by the EASHW (Appendix 1).

To assess the competences that could be measured using an SBL assessment, the participants will be shown the preliminary results of work package 2, the Framework of Competences, during the interview. They were given the opportunity to ask questions about it prior to express their thoughts about how and which competences could be assessed in an SimOT-scenario.

### Data Analysis

The focus group will be conducted online on the Microsoft Teams platform. To enable transcription and analysis of focus group data, focus groups will be audio and video recorded through Microsoft Teams or a local recording app of the researcher's computer, which stored the data according to the data management protocol in a password secured file. Specific consent will be sought from participants for this purpose in the Informed Consent form. Participants will be offered the opportunity to contact focus group leaders after the focus group if they wish to provide additional comments or information that they did not have a chance or feel able to provide during the group discussion.

Following the conduction of focus groups, the recorded conversations will be transcribed in full in preparation for analysis. During transcription, all information that could potentially identify individual participants will be removed. Storage of and access to all collected data, including audio and video recordings, notes and focus group transcripts, will be managed on the secured SharePoint platform of the SIMBA project, hosted by AP, to

which only the researchers involved have access. Focus group transcripts and raw data will be stored separately so no connection can be made between both.

The recordings are not pseudonymized and therefore will be handled as non-pseudonymized data. It will therefore be stored securely only on the AP server. During transcription, all information that could potentially identify individual participants will be removed and from this point on data is anonymized. All data will be linked to an arbitrary code for each participant and not one's name, to demarcate participant responses. This is meant to ensure that data cannot be directly attributed to a specific individual during data analysis. After transcription, estimated a maximum of two months after the focus group took place, the original recordings will be removed from the secured SharePoint platform of the SIMBA project. A copy of the anonymized transcripts will be stored on the secured N-server of the AP University college as a back-up. Raw data and processed data will always be stored separately during the project. After project completion (30/11/2025) the processed data will be stored for a period of 10 years on the secured N-server of AP University college only accessible to the project coordinator.

Analysis of focus group data will be carried out, using a structuring analysis of content (Kuckartz & Rädiker, 2022). Themes and codes will be organized into a structured framework. The completed coding matrix (i.e., anonymized quotes from focus group transcript organized within the coding framework) will be stored on the secured Sharepoint environment. No one outside the group of researchers involved in this research will have access to the data, apart from that which is presented in publication, or any of the personal information of the participants.

The deductive-inductive approach makes it possible to cluster specifically according to the categories expected based on the research question and consequently the interview guideline. Accordingly, the data analysis started with the following deductive data category system:

- Experience with SBL- assessments
- Used SBL- assessments
  - Advantages
  - Disadvantages
- Competencies addressed

Depending on the data material, further categories are formed inductively during the analysis and the categories are systematized and organized until they fully reflect the content of the interviews (Kuckartz & Rädiker, 2022).

## Results

### Participants

A total of eight people participated in the two focus groups, all of whom were female. Three of the participants were students between the ages of 22 and 36 from Sweden, Spain, and Australia, who reported that they had experience using SBL. The remaining five participants were teachers between the ages of 31 and 54 from Spain, Norway, Germany, the United Kingdom, and the United States. Two of them had extensive experience in using SBL, while the other three had some experience.

### Findings

As mentioned above, the research team started with very broad, open-ended deductive categories.

These categories were supplemented by inductive categories according to the given deductive-inductive approach used in the study (Kuckartz & Rädiker, 2022) All categories (deductive and inductive found) were renamed and rearranged into categories and subcategories until they could fully describe the data material. The final code system included the following (sub)categories:

#### 1. Preparation of students before SBL

- a. No preparation
- b. preparation of the SBL experience
  - a. Stressed also prepared
  - b. Safe environment
- c. Theoretical knowledge of skills/competencies

#### 2. Assessments used

- a. summative
- b. formative
  - a. self-created assessments
  - b. reflection/ feedback
  - c. Video assessment
  - d. Written assessment

#### 3. Domains of the SIMBA Framework of Competencies

- a. Domain A – knowledge and attitudes supporting the occupational therapy competence
- b. Domain B – managing and conducting the occupational therapy process
- c. Domain C – developing and maintaining professional relationships and partnerships
- d. Domain D – professional autonomy and continuous professional development
- e. Domain E – promoting and advocating for the advancement of the profession and social change
- f. Domain F – general professional skills and competencies

#### 4. Ideal SBL Assessment Requirements

- a. Student
- b. Institutional

Each of these categories are presented in detail below and could be read in conjunction with appendix 2, which represents all coded elements of each (sub-) category.

##### 1. Preparation of students before SBL experience

This category summarizes statements that include steps that should be taken before conducting an SBL assessment beforehand by students and how teachers support this.

It contains three subcategories, which express that on one hand sometimes (1) **students been not prepared at all** for the SBL assessment, but even if the (2) **had been prepared**, they are stressed before the SBL. Furthermore, it had been expressed that a safe environment is necessary for a less stressful students' experience. The last subcategory expresses that (3) **theoretical knowledge about the skills needed or competencies expected** are taught beforehand in lectures and lessons, so the SBL accompanies the lectures.



It was mentioned several times that the upcoming SBL experience is very stressful for students and that the focus should be on reducing stress and empathizing with the students in the situation.

*“I had a lot of class mates, that had been having a really hard time and crying before the exam and then they have failed, because they were so stressed. Next time, they got a bit better because then they knew how to work it but I still have some class mates, that haven't made it yet and still failing and have to do it again, because they get so nervous. I talked to them, they know, they know how exactly and we have been trained together they do very good when I am playing the patient, but as soon as they get in there with the teacher, they get so nervous.” (Person 1, focus group 1, paragraph 53)*

This quote shows the importance of creating a stress-free environment for students. It is important to convey that SBL is an experience, and that assessment is a learning opportunity. Students are often afraid of doing something wrong or that their theoretical knowledge will not enable them to demonstrate their knowledge in the SBL situation.

*“[...] we see what they have written and he was a bit afraid of that because maybe it was wrong and I think that is something, I can totally understand that they want to do the correct thing.” (Person 3, focus group 2, paragraph 56)*

The subcategory (2) **“preparation of the SBL experience”** summarized the following named elements for the preparation of students for the SBL-assessment.

- Prebriefing: Explanation of the rules and procedures, as well as the points to be reflected upon.
- Showing the environment: Visiting the premises where the simulation will take place.
- Explain the rules and expectations: Explaining in part that there is no right answer and that the case cannot be solved correctly, to reduce the expectation of doing everything right.
- Show and explain examples of past scenarios to clear expectations
- Lots of support at the beginning, less at the end: Students should learn to grasp the main points with as little introduction to the scenario as possible, as is the case later in their professional lives.

In addition to the prebriefing, there is also information for the students about the SBL. In some cases, students are given lectures on the topic, in others they are given video material. It was also described that the cases presented are mostly based on case descriptions from OT colleagues in practice.

It was also reported that real clinical cases are presented at the beginning of a module and these cases are worked with for a semester. It was also described that prior to the SBL experience, students were assessed using specific rubrics to determine whether a particular skill had been learned. This made it possible to track learning after the SBL assessment.

*“And prelearning could be a video of a similar case, it could be reading material, a case history, practicing of techniques that might be applicable to the session, so they do all of their prelearning and the expectation is that they must do the prelearning before they come. So there will be tasks on virtual learning environment that they have to finish, so we can, we know who's finished and who hasn't. So that you know that when they come to the simulation they are prepared, then they come to the simulation and they do whatever the task is and then there is debrief. So they have to follow all the stages, so that we know that they have learned effectively.” ( Person 3, focus group 2, paragraph 39)*

## 2. Assessments used in simulation

*“I think assessing simulation based learning is superior to I guess the tests and the essays, obviously, they have their place but I think we are a patient-facing profession so being assessed on things that you need to know to be a good clinician is really important, and getting feedback on that, and then being actually able to improve those skills before you are helping people, I think it is a really valuable way to assess.” (Person 2, focus group 1, paragraph 42)*

None of the participants had experience using (1) **summative** assessments. The assessments they had experience with were all (2) **formative** assessments. The formative assessments used were mostly self-developed rubrics that tested the application of knowledge that had been gathered in the lessons before in the simulated situation.

The focus was mostly on student self-reflection. It was described as very important to give the student feedback after the SBL. This should be timely and facilitate personal growth in the situations.

Feedback should be appreciative, authentic, and timely.

*“And it's a comfortable place to make mistakes and you got your teachers there to say: "Actually, no, that is not the way you do it" or "that's okay, but maybe think about this". I think it is a really valuable way to learn.” (Person 3, focus group , paragraph 31)*

If feedback is given by peers, it should also be authentic and not superficial. It was also discussed that it should be possible to upload a video to a platform as part of an SBL and then rate it using categories. This means that feedback does not always have to be verbal after the SBL experience but is also possibly assessed with the rating of a video.

The written assessments were, for example, reports written by a group of students after the SBL experience and subsequently assessed by the teachers. Feedback from the people who played the simulated patients was also described as enriching for the learning experience.

### 3. Domains of the SIMBA Framework of Competencies

*„It is such a practical profession, you are out there, working with people, doing manual handling and all those sorts of things, so I think, it is just, it makes so much sense to be able to assess those skills in a simulated way before we go out into the big wild world. “ (Person 3, focus group 1, paragraph 36)*

To provide a structured framework for the experts to reflect on possible assessable competencies, they were briefly introduced to the pre-final competency framework (WP2), indicating that it was pre-final.

The experts were then given the opportunity to share their views on which competencies could be tested as part of an SBL assessment.

It was noted that in an SBL situation, both individual skills and multiple competencies could be assessed in a more complex case addressing for example communication skills, application of knowledge about the occupational process and dealing adequately with a medical condition.

**(1) DOMAIN A Knowledge and attitudes** supporting occupational therapy competence “describes the knowledge and attitudes possessed by the novice occupational practitioner that support competent OT practice” (Bartolac et al., 2024) to alone is hardly tested in SimOT, but the knowledge and attitude of the learner is indirectly reflected in the performance of the occupational therapy process.

However, **(2) DOMAIN B: Managing and conducting the occupational therapy process describing** “the general and specific competencies of the novice occupational therapy practitioner for organizing and conducting the occupational therapy process” (Bartolac et al., 2024) and can be well tested in SBL and can also be partially used and applied in an SBL experience.

In this context, it is also important to note that the only SBL assessment mentioned was the SPEF-R2 (person, focus group 1, paragraph 10), which summarizes the competencies for the placement. According to the respondents, the assessment of practical skills as an occupational therapist is the main focus of the currently used procedures in SimOT.

**(3) DOMAIN C: Developing and maintaining professional relationships and partnerships** was considered by all to be very suitable for assessment in an SBL scenario. „This domain describes the competencies possessed by occupational therapists for establishing and maintaining relationships with clients, colleagues and other partners involved in the OT process” (Bartolac et al., 2024). Communication is seen as an observable

phenomenon that could be used to observe students' abilities to position themselves in an interprofessional team and to explain what occupational therapy could contribute to a case.

**(4) DOMAIN D: Professional autonomy and continuous professional development** was also considered suitable for testing with SBL assessments, also this "competencies possessed by occupational therapists as autonomous and accountable professionals" (Bartolac et al., 2024) were only mentioned to be assessed together with other domains (e.g. Domain C communication)

There were conflicting statements regarding **(5) DOMAIN E: Promoting and advocating for the advancement of the profession and social change, which summarizes** "competencies possessed by occupational therapists for engaging in activities related to promoting and advancing the profession and advocating for greater social change" (Bartolac et al., 2024): while some could well imagine testing it with SBL (person 2, focus group 1, paragraph 80), others found it almost inconceivable (person 1, focus group 2, paragraph 67). Specifically, it was suggested to advocate for a client in a role play.

**(6) DOMAIN F: General professional skills and competencies** „describes the general professional skills and competencies possessed by occupational therapists. While these competencies are not necessarily skills specific to the occupational therapy profession alone, they are considered essential skills for effective occupational therapy practice" (Bartolac et al., 2024) Similar to Domain A, Domain F was hardly suggested. Here it was said that it would be easy to present in conjunction with Domains C and D.

#### 4. Ideal SBL assessment requirements

For an ideal SBL assessment, participating **(1) students** need to be well prepared and know exactly what will happen and what is expected of them during the SimOT. In addition, an SBL assessment being the final course exam was considered critical in the focus groups as this is resulting in stress and anxiety and could block a good learning experience.

Therefore, for the simulation to be a safe learning environment in which students can adapt and learn to cope, it is important to slowly introduce students to SBL assessment and reduce their stress about it. An SBL assessment should not be an additional component to existing testing situations and assignments but should at best replace or/and supplement them, so as not to increase the workload of students using an SimOT in the course.

The SimOT itself is described to be a helpful tool for students to train both individual skills and how to deal with complex situations in everyday life of occupational therapists. It is essential for personal and professional growth that an SBL assessment is always embedded in the prebriefing session (explicating the learning outcomes and rating) and that the learning experience is reflected upon with the students. If grading is done with an SBL assessment it should be accompanied by feedback and reflection. The focus should be on student growth. The institution should provide self-learning activities that prepare students for the SimOT and introduce the assessment method and used tools. Teachers also pointed out that there should be a competency based SBL assessment that shows students' learning progress in a standardized way. This assessment should be objective and able to assess clearly defined competencies.

This means for an **(2) institution** the implementation of SBL requires significant support from IT and a dedicated SBL team to handle the logistics, such as room setups, technical support, and scenario preparations. The participants highlight the complexities and resources involved in integrating simulation-based learning (SBL) into curricula. Participants noted the extensive initial setup required for effective SBL. This setup is resource-intensive not only in terms of material costs, such as purchasing equipment like VR glasses, but also in terms of human resources needed to prepare and manage simulations.

Educators emphasized the need for clear learning objectives and the adaptation of assessments to these objectives to ensure educational efficacy. The discussions also touched upon the benefits of flexible assessments that could cater to both formative and summative needs, allowing for adjustments based on the focus areas of each simulation.

Overall, the integration of SBL into curricula demands careful planning, significant resources, and ongoing support to be effective and sustainable.

## Discussion

Regarding the methodology used, it can be said that it was well suited for collecting data to complement the systematic literature reviews of work package 2 and 3. As planned, 2 focus groups were held, but the planned number of 9-15 participants was not reached.

Despite the small number of participants, the spread of participants in terms of age, countries and continents was very satisfactory. In addition, all participants had experience with SBL assessments, which is pleasing, as this meant that the inclusion criteria for the individuals could be met well.

Unfortunately, the planned implementation with 2 online focus groups could not take place. Instead, one online and one live group were conducted. The advantage of a live interview is the personal relationship between interviewer and interviewee. However, this meant that there was more background noise, which slightly affected the transcription process and subsequently the data analysis.

The final code system was very different from the deductive code system. This was due to the fact that the advantages and disadvantages could not be clearly identified and therefore were not presented as separate categories. The categories "experience with SBL assessment" and "use of SBL assessment" were combined into the category "assessments used" to better reflect the diverse discussions. When the preliminary framework was presented to the participants, the category "Competences addressed" was renamed "Domains addressed". In general, however, it was very helpful to start with a deductive category system and then modify it. According to Kuckartz & Rädiker (2022) the disadvantages of the two approaches (deductive or inductive) are thus balanced and advantageously complemented for content analysis.

**Table 2 comparison of deductive and finalized code system.**

| Deductive Categories   | Completed code system with inductive and deductive categories   |
|--|---|
| ---  | <p><b>Preparation of students before SBL</b></p> <ul style="list-style-type: none"> <li>• No preparation</li> <li>• preparation of the SBL experience               <ul style="list-style-type: none"> <li>○ Stressed also prepared</li> <li>○ Safe environment</li> </ul> </li> <li>• Theoretical knowledge of skills/competencies</li> </ul>        |
| <p><b>Experience with SBL- assessments</b></p> <p><b>Used SBL- assessments</b></p> <ul style="list-style-type: none"> <li>• Advantages</li> <li>• Disadvantages</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Assessments used</b> <ul style="list-style-type: none"> <li>○ summative</li> <li>○ formative               <ul style="list-style-type: none"> <li>▪ self-created assessments</li> <li>▪ reflection/ feedback</li> <li>▪ Video assessment</li> <li>▪ Written assessment</li> </ul> </li> </ul> </li> </ul> |
| <b>Competencies addressed</b>  | <p><b>Domains Addressed</b></p> <ul style="list-style-type: none"> <li>• Domain A</li> <li>• Domain B</li> <li>• Domain C</li> <li>• Domain D</li> <li>• Domain E</li> <li>• Domain F</li> </ul>  |
| ---  | <p><b>Ideal SBL Assessment Requirements</b></p> <ul style="list-style-type: none"> <li>○ Student</li> <li>○ Institutional</li> </ul>  |

Regarding the results of the interviews, it is important to emphasize the importance of preparation for the SimOT and thus for the SBL assessment. Although this does not concern the assessment itself, it is important for a successful implementation and an anxiety-free, sustainable experience on the part of the students. This leads to the conclusion, that the SBL assessment need to be introduces in the prebriefing to state clearly the learning objectives for the SimOT and set clear expectations for the student performing the SimOT.

It is also surprising that all experts and students concluded that they use formative rather than summative assessments to evaluate an SBL experience. This can be explained by the fact that there seem to be only a few known assessments for the evaluation of the whole SBL experience because as shown in the report on WP3 Activity 2 ("Systematic Literature Review"), there are also only a few assessments that test all competencies. But also, the SBL assessment tool needs to be very flexible and therefore, participants reported to prefer self-developed rubrics to measure and rate specific competencies of a scenario. This should be taken into account when developing the SBL assessment tool for SIMBA and consequently there should be room for adaption depending on the SIMOT-scenario performed.

Furthermore, the SBL assessment needs to consider the fidelity of the SimOT-scenario. Fidelity is defined as "the degree to which the simulation replicates the real event and/or workplace; this includes physical, psychological, and environmental elements" (Lioce & Society for Simulation in Healthcare, 2020)

Given increased complexity by

- Increasing knowledge of the students
- Different fidelity of the SimOT and
- Different/ multiple domains of competency addressed

It becomes obvious how flexible the SBL assessment needs to be on one hand, illustrated in figure 1. On the other hand, it needs to be reliable to measure students' outcome in the different scenarios over the course of their studies.



Figure 1 use cases for the SBL assessment tool

For the further course of the project, it is therefore important to ensure that the evaluation has a modular structure. It should enable both a formative and a summative evaluation. The participants stressed that an ideal assessment also needs to be used in variable SimOT, which tests different levels of complexity in the SimOT. Accordingly, an SBL assessment should be flexible in its use to cover the use case assessing one domain or up to all domains of the framework.

In summary, the following points should therefore be considered when developing the SBL assessment:

- **Make it flexible:** easily adaptable for different fields of OT work and circumstances in different countries.
- **Make it scalable:**
  - Assessments must be adjustable to
    - fidelity of the SimOT-Scenario,
    - the domains assessed
    - the increasing knowledge level of students
- **Make it joyful and sustainable:**
  - Introduce assessment in prebriefing – state clear expectations
  - Enable the track of personal growth by comparable results over the course of study
  - Refer to the assessment in the feedback process facilitate learning rather than use it as grading

## Literature

- Bartolac, A., Sangster Jokić, C., Magerat, L., & Klepo, I. (2024). *Occupational Therapy Competencies for simulation-based learning*.
- Kuckartz, U., & Rädiker, S. (2022). *Qualitative Inhaltsanalyse: Methoden, Praxis, Computerunterstützung: Grundlagentexte Methoden* (5. Auflage). Beltz Juventa.
- Lioce, L. & Society for Simulation in Healthcare (Eds.). (2020). *Healthcare Simulation Dictionary* (Second). Agency for Healthcare Research and Quality. <https://doi.org/10.23970/simulationv2>

## Appendix 1 – Interview guideline

| Topic  | Main question   | Detailed question  |
|--|---|--|
| <p><b>Introduction: (1min)</b><br/>           Thank you for agreeing to participate in this Stakeholder Focus Group, which is being conducted as part of Work Package 2 of the Erasmus+ funded project SIMBA.</p> <p>We are...</p> <p>The purpose of this group interview is to gather information from stakeholders about your perspectives on your experiences with Simulation Based Learning in Occupational Therapy education.</p> <p>The anonymized results of this focus group will inform the ongoing development of Assessment for SBL in OT education. When finished, these documents will be publicly available to everyone via the project website.</p> <p>Our conversation is planned to last about 60-90 minutes.</p> |   |  |
| <p><b>Confirming Consent: (2min)</b><br/>           We also want to thank you for agreeing to have this <b>conversation recorded</b>.<br/>           The goal of the recording is to ensure that everything you share in the conversation is recorded exactly as you have said it without the need for extensive notetaking, thus making our conversation more comfortable and natural.</p> <p>Likewise, we would like to emphasize again that all information <b>will be used exclusively for the purpose of this project</b>, and that all received information will be <b>treated as confidential</b>, as stated in the Informed consent form you have signed.</p>  |   |  |
| <p><b>Get to know each other (5min)</b></p>  | <p>I would like to ask each of you to <b>introduce yourselves briefly one by one</b> so that we can get to know each other better. Please tell us your name, in which country you live and how you experienced simulation-based learning?</p> | <p>Do you have any questions before we start?</p>  |
| <p><b>Main Part</b></p>  |   |  |
| <p><b>Personal Experience with SBL assessment (10min)</b></p>  | <p>Which simulation-based assessments do you know?</p> <p>Which ones have you already used?</p> <p>Please tell us what it was like to be exposed to the SBL assessment for the first time?</p>  | <p>Do you know other SBL assessments?</p> <p>Please name the ones you already use.</p> <p>How did you <b>prepare</b> for the SBL assessment?</p> <p>What are the characteristics of <b>conducting</b> an SBL assessment?</p> <p>What was <b>assessed</b> during the delivery of the SBL assessment in which you participated?</p> <p>How <b>valid is the outcome</b> of an SBL assessment?</p> |
| <p><b>Advantages of an SBL assessment</b></p>  | <p>What do you think: What are the advantages of using a SBL assessment in education?</p>   | <p>What would you see as an <b>advantage in preparing</b> an SBL assessment as opposed to a traditional assessment?</p>  |



|  |  |  |
|--|--|--|
| <b>(10min)</b>   |  | <p>What are the <b>advantages of conducting</b> an SBL assessment over other forms of assessment?</p> <p>How is a SBL assessment <b>helpful in assessing / rating</b> of students' performance/ competencies?</p> <p>Overall, to what extent is the outcome of an SBL assessment superior to that of a traditional assessment?</p>   |
| <b>Pitfalls (20min)</b>                                  | <p>From your experience: What makes it difficult to use a SBL assessment in the context of health education?</p>   | <p>What are <b>the pitfalls of conducting</b> an SBL assessment compared to other forms of assessment?</p> <p>When assessing student performance/competencies, in which <b>areas is an SBL assessment not sufficient?</b></p> <p>In your opinion: What are the <b>disadvantages of results</b> generated by an SBL assessment?</p> <p>To sum up: What is important to <b>consider when preparing</b> for an SBL?</p>   |
| <b>Competencies addressed by SBL assessment (20 min)</b> | <p>What competencies do you think would <b>be good to measure</b> with an SBL assessment?</p> <p>Which competencies do you think are <b>difficult to measure</b> with an SBL assessment?</p> | <p>Think about OT competencies in regards to (explain as needed)*</p> <ol style="list-style-type: none"> <li>a. Knowledge and attitude supporting the OT process (explain framework as needed)</li> <li>b. Conducting the OT process</li> <li>c. developing and maintaining professional relationships and partnerships</li> <li>d. professional autonomy and continuous prof. development</li> <li>e. promoting and advocating for the advancement of the profession and social change</li> <li>f. General professional skills and competencies</li> </ol> <p>How could these be measured?<br/>Could these be measured with an SBL?</p> |

|   |   |  |
|---|---|--|
| <p><b>Development of new SBL assessment (20min)</b></p> | <p>If you could make a wish: What should the ideal SBL assessment look like?</p> <p>After all, we as a research group want to develop a new valid SBL assessment.</p> <p>What would you like us to take away for the development of such an assessment?</p> | <p>What <b>competencies should ideally be covered</b> by an SBL assessment?</p> <p>What should be considered when creating the SBL assessment for its <b>ideal implementation, including space and staffing</b> requirements?</p> <p>How should the SBL assessment <b>ideally be presented</b> to students?</p> <p>What should be considered regarding the students and their <b>ideal learning experiences</b> with the SBL assessment?</p> <p><b>What else is important</b> for you to say so that we as a research group can develop a valuable new SBL assessment?</p> |
|---|---|--|

## Appendix 2 – Report of Results

### 1. Preparation of students for SBL

#### 1.1 No preparation

1.

"I don't prepare my students."

[WP3-3 Focus group 2; Position: 41-41]

2.

"So for the simulations, before we entered the situation role-play or something, we know we are going to the simulation and how in some situations we don't know what's going to happen"

[WP3-3 Focus group 2; Position: 43-43]

3.

"We had recently practical examination where we get to meet the simulated patient and different scenario so you do not know beforehand, you get there in the room and then you get a little note about the patient and like you are reading a journal, and then you read it, you get like five minutes to figure out what you are going to do then you are going to approach the patient and play it out like you are an OT and we don't get any feedback at right there, we have to wait around two weeks to get if it were accepted or not and the teacher gave us,"

[WP3-3 Focus group 1; Position: 14-14]

4.

"Some stuff you don't get much preparation at all, you just like, okay, now we are going to do this, you have to fix sort of yourself how you are going to do it, we are not going to tell you how to do it, you have to figure it out by yourself but before "pre-trial" it is called a practical examination where we get into a room and test. We get training on different subjects as we get stroke, we get to train a bit about movement, about hips, so we get some training sessions but there was just the teacher and students, so you were a lot of being no clue when you get to actually expect, so we didn't get very much like preparation for it"

[WP3-3 Focus group 1; Position: 26-26]

5.

"I know several peers that had been needing more teacher, teacher-student-preparation before, they didn't make. Because they haven't worked in health care, they don't know how to chart a patient, I think it's very different what background you come from before at our university. So for me it works well, but not for everyone."

[WP3-3 Focus group 1; Position: 28-28]

#### 1.2 Preparation of students for SBL experience in general

1.

"we have a debriefing method where we have the theoretical input and to prepare about the rules and the reflective points. And we also prepare the simulation day itself by showing the rooms, showing how everything will happen and give time to get comfortable with the environment and the simulation will happen."

[WP3-3 Focus group 2; Position: 38-38]

2.

"So maybe, that's important to make the students really comfortable and safe, and feel it is a safe environment to do wrong and maybe also the goal is to do the wrong thing. It's just, we have the time that's the goal with this simulation that you actually are doing this wrong. Because that's we want but then you have to prepare the

students very well to make it a safe environment for doing wrong things, because that is not easy for us. We don't like that, at least I don't like it."

[WP3-3 Focus group 2; Position: 56-56]

3.

"I think for us what was really important is not just preparing the students, but preparing the staff. To appreciate that this is slow, and stressful situations for students, so we have simulation teams and we are working towards just having just the simulation team that delivers the simulation and by in that way, they appreciate the students, and they might not want to perform in front of everybody and they have empathy, and they have the kindness to deal with that situation because we have a lot of random people, they might take the time to appreciate so, I think it is not just preparing the students but it's preparing the staff as well. Especially when the clinical scenarios bring up issues that affect the students, and that is really important."

[WP3-3 Focus group 2; Position: 57-57]

4.

"I have started making videos to show the SPs before they come so they have some visuals and show examples from past scenarios that we have done in a while, so there is a lot of that. As far as for the students, lot of them are very nervous so I try to keep it very clear and organized and chilled, you know very calm before they, you know, telling them, we have what we call the "safe container" that we do for each thumb, so it is like a four step thing, where you clarify what the objectives are, you review all the logistiques, you talk about suspending disbelief, and then psychological and emotional safety, and we do that before every single one. As far as we getting ready for the actual scenario, so depending on where they are in our program, when they kind of the first ones, we give them the scenario, like a couple of weeks in advance and we give them time to work with partners, talk about it, but as it get's forsy in the end of our program so like, Person 1 was saying, the very last one we do, they pretty much show up, read the chart, have ten minutes and then they are going, so the prep-time we adjusted based on were they are, right the closer you are to initial team we give them less time to prepare, and you know, do their research."

[WP3-3 Focus group 1; Position: 22-22]

5.

"with our simulated placement, they give us a rundown of what the health center was that we were working for, and what our role was within that and the sort of patient-base of the health center. We got a minimal amount of the sort of schedule for the week, we did not really know what was going on from day to day, but we knew kind of an overall idea of this is sort of what we are going to achieve by the end of the week"

[WP3-3 Focus group 1; Position: 24-24]

6.

"Where is I had another simulated placement next week, we have been given the same kind of thing like a rundown of the center that we are working in but we are giving a breakdown of the first day will be doing these things not specifically, but this is what you will achieve by the end of the day and this what you are going to achieve by. And they also have been priming us for the one who is coming up that is going to be really self-directed. So they are just going to give us some jobs that we need to do, and it is up to us to manage your time as you are when you are a professional. You are prioritizing things and where is the previous one, it was very directed and they I guess sort of primed us that was how it was going to be because we knew that we are going to have a supervisor with us, like all day, every day, and they would sort of tell us, what we were doing, that sort of thing."

[WP3-3 Focus group 1; Position: 24-24]

### Stress/ anxiety also prepared

1.

"Many were extremely stressed about this, they did not feel like they understood, even though we had times with the teacher we could ask and people asked and asked, but all in all you have to find out for yourself, because we are doing problem-learning like PBL so you have to find out for yourself that's the part of our university, so it is a bit less preparation I think, maybe, because you have to figure it out yourself and we do a

PS, that's the all objective, figure it out, because when you are out, then you have to figure it out yourself, you are going to know how to do it, when you are done."

[WP3-3 Focus group 1; Position: 26-26]

2.

"I know several peers that had been needing more teacher, teacher-student-preparation before, they didn't make. Because they haven't worked in health care, they don't know how to chart a patient, I think it's very different what background you come from before at our university. So for me it works well, but not for everyone."

[WP3-3 Focus group 1; Position: 28-28]

3.

"but sometimes the student emotional reactions to and feelings, you know, the anxiety, the stress I think, I mean a little bit of stress is good, because it gets you in your, to be very attentive but sometimes people just have so much anxiety that you know, they, it compromises. They are learning, and just you know all attention, to provoke so much anxiety, that is another thing I think about. It is just student emotional toll, emotional □elfare."

[WP3-3 Focus group 1; Position: 49-49]

4.

"Sometimes, some part of our scenarios triggers their past trauma and nobody had any idea, because you know, we just walking, read the chart and say, you go. So, yeah they happened"

[WP3-3 Focus group 1; Position: 51-51]

5.

"I had a lot of class mates, that had been having a really hard time and crying before the exam and then they have failed, because they were so stressed. Next time, they got a bit better because then they knew how to work it but I still have some class mates, that haven't made it yet and still failing and have to do it again, because they get so nervous. I talked to them, they know, they I how exactly and we have been trained together they do very good when I am playing the patient, but as soon as they get in there with the teacher, they get so nervous. They are just, they have specifically class mates in my mind they have problems because of this, he gets so nervous and he keeps just failing it right now. He can't pull it through when the teacher is there."

[WP3-3 Focus group 1; Position: 53-53]

### Safe learning environment

1.

"We also use challenging situation for the simulation but, also see it like really safe learning environment. But I experience is that it is really challenging for the students to accept like such an offer. The offer to train, to try something new and."

[WP3-3 Focus group 2; Position: 47-47]

2.

"I think because they don't feel safe like I want to. They feel like.

Moderator: I may have, you may speak german.

Person 5: Einfach beobachtet, und wertend.

Moderator: They feel like they are observed and judged."

[WP3-3 Focus group 2; Position: 49-52]

3.

"I think a difficulty can be as a person, I don't think you like to show that you don't know a thing."

[WP3-3 Focus group 2; Position: 54-54]

4.

"You, it is a more, it is nice to show that I can it, and I know how to do it. If it's something that you don't know how to do it, it can be quite difficult I think."

[WP3-3 Focus group 2; Position: 54-54]

5.

"It's more like teacher to learn, but then still one of the students told me that it because we see what they have written and he was a bit afraid of that because maybe it was wrong and I think that is something, I can totally understand that they want to do the correct thing."

[WP3-3 Focus group 2; Position: 56-56]

## 2. Theoretical knowledge of skills/ competencies

1.

"And how do you prepare them and yourself for simulation based assessments?"

Person 2: Reading books obviously"

[WP3-3 Focus group 2; Position: 30-31]

2.

"For example, for the study cases is presented during labs. I combine the labs, the theoretical content labs, with the study cases and so I am combining both. Actually, I don't prepare the students for the study cases."

[WP3-3 Focus group 2; Position: 37-37]

3.

"I think similar to what you are doing, we do prelearning. And prelearning could be a video of a similar case, it could be reading material, a case history, practicing of techniques that might be applicable to the session, so they do all of their prelearning and the expectation is that they must do the prelearning before they come. So there will be tasks on virtual learning environment that they have to finish, so we can, we know who's finished and who hasn't. So that you know that when they come to the simulation they are prepared, then they come to the simulation and they do whatever the task is and then there is debrief. So they have to follow all the stages, so that we know that they have learned effectively. So that's, yeah."

[WP3-3 Focus group 2; Position: 39-39]

4.

"We, before the simulation part and the labs, we know all the theoretical content of the situation. Previously we had a subject for spinal cord patients, and then we have the subject of this."

[WP3-3 Focus group 2; Position: 43-43]

5.

"And then for doing the transfers, transferring, we do not hire actor for that but the students practice with each other but then one again because if it's a competency there are given a rubric beforehand and then instructor observes so there is like established expectations before going in to the simulations."

[WP3-3 Focus group 1; Position: 12-12]

## 2.1 Information from people in the field

1.

"I like to use real situations, so I am in contact with occupational therapist friends working in different NGOs. They come to us, meet me, information for example for their other subjects they have, orthopedic techniques"

[WP3-3 Focus group 2; Position: 33-33]

2.

"For me, the preparation of the students are on different layers, so we have the preparation in touch with the cases, so we use clinical cases, that are derived from real practice and give time to, yeah, so we start with the cases at the beginning of the module, and they working for a long time this cases, before the simulations happened. And so they are knowing the patients, the history of the patients and diagnosis and then we start to prepare the simulation"

[WP3-3 Focus group 2; Position: 38-38]

## 3. Assessments used

### 3.1 Summative

1.

"I can continue with that so as far as how students performance is assessed, so for the simulations in the program where it is a summative assessment we were looking at as a competency that's handled differently versus the ones where it is just for their formative learnings."

[WP3-3 Focus group 1; Position: 12-12]

### 3.2 Formative

1.

"We have simulation on side, so we use in our programme we use it mostly for formative, for the teaching process other there's selected skills where it is used as a confidency."

[WP3-3 Focus group 1; Position: 4-4]

2.

"For the simulated placement it was, there were activities throughout the placement for example we had to, we were working on a lot of note taking, like documentation so throughout the placement we did a guess documentation session where we write some documentation and then we got feedback on what we had written and the overall sort of assessment on that I guess it is called the "SPEF-R2", student practice evaluation form revised second edition, so we use that one that's sort of evaluation form we use for all of our placement, so real or simulated, and it is a way of talk about things like communication and professional behaviour and that sort of things so all of the, things you want in an OT and sort of checklist of achieving and not achieving those. So that is the main assessment that our placement was (braided) on a I guess."

[WP3-3 Focus group 1; Position: 10-10]

## Self created criteria-based assessments

1.

"So we have created opportunities to have simulated placements and our professional bodies of our college of OT allows us to count 40 hours of that kind of simulation towards practice hours. So we use our assessments forms to do that."

[WP3-3 Focus group 2; Position: 17-17]

2.

"afterwards like in fourth year, with this pedagogical methods, there was like a rubric with, we had to fill in the methodology, the planning, the justification for the .....method of leadership that we had to follow in the session. They had like very specific things that you had to check, that is how the teachers assess it, because we have like precised items."

[WP3-3 Focus group 2; Position: 28-28]

3.

"For the specific assessment we did in a simulated sort of way, I guess that was assessed a rubric so it was a bit of a checklist but also sort of what specific categories and how well we have achieved it."

[WP3-3 Focus group 1; Position: 10-10]

4.

"I start with the more formal ones where we are looking at competencies. So for example you use under.. patient to establish student competency for manual muscle testing and goniometry, range of motion measurement, so in those instances we hire standardised patient to be the actor and prior to participating in the competency the students are provided with a rubric these are all the things were going to looking for that you do, so it is pretty transparent and then during the session there is an instructor who sits and watches and you know, we try to not to, but there is pretty much a list and we look to see if they have done everything and additionally, so that's what determinants whether the student passes the competency or not."

[WP3-3 Focus group 1; Position: 12-12]

5.

"both self-assessment and then a peer-assessment and the content of each one it's R. Simseder has just a general format of similar to whether these are the areas of about you know about your communication skills, safety, your actual clinical skills and like managing, you know there are some broad categories and we adjusted customized for each scenario and usually we asked the students objectively with regard to this expectation what did you see, what did you not see and then usually kind of symphysis."

[WP3-3 Focus group 1; Position: 12-12]

6.

"We also for some of our competencies, thar are more the physical skills, we have just a basic standard precautions you know, did you sanitize your hands if you are going to handle something with bottles, you could go outside, you know just sum up the safety practice are pretty standard, and it's like yes or no, did you do this? Basic safety things right, did you put the bed reel down all the way, did you lock the brakes on the wheelchair before you transfer, so we have those things that they should know. Things are more concrete, like did you this or not do this, I think those work really well"

[WP3-3 Focus group 1; Position: 65-65]

7.

"For things of range of motion measuring and manual muscle testing, those are standardised in terms of the procedures, so I think that is also very meanable to you know say, did they follow the protocol for the manual muscle testing? So, those work well."

[WP3-3 Focus group 1; Position: 65-65]

8.

"A couple of other things that we have on our checklist is just students sometimes forget, when they go introduce themselves, ask the patient what they want to be called like you know, do that every single time, tell them what



OT is because most people are not going to know even if they've had it, you know, so there are some standardised things such as in the patient interactions that are regardless of client profile or situation, you are always going to do."

[WP3-3 Focus group 1; Position: 65-65]

#### Reflection/ feedback

1.

". For instance, if you will meet violent people in your clinical placement, that was an issue where we were talking about, but we didn't assess that. It was more just a reflection or so, looking at the video through the VR glasses reflecting on what did I experience, how was it, being in that session kind of that. And we had a debrief-session after, but that was not assessed in any way, it was more reflecting on the communication, so it is quite different."

[WP3-3 Focus group 2; Position: 23-23]

2.

"I think it starts with a goal to make it transparent for the students because our debriefing session, we are reflecting this goals, and we have items for this goals, for example, in this interdisciplinary modul it is about communication skills and where different items of verbal aspects and nonverbal aspects of communication but we do not have a standardised assessments so it's, yeah. Only follow steps and items."

[WP3-3 Focus group 2; Position: 27-27]

3.

"The assessment part, I mean, it's been really different between the years. Because in the first year we would simulate like strange situations that could happen, in [location] we have like field work, like all years, but field work one and two for preparation for the next field work in pediatrics, not identified mental health. So in simulations in field work 1 and 2 were more based in feedback that the students, we have to teach us about how we felt and in the situations and what we did, and what in the moment we would have done better to get in touch with this situation an."

[WP3-3 Focus group 2; Position: 28-28]

4.

"And also ahm if it's about skills where you do not have a wrong or a right. So they are different ways to handle the situation to make it clear, that it's important to reflect it but there is no really wrong or right, I think it also a point for the lecturers view because there are different perspectives on teaching."

[WP3-3 Focus group 2; Position: 58-58]

5.

"We did do one assessment that was a role play essentially so there was an OT and a patient and it was to do with manually handling, so we had learned various manual handling techniques like movement in bed and movement from a wheelchair to a bed and that sort of thing and the assessment for that was a role play in which one of the other student was the patient and so we had to communicate what was happening and how we were going to to things, and be able to clearly communicate what we wanted the patient to do as well as be able to justify why we chose that particular manual handling technique so we had a scenario that identified a couple of different manual we handling techniques and we had to chose one and justify why that was useful and otherwise it has been in classes we are doing some sort of theory and then well again, role play to be more in the OT role and other student role in a patient or client role."

[WP3-3 Focus group 1; Position: 8-8]

6.

"Additionally just another layer of feedback is the standardised patient after the accouter always gives their perspective about the feedback, so we have that for those two."

[WP3-3 Focus group 1; Position: 12-12]

7.

"For the more the ones where it is more informative and just for their learning experiences, the way we assess is the standardised feedback after the encounter and we provide our standardised patients, it is not a formal checklist, but I usually gave them maybe five or six areas for feedback with like for them to hit on that relates you what are the students' given as the objective for each scenario we have the learning directives that we give to both the standardised patient and the student. So, the feedback is kind of what we structure those establish objectives."

[WP3-3 Focus group 1; Position: 12-12]

8.

"We also have our students doing a self-assessment as part of the feedback process."

[WP3-3 Focus group 1; Position: 12-12]

9.

"I think maybe it might be just their learning style, because I think that the majority of people did get something out of the simulation and the assessment and the feedback, I think"

[WP3-3 Focus group 1; Position: 58-58]

10.

"And how did you deal with this in the debriefing, Person 2? If you experienced it, maybe you have an idea how to just deal with it?"

Person 2: Yeah, I think you know. It is acknowledging that others how, how it feel and just appreciating, you know, everybody has range in terms of how much you can suspend disbelief. And then I think for me, just going that, these are the learning objectives, you know, this is what, I try to keep it positive because I can not invalidate what their perception is but I am trying to circle that too, okay, this is what we have said, what you know, we are working on, what did you get, yeah, but. It is hard because then managing the classroom dynamic, right, like, you know keeping it positive for all the other rest. Yeah I don't want, you know, I am not there to argue with the student about, it's yeah. It is a little tricky."

[WP3-3 Focus group 1; Position: 60-61]

### Peer feedback

1.

"But if you want to observe the communication skills in an interview, etc. they could video that or you could do a peer observation for that."

[WP3-3 Focus group 2; Position: 64-64]

2.

"I implemented for the curriculum few years ago for the students to do a self-assessment, they processed during the study cases also, assessed in college. The tribunal, for themselves and themselves with the work of the colleagues, so three assessments and combined them. It takes a lot of time because we need to talk with the students, so they can understand why they implement this methodology for assessment."

Moderator: Would you recommend to do it in this way or?"

Person 2: Yes, because it is a way that the student take attention to the other aspects and do reflect more about their work and the work of the colleagues."

[WP3-3 Focus group 2; Position: 86-88]

3.

"As a student, it was more effective to see, because when you get the think about some simulation that you have done in the health team or health subject, we have to role-play a whole session. From the start where you meet the patient and when you are at the start for the intervention. So we have like a whole class just to present the video, assess ourselves, assess others project and received feedback from the teacher and from other. You see really where are the mistakes, where are you coming off, and it really shows. Because one teachers says

it, yeah. But when someone makes the same mistake, "you could do it this way" when you see it, because ah, "did you see the mistake?". I can approve it, like she says. More empathy in that way."

[WP3-3 Focus group 2; Position: 90-90]

4.

"It is more like a peer-assessment. We did find that peer-assessment get everybody 90 out of a hundred. It count two percent of the final grade."

[WP3-3 Focus group 2; Position: 91-91]

5.

"We didn't give each other like a number, but we have to adjustifying in an item, so like, following the process or how was the language, and you have to adjustifying why score him a ten or why not? And that is how we deal with everyone assessing."

[WP3-3 Focus group 2; Position: 95-95]

6.

"I think a lot of this can work quite well in scenarios, I am a bit cautionary about peer, to give peer-feedback, depending on the level you are in your studies it can keep very difficult if you are on a higher level and you have to, you have ones that's about lower level education it can be very hard to get a correct feedback and I have been on places where I have made: Oh, okay that is wrong and I have (not identified) but I was right so I think can be very hard to do too much peer-feedback here"

[WP3-3 Focus group 1; Position: 73-73]

7.

"Okay, this is important, this is we are going to spire to. So then as part of the given feedback, we give feedback with respect, okay did you do, did you follow this priniciple, did you, so it is a little bit structured if you will, for that."

[WP3-3 Focus group 1; Position: 76-76]

### Accuracy of peer feedback

1.

"It is more like a peer-assessment. We did find that peer-assessment get everybody 90 out of a hundred. It count two percent of the final grade.

Moderator: Because they are too nice to each other is that what you are saying?

Person 1: They are supporting each others."

[WP3-3 Focus group 2; Position: 91-93]

2.

"I think a lot of this can work quite well in scenarios, I am a bit cautionary about peer, to give peer-feedback, depending on the level you are in your studies it can keep very difficult if you are on a higher level and you have to, you have ones that's about lower level education it can be very hard to get a correct feedback and I have been on places where I have made: Oh, okay that is wrong and I have (not identified) but I was right so I think can be very hard to do too much peer-feedback here"

[WP3-3 Focus group 1; Position: 73-73]

## Video assessment

1.

"when we do it in first class, they have to practice, and also have a video presentation of what they learned and how they do it, and that will be assessed by the teachers, if it's a proof or not. So then, it is a video presentation of the, that's the assessment."

[WP3-3 Focus group 2; Position: 23-23]

2.

"Students take on issue online training, so they will practice with every out of, scenarios, they have pre-learning, they come in, they practice, and then they do the assessment. They video themselves during the assessment, and upload it and then we go in later to check whether it is successful or not. Because we have to do it before every placement, they have to be up to date. And when you have 80-90 students, that's a lot of work so we have to find another way of doing it."

[WP3-3 Focus group 2; Position: 29-29]

3.

"So for example, basic skills, if I want to test the student to make sure that they know how to goniometry or if they want to do muscle-strengthening, they can take a video of themselves doing it with a friend and you want to see whether the techniques is correct, whether they are getting to right answer, they can upload that video that is quick assessment, and it is a video-based assessment"

[WP3-3 Focus group 2; Position: 64-64]

## Written assessment

1.

"But they also have this group work with students later in second year, they have, the students play roles and the students are the leaders of the group and they have a group session and after, so they have to plan the session, and after the session ready, they have finished, they have to write a report from what's happened and what they did, that is the exam."

[WP3-3 Focus group 2; Position: 23-23]

2.

"then in the simulated practical we had, we were OT students at a made up health center and we were given different clients to work with so we were watched recorded interviews and then we had to interview an actor who was playing this client so we had to plan the interview and do the interview and we had to .. write a report on this particular person...."

[WP3-3 Focus group 1; Position: 8-8]

## 4. Competencies addressed with SBL

### 4.1 Domain A- Knowledge and attitude supporting the OT process

1.

"I think, B because it's about the doing part and I could see the knowledge and attitude underlined that you know, kind of what I am seeing what they are conducting I think that's very well underlined with simulation based learning."

[WP3-3 Focus group 1; Position: 78-78]

## 4.2 Domain B- Conducting the OT process

1.

"If we look at the levels of simulation, so according to the standards it says that if you just doing a skill like doing an assessment that's level 2."

[WP3-3 Focus group 2; Position: 19-19]

2.

"you need to do a study case, show the process of OT from derivation, assessment of the patient, and the planning and intervention and propose for activities for this case in concrete and the students working in groups for 5 students by group and then they give me the work, the written work, and I assess it and I have a rubrics, yes, from 1 to 5 and I check all the items for the rubrics for example."

[WP3-3 Focus group 2; Position: 21-21]

3.

"The process of occupational therapy, the reference use, the activities proposed, the confidence between the derivation, the follow-up. So this is a rubric designed by me, but this rubric is also now at recent used by different teachers in practice."

[WP3-3 Focus group 2; Position: 21-21]

4.

"I think ...conducting the occupational therapy process could definitely be assessed in simulation and the general professional skills and competencies. I think in, like, in the longer simulations that I have done"

[WP3-3 Focus group 1; Position: 69-69]

5.

"I think specific scenarios with actors and educators observing those scenarios I think would be a really good way to look at the professional skills and the maintaining and developing relationships and of course conducting the occupational therapy process"

[WP3-3 Focus group 1; Position: 71-71]

6.

"I think, B because it's about the doing part and I could see the knowledge and attitude underlined that you know, kind of what I am seeing what they are conducting I think that's very well underlined with simulation based learning."

[WP3-3 Focus group 1; Position: 78-78]

7.

"I am not sure if it fits in assessment but I guess I thought of reflection like student reflection as a really important part of it. I think reflecting on your own experience is, the way you have implemented the skills and competencies and the way that you worked through OT process in your simulation I think this is a really valuable way to assess your own skills and experience."

[WP3-3 Focus group 1; Position: 82-82]

#### 4.3 Domain C- developing and maintaining professional relationships

1.

"developing and maintaining professional relationships so I guess, yeah, working with clients and colleagues I think that sort of to me it sounds like the communication side of it."

[WP3-3 Focus group 1; Position: 69-69]

2.

"I think specific scenarios with actors and educators observing those scenarios I think would be a really good way to look at the professional skills and the maintaining and developing relationships and of course conducting the occupational therapy process"

[WP3-3 Focus group 1; Position: 71-71]

3.

". I think peer feedback is useful in assessing C. They are sort of, their experience of your relationship I guess."

[WP3-3 Focus group 1; Position: 71-71]

4.

"I think scenarios, especially for F and C and D can be very good at scenarios with actor or a teacher because it is hard, even if your student is in the same semester, supposed to be on the same level I assume it is not always the case so I think it can be a bit problematic with peer-feedback but I think scenarios could be good in most of this cases even E, to train and advocating because we need to learn to advocate for the profession and patients. And it can, it takes some more practice because we don't get practice in that."

[WP3-3 Focus group 1; Position: 73-73]

5.

"I think C about the relationships and partnerships because I think that's one where it can be, very realistic, right, the way we do it or we have like let's say OT student, a PT student, a nursing student, like there are all claim themselves in the rooms, you know what I mean, so we don't even, it is just very authentic if you have access to those, we have partner with a group that have social work. So we actually bring in people in their actual roles and they get, so I think right, I think that the best way to learn and assess communication is to have put people in this situation where they actually have to work as a team and communicate."

[WP3-3 Focus group 1; Position: 78-78]

#### 4.4 Domain D- professional autonomy and continuous professional development

1.

"do I think, D, the professional autonomy and continuous professional development could sort of fit in there as well a."

[WP3-3 Focus group 1; Position: 69-69]

2.

"I think scenarios, especially for F and C and D can be very good at scenarios with actor or a teacher because it is hard, even if your student is in the same semester, supposed to be on the same level I assume it is not always the case so I think it can be a bit problematic with peer-feedback but I think scenarios could be good in most of this cases even E, to train and advocating because we need to learn to advocate for the profession and patients. And it can, it takes some more practice because we don't get practice in that."

[WP3-3 Focus group 1; Position: 73-73]

#### 4.5 Domain E- promoting & advocating for advancement of professional/societal change

1.

"I think that looking at the domains I think that the E the most difficult to implement with the simulation based learning."

[WP3-3 Focus group 2; Position: 65-65]

2.

": "Competence for engage in activities related to promoting and advertising the patient ... [reads out loud the domain competence E]". I think for me, like a teacher, is difficult to process, to some specific simulated based cases thinking about this domain. The rest of them are perfectly up with the SBL. I get that."

[WP3-3 Focus group 2; Position: 67-67]

3.

"Person 5: But I think it's depends also on how the understanding of assessment is and which assessment perspective will be invited in the debriefing, so if we also look at the [disturbance from outside] when we also involve perspectives of the patient's and they assess the situation, so it is possible to handle the E. We do it and it's really interesting about how the perspective is on [disturbance from outside]."

Person 3: We also use our patients to do assessments, and it is really to see from their perspectives."

[WP3-3 Focus group 2; Position: 68-69]

4.

"I think scenarios, especially for F and C and D can be very good at scenarios with actor or a teacher because it is hard, even if your student is in the same semester, supposed to be on the same level I assume it is not always the case so I think it can be a bit problematic with peer-feedback but I think scenarios could be good in most of this cases even E, to train and advocating because we need to learn to advocate for the profession and patients. And it can, it takes some more practice because we don't get practice in that."

[WP3-3 Focus group 1; Position: 73-73]

5.

"I think you can do so much with this if you have a scenario where you have to advocate for a patient, you have two different sides you are supposed to train or advocate I think all of this can do very well in simulation with actors actually because you can do so much things. Just having a bit of fantasy about how to do it, I think it's possible but it can be harder for some things like promote and advocating domain E can be a bit harder because not all people want to do that part, but for those who want to it is very good to practice like how do I do if someone comes for, want to know how we supposed to work. So I think, I am still in love with all the simulation thing. Overall, it can do very much in everyone aspect."

[WP3-3 Focus group 1; Position: 80-80]

#### 4.6 Domain F- General professional skills and competencies

1.

"I think scenarios, especially for F and C and D can be very good at scenarios with actor or a teacher because it is hard, even if your student is in the same semester, supposed to be on the same level I assume it is not always the case so I think it can be a bit problematic with peer-feedback but I think scenarios could be good in most of this cases even E, to train and advocating because we need to learn to advocate for the profession and patients. And it can, it takes some more practice because we don't get practice in that."

[WP3-3 Focus group 1; Position: 73-73]

## 5. Ideal SBL assessment

### 5.1 SBL needs to feel real

1.

"so it felt really weird to play with a patient that was not real and I knew this isn't real but have a teacher to look at you and do, what are you doing? And I am used to teaching the new guys how to do things, so it felt very weird to have a teacher who is going to assess me."

[WP3-3 Focus group 1; Position: 18-18]

2.

"I then it felt very weird to get assessed, yeah."

[WP3-3 Focus group 1; Position: 18-18]

3.

"I have been working in a related field but different for seventeen years and coming into the sort of simulated learning that we did I guess I had expectations of my abilities to do things but then it's a different framework and it's different ways of doing things to how I did it in my other job. So yeah, I went into it with expectations of my abilities and then I doing it with most of what I have done is being role play with other students, so it felt a bit strange, sort of practicing being an OT with the other OT students"

[WP3-3 Focus group 1; Position: 20-20]

4.

"when the instructor switch over to the standardised patients I think the benefit was that it is just much more realistic, right. Because student partners, you know, they know what, I mean maybe not on purpose, but you know if somebody knows okay, I am supposed to this physically they end helping each other, so it is just a much more realistic assessment of somebody who does is not an OT, trained to be an OT, so they have no idea, so I feel like if it's for the hands-on clinical skills, it's a more valide assessment of actual practical skills."

[WP3-3 Focus group 1; Position: 35-35]

5.

"I think it can be hard with certain diagnosis and syndromes because you, sure, you can have someone play that they don't, they have hemiparesis, can't move, but it's a bit different, when you actually meet that patient, I am taking stroke for example, because I have been working with a lot of stroke elderly patients, and it is not the same, it's not. Even if it's very close, it's not really the same, because if something goes wrong, my simulated patient can move up their arm, but my real patient, I can break the arm, I can do harm, so I think it is very hard, you have to think about that. Can I make mistakes with the simulated patient? Mistakes I can't do if it's in real life. So it can be hard to do certain scenarios and certain patients, because you can't act all the way, so everyone is different. So you can't train on every single person, because everyone is different. So it can be hard to do certain diagnosis and problems, I think."

[WP3-3 Focus group 1; Position: 45-45]

6.

"So, it is hard for some people to suspend the disbelief and actually engage with it as a real situation. Yeah, I think that is the challenge of SBL."

[WP3-3 Focus group 1; Position: 47-47]

7.

"Yeah, I would concur what was said about just the standardised patients and they are, you know, they are not real patients, they are definitely limitations in terms of what, how you can do, what the perception of how realistic it is, right."

[WP3-3 Focus group 1; Position: 49-49]



8.

"I think there is also a range of skills in how well the actor can portrait the different roles. I find how the student's SPs, the actor perform, it has a big impact actually on the quality of the learning experiences. I am so thankful when I get an actor that is spot on. I think another difficulty is just, I think for me it is gotten better over the years, I think I have learned some ways to navigate this,"

[WP3-3 Focus group 1; Position: 49-49]

## 5.2 Student

### (mental) Preparation of students

1.

"I think more preparation in form of videos we can watch over and over again how you supposed to do and act because that can really help to get both, not having it wrong. This is wron, don't do it like this. More like that kind of preparation. Because some scenarios are going to be hard I think and it can be very good for many people to see how to not do it, not only to how to do it but no how to not do it. I think it can be a very good way to make more simulations like we look at videos not how to do it and then you have to try it for yourself, I think that can be very good way to do it. Even better than we do it at our university, more like before not how to do it because it is very easy to do it wrong if you only know how to do it."

[WP3-3 Focus group 1; Position: 86-86]

2.

"I think the growth mindset being part of it I think just everybody being okay with like, this is. You know, I try to tell this my students, they don't always buy it right. The reason we are doing this is because you are not perfect yet, nobody, nobody's perfect, we are never going to be perfect, but it's for the learning process, so kind of celebrate the things that you are identified. Okay, yeah, I could have done that better, so I think it is just. Because from what I understand, we do the simulations that we practice so we can do better with the actual clients, so I think really putting that growth, growth mindset kind of in the center and framing it in that way."

[WP3-3 Focus group 1; Position: 93-93]

3.

"I think ideally it would be in I guess more realistic setting, we do have an apartment, a simulated apartment and I mean, the area, where we did the mental health simulation, there were sort of clinic rooms with big glass windows where the class could watch from the other side. I guess, in an ideal world with limitless money and space, you'd have a separat simulation space, a simulation clinic I guess, we could go and do the simulations."

[WP3-3 Focus group 1; Position: 105-105]

4.

"The other thing I thought as just resources that we use and is helpful. Our rooms are set up so we could record the encounter so as part of our debrief, and for the students to their self-assessment, they have access to that. So that is, like you ideally you have the resource and you could have, if you want to record, you can, if you don't want to, you don't do it. That would be a nice resource if it's possible."

[WP3-3 Focus group 1; Position: 106-106]

## Safe environment to learn

1.

"I think for those students that not confident yet, to be in front of patients, I think it provides a really safe environment for them to learn, make all the mistake"

[WP3-3 Focus group 2; Position: 45-45]

2.

"Also the possibility to practice cases that not so often happens, so you can for instance in a way, it is not often that you meet violent people or dangerous situations, but if it happens, it will be very good to practice in front, just to prepared."

[WP3-3 Focus group 2; Position: 46-46]

3.

"We also use challenging situation for the simulation but, also see it like really safe learning environment. But I experience is that it is really challenging for the students to accept like such an offer. The offer to train, to try something new and."

[WP3-3 Focus group 2; Position: 47-47]

4.

"We started using simulation just like simulation open center opened at our side and we were like, oh, what is this? And it really how we started using it is. When the student were on the clinical rotations they were telling us like, we were going to ICU and we know nothing about it, it was very stressful so we really just started, oh let's just like, we just set the room up as an ICU and just let them see how it looks like, like that was all the objective but we were quiet surprised, and it was very cool to see all the staff how you know realistic they can make."

[WP3-3 Focus group 1; Position: 16-16]

5.

"but on the other hand it also felt like a sort of safe place to be able to try these things out and it doesn't matter, so I think I felt positive about being or try the new techniques and new ideas and new strategies on people it is not going to affect their lives, so I am not seeking help from me they are just there to learn as well as I am, and then in the simulated placement, yeah it felt a bit strange being part of this made up health center and it felt like it was hard to connect with the I guess professional experience because we were just at uni and we were in usual classrooms but we were there to be health professionals I guess, so it was a bit hard to connect with the professional side of it I guess, it just kind of felt like we were in class doing a role play.."

[WP3-3 Focus group 1; Position: 20-20]

6.

"I think it is really good because many people that don't come out of the health care don't know how to talk with patients, don't know how to do and this is a good way to train because it is better to fail now when you don't have a real patient than to fail with a patient that needs your help. So I think it is a very good way to do it and we should do it more, because it is the best way to learn according to me to just try it with your own hands. Try, try and fail because you learn by those mistakes and I think this is really good for the outcome."

[WP3-3 Focus group 1; Position: 30-30]

7.

"I would echo that I think it is really valuable way to learn. I think it is great to be able to try out the things that we are talking about in a place where it doesn't matter, it's not, if you are not affecting anybody, you are just learning"

[WP3-3 Focus group 1; Position: 31-31]

8.

"And it's a comfortable place to make mistakes and you got your teachers there to say: "Actually, no, that is not the way you do it" or "that's okay, but maybe think about this". I think it is a really valuable way to learn."

[WP3-3 Focus group 1; Position: 31-31]

9.

"It is such a practical profession, you are out there, working with people, doing manual handling and all those sorts of things, so I think, it is just, it makes so much sense to be able to assess those skills in a simulated way before we go out into the big wild world."

[WP3-3 Focus group 1; Position: 36-36]

10.

"It was really nice to get I know you don't get it when you are working, you never know what the patient thinks when you are working, you can get a "oh, you are so nice!" but that's about it. So it was really nice to get feedback."

[WP3-3 Focus group 1; Position: 39-39]

### Active learning environment

1.

"I really enjoy the simulation based learning because it is active learning. They are actively participating, so I find it that it's engaging, there are mentally and emotionally engaged. From what we learn about how the brain works, that's when things stick, you remember because you had this active experience, you had the emotion attached to it."

[WP3-3 Focus group 1; Position: 33-33]

2.

"in written or oral exams you can just read, read, read and you forget it quickly after, because you are just focusing on this, but when you do it practically, you have to get it all in, because otherwise you, it is not going to work, you are not going to forget it in the same way when you are doing it. It is easier to forget when we have had test, written tests, those things you forget more easily."

[WP3-3 Focus group 1; Position: 41-41]

3.

"I think it's very important that you can get to scenarios where you can't do it right, you have to do wrong, because you learn so much about this discussing and reflecting, "What did I do wrong? How I am going to do better?" so I think ideally would be, there are programs where you are going to try to get as perfect scores as possible but some way you are not going to get perfect, you are not supposed to get perfect, you are suppose to fail, so you can discuss "why did I fail? How do I fail and how could I do better next time?". Because you learn so much about when you fail and how you can do better. And in some cases in real life you will fail with patients, you can't do always the right and it's good to learn how to handle that fail. So you don't, when you go out in the professional feel very bad, because I just failed, I failed. To help the simulation to get even training how do I fail? How is it okay to fail? I think that would be important to incorporate that failures are okay and how to handle it, so you don't get breaking down."

[WP3-3 Focus group 1; Position: 99-99]

### Learn to cope and adapt

1.

"So I think it's definitely an advantage because you are creating a second environment for them to learn. Because all the theory says that when students are in unfamiliar situation, and if they are not able to overcome

their anxiety and the stress, they don't learn effectively. So, you know I think simulation from that perspective is really positive."

[WP3-3 Focus group 2; Position: 45-45]

2.

"your peers are learning from the mistakes you make and you are learning from the mistakes your peers make."

[WP3-3 Focus group 1; Position: 31-31]

3.

"I think also it is a good way to assess professional behaviour because it is, at least in Australia, it is not I mean, you got your clinical supervisor at your hospital or where you are doing placement, but your lecturer don't see what you are doing there so they can't sort of assess you on that sort of those skills in that situation."

[WP3-3 Focus group 1; Position: 67-67]

#### No adding of student's assessments by SBL

1.

". What we found is that if we are writing a new program, and you are using simulation, is to make sure that you are not creating additional assessments for the students, because that is also stressful."

[WP3-3 Focus group 2; Position: 81-81]

2.

"This assessment, this exercise is not on top, it's more imbedded in the curriculum. Yeah, I agree."

[WP3-3 Focus group 2; Position: 82-82]

#### Different levels of SBL

1.

"So, depends on what level of simulation they are doing, if it is just skills that doesn't count towards practice hours but if it is a full simulation with a case scenario, they are doing something, and we debrief them, then that counts towards practice hours. So it is very specific what they have to do."

[WP3-3 Focus group 2; Position: 19-19]

2.

"It depends I think it also depends on what's the goal of the simulation because we have, for instance, they have to practice [transferring] patients, and in first grade, when we do it in first class, they have to practice, and also have a video presentation of what they learned and how they do it, and that will be assessed by the teachers, if it's a proof or not. So then, it is a video presentation of the, that's the assessment."

[WP3-3 Focus group 2; Position: 23-23]

3.

"But they also have this group work with students later in second year, they have, the students play roles and the students are the leaders of the group and they have a group session and after, so they have to plan the session, and after the session ready, they have finished, they have to write a report from what's happened and what they did, that is the exam."

[WP3-3 Focus group 2; Position: 23-23]

4.

"Yeah, what's the goal with the simulation, and then, we had different sometimes do assessments and sometimes it is more reflection kind of, it depends on the goal what we are using and what is supposed to be used, what's the goal of the use, yeah."

[WP3-3 Focus group 2; Position: 23-23]

5.

"Ahm, well. The assessment part, I mean, it's been really different between the years. Because in the first year we would simulate like strange situations that could happen, in [location] we have like field work, like all years, but field work one and two for preparation for the next field work in pediatrics, not identified mental health. So in simulations in field work 1 and 2 were more based in feedback that the students, we have to teach us about how we felt and in the situations and what we did, and what in the moment we would have done better to get in touch with this situation and afterwards like in fourth year, with this pedagogical methods, there was like a rubric with, we had to fill in the methodology, the planning, the justification for the .....method of leadership that we had to follow in the session."

[WP3-3 Focus group 2; Position: 28-28]

6.

"So for example, basic skills, if I want to test the student to make sure that they know how to goniometry or if they want to do muscle-strengthening, they can take a video of themselves doing it with a friend and you want to see whether the techniques is correct, whether they are getting to right answer, they can upload that video that is quick assessment, and it is a video-based assessment. But if you want to observe the communication skills in an interview, etc. they could video that or you could do a peer observation for that. But if you want to, like you mentioned the whole OT process, watch them do an assessment, develop a treatment plan, do the, actually imbed the treatment plan, that might be the practice skills competences that we have. So depending on the level of information you want, there would be an assessment for each one. Does that makes sense?"

[WP3-3 Focus group 2; Position: 64-64]

## Debriefing

1.

"think in an ideal world the assessments or at least the feedback from the assessments would be given on an individual basis. They sit down with you with your educator and they go through and say, you did great here but this is what you need to work on and how you could work on it, I think yeah. Ideal that would be amazing and really valuable to hear from individually from your assessors."

[WP3-3 Focus group 1; Position: 87-87]

2.

"But I think also in a more achievable sense, feedbacks in sort of overall assessment information I guess, in sort of looking at assessments of the class and feeding back to everyone, so this is what lots of people did well, and this is what lots of, there were sort of tripped up a lot of people and this is how we can face that problem and you can learn from it and improve in the future."

[WP3-3 Focus group 1; Position: 87-87]

## 5.3 Institution

### Flexible use in curricula

1.

"Because you have six assessments in one modul, so, to see how much it fits in your current modul and your current delivery, there is lots to think of. I don't think you can just develop one."

[WP3-3 Focus group 2; Position: 81-81]

### Self driven learning activities

1.

"Yes, yes. And I think, you mentioned it earlier, that would be also a nice opportunity to give options that the students can use good labs or simulation by themselves. I think it could be a good opportunity. Later with the lectures for example."

[WP3-3 Focus group 2; Position: 53-53]

### Lacking resources to create SBL scenarios

1.

"And actually preparing your teams, and preparing [disturbance from outside] the simulation. I think initially it takes a lot of work but once it's set, and the process is there, I am hoping it gets easier, because we are in the process of building our bank of scenarios, but we have a professional body and for all our allied health professional. If there is a really good simulation, you can upload it to their site and anybody can use it, so you don't, all have to create a scenario for readings, for spinal cords, there might be some in the bank, that you can go just download and use. But it is really expensive as well when you are buying the equipment."

[WP3-3 Focus group 2; Position: 78-78]

2.

"Especiall with the VR glasses, oh my god, if I didn't have a person helped me, it would be terrible, because everything can go wrong, goes wrong if you don't have anyone helping you. It's very stressful, I agree, it would be very good to have a team that works for you with you quite often, then it is less and less stressful and you understand it more better and you are more into it and you like it. Because not every teacher likes this simulation based teaching, or VR glasses, or whatever, so."

[WP3-3 Focus group 2; Position: 102-102]

3.

"But I as a teacher was surprised how much work it was, they were like, oh we don't just do tours like come up with what is your learning objective? What is your scenario? You know, so it became this whole big, yeah, that was my initial, wow, it's this whole new world and it was very interesting but it was a lot of there was a lot of that went into it to create the learning experiences."

[WP3-3 Focus group 1; Position: 16-16]

4.

"I would say the preparation is extensive and it is still for every single one so I could talk about what I do with this in-team and we specifically prepare students because we now have a pretty standardised process. So it means for preparing, there is so much in terms of coordination right, reserving the space, I have had times where I had to change my course schedule and stiller this because the simulation day you know like this semester I had to rework everything so it is just getting space, hiring the actors, training the actors, we work with our team to get all the props that they need, I did one this week where we needed to see clearly, so the camera, you know it feels like a productive, you know, like a production, so from that stand of point there is a

lot of we train our actors, I have started making videos to show the SPs before they come so they have some visuals and show examples from past scenarios that we have done in a while, so there is a lot of that."

[WP3-3 Focus group 1; Position: 22-22]

### Standardised SBL assessments

1.

", we need to think about using what we are doing and not being to standard, so that we are doing it all at the right level. Cause anything can count to simulation but to make sure that the students are getting the right skills at the end of it, you know, might be necessary, it is just a suggest, that it is all up to standards. Not to take away the creativity, though."

[WP3-3 Focus group 2; Position: 26-26]

2.

"So there is something more, there is a scenario which is a lot more complicated that you don't know how it is going to go, so you can use higher levels for that. So because one of the things that we have to do, anybody that wants to do simulation has to map it to the standards and has to map it to the process of simulation we finding that we can meet all of those domains, depending on the level of simulation we are doing."

[WP3-3 Focus group 2; Position: 62-62]

3.

"In addition to that I wonder if there's an opportunity to take international simulation standards and interpret for our profession, because would then aligning to what we want to assess and do not be a word-file exercise to do."

[WP3-3 Focus group 2; Position: 89-89]

4.

"where is others, it's just about the learning process, so I am trying to think if you have an assessment tool, could it be flexible enough or could you have maybe a couple of, it could be the same domains or areas but could be flexible, so that the educator can choose okay, this is a formative assessment, and this is a summative assessment. Because I think it feels very different, right."

[WP3-3 Focus group 1; Position: 97-97]

### Focused on competencies

1.

"I liked what Person 2 was saying about having a flexible assessment, so maybe, it has all of the competencies on it, but each simulation has sort of focus-areas, so like you either achieved or didn't achieve certain things but then you have focus-areas you get more in depth feedback on it and how you can improve on that like where you went wrong and how you can improve. Because I think, that is to me that's what simulation based learning, it's seeing, it's putting the theory into practice and learning how you can be better to be the best health professional you can."

[WP3-3 Focus group 1; Position: 101-101]

### Clear objectives

1.

"Yeah, I think what the assessment, I mean it needs to be customized for each case but I think having the expectations or intended learning outcomes, very clear upfront and then using that into guide the subsequent

assessment both by everybody involved, you know, peers, faculty, basically if everybody's speaking to "Oh, these are the objectives, these are the outcomes we are looking for, what did they do with respect to that?"

[WP3-3 Focus group 1; Position: 84-84]

### Provide resources to create/ implement SBL

1.

"We went through that scenario, and we have to do a business case to show how if we use a simulation team to do exactly that, it would save money using several lectures. So we now have two two senior lecturers and three technicians that run all of our simulation."

[WP3-3 Focus group 2; Position: 72-72]

2.

"So what we then had to do is we applied for some funding and we bought some really expensive cameras and so when simulation is happening, you might have a group of students here, but you have eighty others in another room that are watching the simulation and then they swap."

[WP3-3 Focus group 2; Position: 74-74]

3.

"So when we are considering space and time, you mentioned. Sometimes it takes a lot of time, a lot of staff, we already heard. So what would be ideal for implementation including the space and staff requirements?"

Person 1: A simulation team.

Moderator: What is it? Can you explain it for me further?

Person 1: So you have your lead for simulation, so you are an occupational therapist who understands what the scenario is, etc. You need your technicians who can lay out the whole scenario for you so they prepare the room, they prepare the cameras, they do all the audios, they do all of that. They bring the not identified if it stored somewhere else. And of course, they might be other lectures that are helping you to do the debriefing if it's a very big class, so."

[WP3-3 Focus group 2; Position: 96-99]

4.

"I think we have quite good at the university, we have something called "clanicum", it's a lot of different rooms like health (not audible) with several patient beds and stuff. It's not only us, it's nurses too. And we have a special apartment for us occupational therapists, I think you could vary them more because we have three different rooms and you could get more, because you don't do, many rooms are small, it's just one patient. But otherwise I think actually, my university is very good in the setting for it because it's at the university that feels you are in a health care facility. So for a setting I think this is very good, but you could do it a bit more like now people can wander through and that's a big problem because you can get distracted, so maybe a bit more excluded, so it's easier to feel real."

[WP3-3 Focus group 1; Position: 103-103]

5.

"I think this flexible space is definitely or broader space, you know, you could make it look more realistic. What Person 3 said about having an (dealing) room for observers to watch while the, I mean for us we just because we can engage more learners as part of you know just, observers learn from the simulation as well."

[WP3-3 Focus group 1; Position: 106-106]

6.

"I think our school is pretty lucky, because we have the whole center. It means far as resources are accessible, we have like a person just a scheduler for all the spaces, we have somebody that recruits the actor, there is a



tech person who runs like all of the technology and then we have a simulation educator that works with me and you know, there are a lot of resources"

[WP3-3 Focus group 1; Position: 108-108]

7.

"First another big scenario, we do this one scenario where we have, like we have 42 students in our cohort. So it's like a day where all 42 of them have to transfer patient out of bed. So that takes like I have to get volunteers, I can't do it all, so getting volunteer faculty to come in and yeah, just I think the human resources, it's. I think it's helpful to have from the teacher's perspective, people who are willing to step in, because it's a lot."

[WP3-3 Focus group 1; Position: 108-108]

### Create sustainable learning material/ opportunities

1.

"And actually preparing your teams, and preparing [disturbance from outside] the simulation. I think initially it takes a lot of work but once it's set, and the process is there, I am hoping it gets easier, because we are in the process of building our bank of scenarios, but we have a professional body and for all our allied health professional. If there is a really good simulation, you can upload it to their site and anybody can use it, so you don't, all have to create a scenario for readings, for spinal cords, there might be some in the bank, that you can go just download and use."

[WP3-3 Focus group 2; Position: 78-78]

### Lacking time resources

1.

"We also use our patients to do assessments, and it is really to see from their perspectives.

Moderator: That sounds really nice!

Person 3: And it is easy to process. But we haven't been talking about that, it takes quite a lot of resources. So because, in our university it is more talk about less money, we have to do everything with less resources, that is a big issue, especially in simulation because that we are not that big classes. So it's, I heard the nurses who run 200 students and I think it is quite difficult with SBL and we around 40 students and it's easier. But still, it takes quite a long time to make, to go through all the simulation, especially if it's not identified it's quite large, preparing, taking the simulation and the debriefing. It takes quite a lot of time, you can't be that many students at the same time. So, it's quite"

[WP3-3 Focus group 2; Position: 69-71]

2.

"And then they get really good at it, also. But still it takes time, though."

[WP3-3 Focus group 2; Position: 73-73]

3.

"I think that is the way to do it, they are talking about that for all the students can do the simulation, but maybe more have to just watch it

Person 1: and then they have to rotate

Person 3: And yeah, in all three or four years, so the students are doing all the simulation and that might be a solution I think because I think it is quite time-consuming."

[WP3-3 Focus group 2; Position: 75-77]

4.

"It takes a lot of time because we need to talk with the students, so they can understand why they implement this methodology for assessment."

[WP3-3 Focus group 2; Position: 86-86]

5.

"And then the last thing I think from just like, let's take an example as a teacher, like it's there's limited time and resources. This semester, I am teaching a class where we are doing seminars, but not simulation, but not everybody has got the chance to be an active learner and I know, I want to turn, but we just don't have time to you know, because it is just much faster if I just get everybody a test and everybody takes it, and we are done."

[WP3-3 Focus group 1; Position: 49-49]

#### Suitable equipment (IT requirements/ connectivity)

1.

"But also one of the things which you have mentioned which I am going back to, is the IT. You don't realise how many times you buy equipment and it is not compatible with your universities stuff. So that is really important, you need to make sure that is correct, and that you have the right support, because if you trying to make it link with other systems, and you are wasting your money, you wasting your time. So we learned that lesson."

[WP3-3 Focus group 2; Position: 103-103]

2.

"And it has to link with internet sometimes, how do you that? The technical issue is quite important, if it doesn't work you don't want to try again because then your classes is ruined and you. I think that is very important."

[WP3-3 Focus group 2; Position: 105-105]

#### Supported by IT/ SBLteam

1.

"Especially also this technical part, it's quite.

Person 1: You need your IT on board, yes."

[WP3-3 Focus group 2; Position: 100-101]