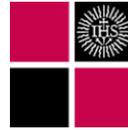


Toolkit for the Blended Implementation of Multilogues in Higher Education



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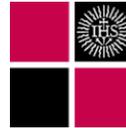
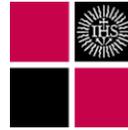


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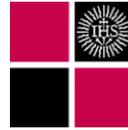
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What is this toolkit and how can I use it?

This toolkit is a guide or handbook that helps you understand the concept of a multilogue and gives suggestions on how to create one by yourself or together with your colleagues. It starts with a brief explanation, describes the building blocks of a multilogue – that is, the main activities that are part of it – and concludes with a list of nine steps that guide you through the creation of a multilogue. Occasionally, scholarly literature is referenced which will be given in full at the end of this toolkit. We have also compiled a number of suggestions for further reading, including a few articles and web pages relating to some of the nine steps.

As this toolkit contains not only URLs to web pages but also suggestions for certain software products, a disclaimer is necessary here: The authors of this document are not responsible for the accuracy, completeness, or suitability of the information contained on the websites to which we provide hyperlinks here. The inclusion of any product or company does not imply endorsement. Users are advised to conduct their own research and due diligence before reading web pages or using any software tool listed, keeping in mind regulations that may exist at the institutions to which they are affiliated. We disclaim any liability for any damages or losses, whether direct, indirect, or incidental, arising from the use or misuse of the software tools or reliance on the information provided. By accessing and using the hyperlinks provided in this document, you agree to these terms and conditions. All internet sources in this document were available on 16 July 2024.





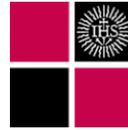
What is a multilogue in higher education?

The demands on higher education as a place for academic and professional education and personal growth have changed. Rather than providing an education for a career path in a single field of work, higher education must provide interdisciplinary approaches to an ever-changing workplace environment and provide students with the ability to navigate a complex world through laying the foundation to global citizenship. In other words, higher education should provide sustainable and humanistic education, teaching not only factual knowledge but also ways to approach different demands and challenges with a diverse group of stakeholders involved.

The concept of multilogues offers the opportunity to venture beyond the established paths of knowledge transfer in higher education. Multilogues aim to offer not only means to acquire knowledge, but also for personal and skill development. Furthermore, this educational tool aims to connect different stakeholders from inside and outside academia, bridging different spheres of society and knowledge. Traditional teaching methods are based on a monologue or dialogue setting with a limited flow of information and often set in a hierarchical structure and power gap between students and teachers. Multilogues diverge from this pattern: the goal is to establish a horizontally structured learning environment where students, external stakeholders, and teachers engage on an equal footing. Achieving this requires all participants to embrace ambiguity and navigate within a non-authoritative framework.

Furthermore, multilogues break with the traditional academic setting and participants. Rather, the format is open for and explicitly invites different stakeholders from outside academia and from different walks of life and parts of society. Knowledge from outside academia can find its way back into the academic setting, connecting scientific teachings with practical knowledge. Rather than expanding subject-matter-related knowledge and skills, the main goal is on methodical and personal competences. Perhaps even more importantly, different sectors of society participate in an interactive, transformative learning process, ideally generating societal engagement and change. Thus, multilogues allow us to gain and create new perspectives on common problems as well as learning new skills besides the traditional academic knowledge transfer.





The desired outcomes of a multilogue are, for example, that the participants develop new solutions to certain problems through cooperative and interdisciplinary approaches, or that their way of thinking and approaching challenges improves in the long run. Multilogues can help tackle current challenges through an early confrontation with interdisciplinary methodology and perspectives, offering not only an egalitarian knowledge exchange but also building skills in communication, collaboration, critical thinking, and creativity (the so-called “4 Cs” of 21st-century skills).¹ Multilogues encourage and foster cooperation to identify creative solutions for common problems. They provide the chance to create an inclusive, democratic learning experience for all participating stakeholders through shifting the traditional power imbalance in classic classroom settings. Multilogues can be integrated to various degrees into teaching formats in higher education, ranging from small add-ons to fully integrated multilogue programs.

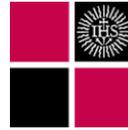
While the format of the multilogue as a learning experience in higher education is relatively new and uncharted,² the specific methods and tools allowing for facilitating and enabling the exchange of ideas and perspectives across multiple stakeholders (from within and without higher education) are mostly well-established in education and cooperative work environments. One could say that the significance of the multilogue (and also this toolkit) is to curate these methods in a way that they enable meaningful exchange and work towards the objectives set for a given learning environment. What follows relies on the publications of several scholars and practitioners whose work is greatly appreciated and referenced in the “Further reading” section of this toolkit. Educators who wish to immerse themselves further in the various teaching methods mentioned here are encouraged to explore this section.

This toolkit or handbook is one of the results of the EU Erasmus+ project “Blended Multilogues: Enhancing Transformation and Innovation in Higher Education” conducted by Trnava University (Slovakia), Leuphana University Lüneburg (Germany), Hochschule für Philosophie München (Germany) and the Newman Institute in Uppsala (Sweden) between 2022 and 2024. The project included a phase

¹ Pacific Policy Research Center, ‘21st Century Skills for Students and Teachers’, *Kamehameha Schools Research & Evaluation Division*, 2010, pp. 6–7.

² Kaščák, O., Scheuner, S. & Becker, A. (2024). Readiness Framework for Blended Multilogues in Higher Education [Blended Multilogues in Higher Education Project – Project Result #1]. <https://doi.org/10.5281/zenodo.13737483>

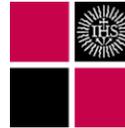




of ideation and development, testing the method with selected groups of students at the participating institutions, fine-tuning and eventually conducting train the trainer events to share the concept of the blended multilogue. This toolkit includes many of the insights gained along the way and the members of this project hope that it will help you with your own work in higher education. You can find much of the information also on our website: www.blendedmultilogues.eu.



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The building blocks of a multilogue in higher education

In order to help educators in higher education structure a learning experience according to the ideas of a multilogue and to highlight the different didactical emphases, we propose a model of several archetypal so-called “building blocks”.

Multilogues in higher education combine elements from various forms of learning approaches, most notably project-based learning (PBL) challenge-based learning and service learning,³ all of which emphasise that participants actively acquire knowledge by working on (real-world) problems. Therefore, the structures of these learning formats offer a good starting point to model the building blocks of multilogues in higher education. Especially the following four-phase model of project-based learning formats suggested by Boston University’s Center for Teaching and Learning offers a lot of overlap to multilogue formats:

“Typically, PBL takes students through the following phases or steps:

1. Identifying a problem
2. Agreeing on or devising a solution and potential solution path to the problem (i.e., how to achieve the solution)
3. Designing and developing a prototype of the solution
4. Refining the solution based on feedback from experts, instructors, and/or peers”⁴

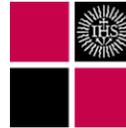
There are a number of other approaches with phase models that can be built upon in a similar fashion, such as design thinking, which strongly focuses on collecting the needs of various stakeholders. Design thinking is widely used to allow for the empathetic development of products and services. Its intellectual home – Stanford’s “d.school” – proposes five stages for design thinking processes:

- Empathise
- Define

³ See the further reading section for more on project-, challenge- and service-based learning.

⁴ Project-Based Learning, *Boston University Center for Teaching and Learning* [website], <https://www.bu.edu/ctl/guides/project-based-learning/>.





- Ideate
- Prototype
- Test⁵

Phase models from workshop organisation and design can be taken into consideration, too. One model developed during an event hosted by the German “Corporate Learning Community” proposes the following five phases:

- Break the ice
- Access resources
- Inform
- Digest and transfer
- Evaluate⁶

Finally, this originally german model employed for citizen participation⁷ suggests the following phases:

- Information
- Consultation
- Accountability

Drawing on these examples, we suggest the following building blocks to create a multilogue-based learning experience in higher education:

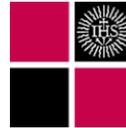
A: Build a team and create a cohesive group. This block allows the participants of the learning experience (i.e. learners, educators etc.) to get to know each other,

⁵ Design Thinking Bootleg, *d.school Stanford* [website],
<https://dschool.stanford.edu/resources/design-thinking-bootleg>.

⁶ Von Analog zu Digital. 7x5 interaktive Workshop-Methoden, die auch online begeistern, *Read Book Creator* [website],
<https://read.bookcreator.com/VBTBmiXkvoUE98PpAUaM4DNGZvl2/77ZfcLDwTrumhFpRkmr9EA/MsKWX189QZuTld3oFzZLEQ>. The model is here called the IRIVE model: Icebreaker, Ressourcen, Informieren, Verarbeiten, Evaluieren.

⁷ In Drei Phasen zur guten Bürgerbeteiligung, *Wer Beteiligt Wie* [website],
<https://werbeteiligtwie.de/in-drei-phasen-zu-guter-buergerbeteiligung-906/>. In German, the three phases are “Information”, “Konsultation”, “Rechenschaft”.





understand each others' backgrounds and break the ice in order to ensure an open and trustful atmosphere.

B: Research the problem, challenge or question at the heart of the learning experience and gather as much information and data on it as possible. This block is dedicated to understanding the problem or challenge. It will consist of input-oriented methods (i.e. classical lectures, seminars, expert talks) and individual or collaborative investigative activities (e.g. literature reviews, interviewing and other research-based learning methods).

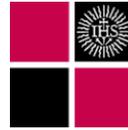
C: Identify relevant perspectives and people that would need to be included in order to fully understand (and solve) the problem, challenge or question. This building block is strongly linked to the previous one. The more the participants learn about the problem or challenge they want to solve, the more they should understand which perspectives, viewpoints and stakeholders they should integrate into the multilogue and what their roles and needs regarding the challenge might be.

D: Engage people and exchange perspectives and make sure that there is an actual multi-perspective exchange. This building block includes the actual exchange format, i.e. the actual multilogue, where different participants and stakeholders from inside and outside of higher education freely exchange their perspectives and start looking for answers (to a research question) or solutions (to a challenge or problem).

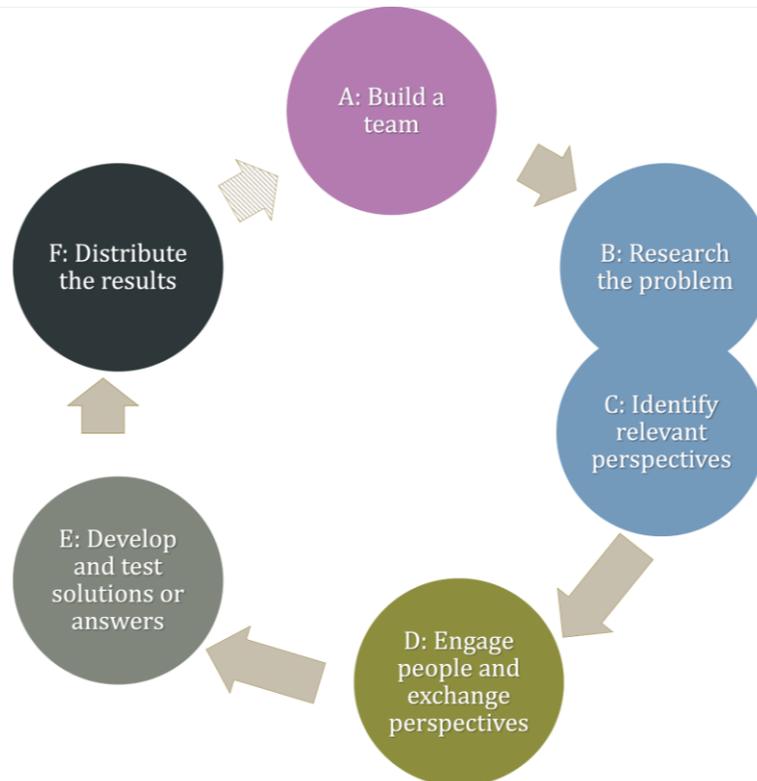
E: Develop and test solutions or answers for the problem, challenge or research question. The purpose of this building block is to devise implementable solutions – and a process to reach that solution – in a collaborative way or to find answers to the research questions stated at the beginning of the learning experience and expose them to feedback. It is thus a direct follow-up from the exchange of perspectives (i.e. the actual multilogue) and strongly influenced by project-based learning.

Finally, participants would consolidate and F: distribute the results, i.e. the solutions, ideas, research outcomes etc. generated in the learning experience. The format in which the results are presented should fit the topic, the target audience (if there is one) and the requirements that have been chosen regarding the method of distribution. This may include online and offline publishing but also other means of dissemination, such as personal interaction with the target audience or artistic formats such as theatre or music performances.



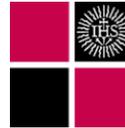


The building blocks proposed above are not necessarily linear or sequential but can be iterative and might have to be deployed at multiple points during the learning experience, as illustrated in the diagram below.



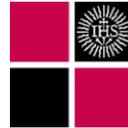
The schedule below shows how the different building blocks – identifiable by the colour-coding based on the illustration above – have been deployed during a pilot multilogue event on “Taking Action Towards Sustainability” hosted at Leuphana University Lüneburg. Whereas a multilogue can be organised to run over several months, the entire process was compressed into a single week in this case:





MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Optional: 10 am <i>Tour of the campus and central building</i>	09.15 am Check-in	09.45 am Check-in	10.30 am Check-in	10 am Check-in
Optional: 11.30 am Mensa	09.30 am Inspiration and exchange How can action towards sustainability look like? (210 min including breaks)	10 am Project plenum on seeds & sustainability (120 min)	10.45 am Workshop 3: What's your plan? Conceptualization develop the concept/action plan for your initiative (e.g. with social business model canvass) and prepare your presentation for Friday (120 min)	10.15 am Tell us about your idea! Group presentations with audience playing different roles. (120 min)
12.30 pm Welcome & intro	12 pm Lunch break	12 pm Lunch break	12.45 pm Daily wrap-up	12 pm Final wrap-up & feedback
1 pm Who are you and where are you now (regarding the sustainable transformation)? (90 min)	1 pm Lunch and transfer to old town	1 pm Main Auditorium Opening ceremony Conference Week (120 min)	1 pm Lunch break	
Coffee break (30 min)	2.30 pm Workshop 1: What's your problem? Identify and understand a challenge/problem that your initiative wants to address! (90 min)	3 pm Conference Week program (e.g. Gallery walk #7, 10 or 17) or individual research @library	Conference Week e.g. wallery walk tour #34, 20 or 21 at 3.30 pm / SCHub presentation	Optional: Conference Week program/closing ceremony
3 pm Why and where is sustainable transformation needed? (90 min)	4 pm Daily wrap-up	4.15 pm Workshop 2: What's your solution? Ideation: Design your own idea for a project/initiative/start-up/seed/solution to tackle your challenge! (90min)	Individual research & working on the presentation @library	
4.30 pm Daily wrap-up	5 pm City tour	5.45 pm Daily wrap-up		
7.15 pm Dinner				





What do we mean by blended implementation of multilogues in higher education?

Stefan Hrastinski, professor for digital learning, correctly remarked that “the term blended learning is used frequently, but there is ambiguity about what is meant”⁸. In a narrow sense, the term can be used to merely describe “the thoughtful integration of classroom face-to-face learning experiences with online learning experiences”⁹ whilst others see blended learning as “an umbrella term that describes the use of technology in education”¹⁰.

Given the vast range of opportunities for digital solutions, it is obviously not wise to limit the scope of the blended implementation of multilogues to the narrow sense of the term. Instead, inspiration will be gained from the final report of the Erasmus+ co-funded project “Digitally Enhanced Learning and Teaching in Higher Education Institutions” (DIGI-HE), the glossary of which defines this as “any type of learning or teaching accompanied or supported by technology”¹¹.

During the implementation of a multilogue in higher education three main areas for digital enhancement were identified:

- Digital enhancement by including phases of remote and asynchronous learning in a flipped-classroom approach, e.g. during the initial stages of a multilogue learning experience to allow for the acquisition of relevant knowledge at an individual pace

⁸ Hrastinski, ‘What do we mean by blended learning?’, p. 564.

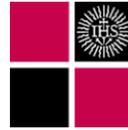
⁹ D.R. Garrison and H. Kanuka, ‘Blended learning: Uncovering its transformative potential in higher education’, *Internet and Higher Education*, Vol. 7, 2004, p. 95–105.

¹⁰ Hrastinski, ‘What do we mean by blended learning?’, p. 564.

¹¹ M. Gaebel and A. Morrisroe, ‘The future of digitally enhanced learning and teaching in European higher education institutions’, *European University Association*, 2023, p. 12.

(<https://eua.eu/resources/publications/1067:the-future-of-digitally-enhanced-learning-and-teaching-in-european-higher-education-institutions.html>).





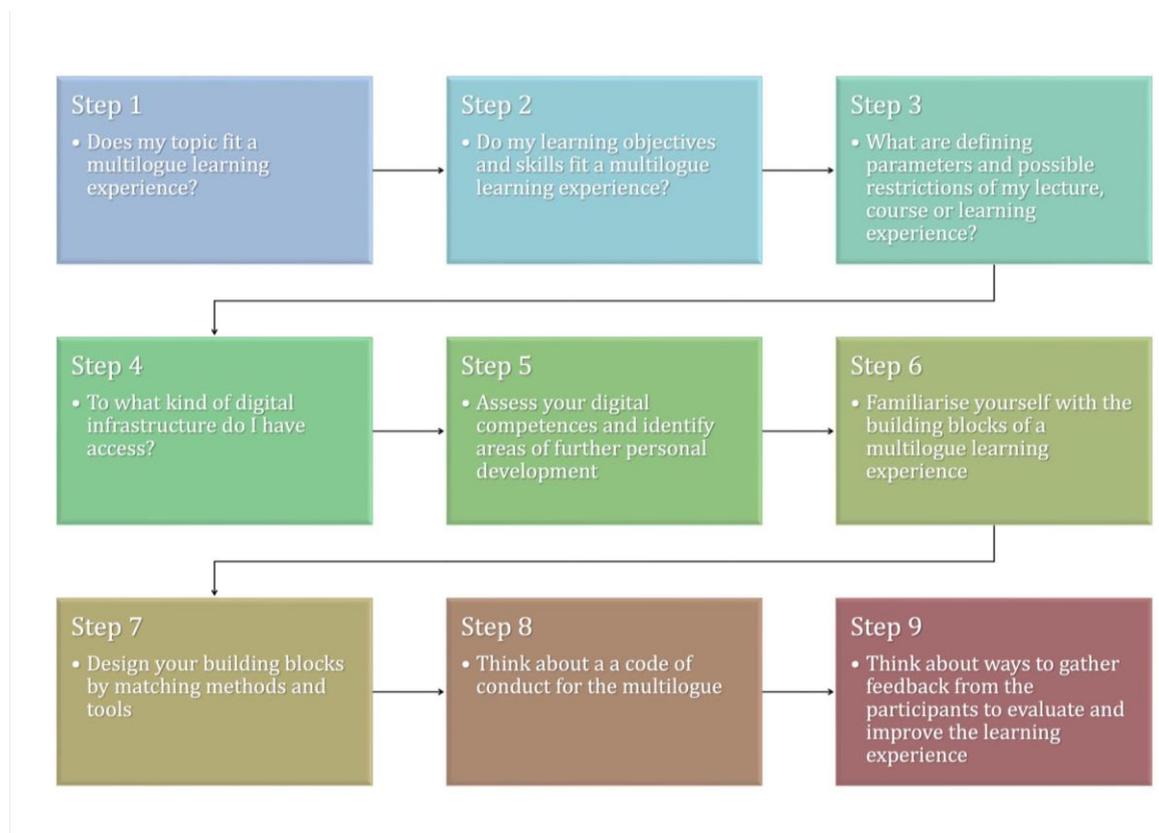
- Digital enhancement by using fully digital and hybrid sessions throughout the learning experience, e.g. to allow for the inclusion of various stakeholders in exchange formats
- Digital enhancement by integrating specific IT-tools to enhance the learning experience and interaction, e.g. by using digital survey and polling tools to collect opinions and feedback

While both on-site and completely digital learning formats are relatively easy to manage, a blended environment which combines both can be more demanding and more prone to accidents than either one. Technical issues such as connectivity or software problems can disrupt the experience for some but not all participants, potentially urging educators to treat parts of the group differently from the rest with regard to assigned tasks, for example. There is also the challenge to create a sense of community between the two spaces, or to ensure smooth interaction on an equal footing between all participants, but this can be facilitated with the methods suggested below. In the end, it can be argued that the benefits of the blended multilogue experience – the chance to gather a more diverse and inclusive group and thereby create a better learning experience for everyone involved – clearly outweigh the difficulties and potential pitfalls.



The 9 steps to help you design your own blended multilogue in higher education

Our toolkit includes a nine-step process to guide educators interested in the format through all the important questions, beginning with whether multilogues are the right format for them in the first place – regarding their topic, competence level and other requirements. This is followed by a guide on how to design the format and how to enhance it digitally. Educators interested in integrating the blended multilogue in their courses can follow the steps or jump to the section they are most interested in:

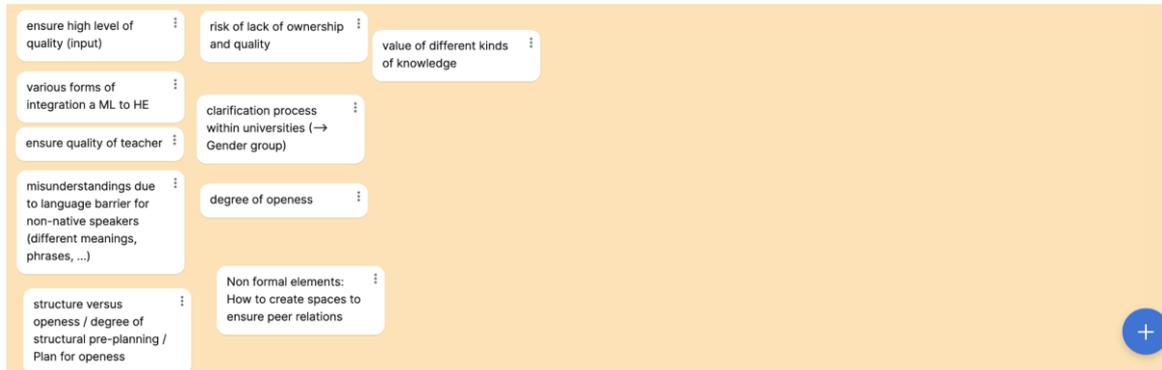
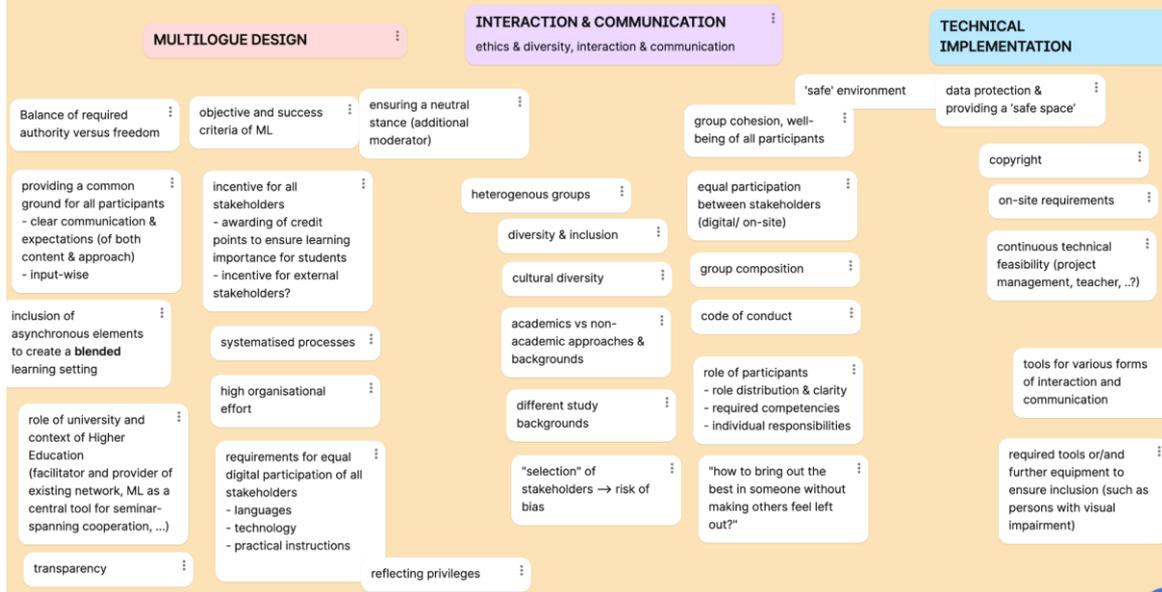


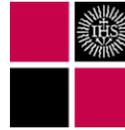
This toolkit has been developed to address the most urgent challenges educators can face when designing and digitally enhancing a multilogue learning format. In the early stages, the members of the blended multilogues project collected the following potential obstacles:



Multilogue challenges

Identified challenges based on students' approaches, group work and teachers' experiences





Step 1: Check whether your topic fits a multilogue learning experience

Multilogues in higher education are designed to engage the participants in real-world, hands-on experiences. The topics and contents addressed in these formats often align with the goals of practical application, critical thinking, and community engagement. Here are examples of topics and research assignments that can be addressed in a multilogue format:

- Environmental challenges:
 - Addressing climate change and sustainable practices
 - Tackling pollution and waste production
 - Designing solutions for biodiversity conservation
- Social and cultural challenges:
 - Addressing issues of social justice and inequality
 - Developing initiatives for community building
 - Exploring challenges related to cultural understanding and diversity
- Community engagement:
 - Partnering with local organisations to address community needs
 - Engaging in neighbourhood improvement projects
- Technological challenges:
 - Solving problems related to emerging technologies
 - Addressing cybersecurity challenges
 - Innovating solutions for improving digital literacy
- Health challenges:
 - Developing strategies for promoting public health
 - Addressing challenges in healthcare accessibility
 - Tackling mental health awareness and support
- Creative arts projects:
 - Producing a film, play, or art installation
 - Designing a public art project and putting it into practice
 - Creating a musical composition or performance
- Business and entrepreneurship:
 - Developing a business plan for a (social) startup
 - Creating and marketing a product or service
 - Conducting market research and implementing business strategies



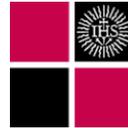


- Technology projects:
 - Developing a mobile app, website, or software solution
 - Designing and building a prototype of a technological device

These examples are not exhaustive, and the possibilities for topics and content in multilogues are vast. The key is to align the chosen topics with the learning goals, encourage critical thinking, and provide opportunities for students to apply their knowledge and skills in meaningful ways. This type of experience is at the heart of the multilogues concept and distinguishes it from what traditionally happens in a classroom. The following list shows common characteristics of topics suitable for this learning format:

- **Relevance to real-world issues:** Multilogues emphasise the importance of addressing real-world problems, challenges, or needs. The topics should have practical applications and contribute to addressing authentic issues.
- **Interdisciplinary nature:** The topics often cut across disciplinary boundaries, encouraging or even necessitating an interdisciplinary approach. Students may need to draw on knowledge and skills from various subject areas to address the complexities of the chosen topics.
- **Community or global impact:** The topics are selected based on their potential to have a positive impact on the community, society, the environment or the world at large. Emphasis is placed on fostering a sense of social responsibility and contributing to the common good.
- **Complexity and challenge:** The topics are often complex and present challenges that require critical thinking, problem-solving, and creativity. They encourage students to grapple with open-ended problems and develop innovative solutions.
- **Student engagement and choice:** The topics are designed to capture the students' interest and engagement. Whenever possible, students may have some degree of choice or input in selecting or shaping the topics, fostering a sense of ownership in their learning.
- **Reflection and learning process:** The topics are conducive to reflection. Students are encouraged to reflect on their learning experiences, consider the impact of their actions, and engage in a continuous learning process.
- **Adaptability and flexibility:** The topics are chosen with an understanding that learning experiences may need to be adaptable and flexible. This allows for adjustments based on student feedback, emerging challenges, or unexpected developments.

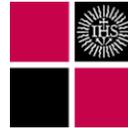




Finally, here are common characteristics of topics that might be unfit for or at least challenging to implement in a multilogue:

- Purely informational content: Simply learning specific facts and memorising information without the necessity of application or practical demonstration can often be achieved through traditional learning methods.
- Purely theoretical or conceptual topics: Such topics (e.g. advanced theoretical physics concepts) without practical application or connection to real-world scenarios may not fully exploit the experiential and applied learning goals of a multilogue format.
- Limited complexity or challenge: Topics that lack complexity may not provide the intellectual challenge of a multilogue nor make use of the fact that it brings together a variety of stakeholders who could share their knowledge.
- Highly specialised or technical knowledge: On the other end of the spectrum, highly specialised topics in a particular scientific or technical field that require extensive background knowledge and are not easily translated into practical projects or service activities are equally difficult to implement in a multilogue.
- Insufficient community or real-world relevance: Topics that do not have direct connections to real-world issues, challenges, or community needs may not align well with the goals of a multilogue format.
- Ethical or moral sensitivity: Topics with sensitive ethical or moral implications may be difficult to address in the multiple-stakeholder setup of a multilogue, especially when there are no clear guidelines for handling them.
- Limited student engagement potential: If a topic lacks inherent interest or relevance for students, it may be challenging to sustain their engagement throughout the extended and often self-directed nature of a multilogue.
- Exclusively individual mastery focus: Topics that primarily require individual mastery of content without significant collaboration, application, or interaction with the external environment may not fully leverage the strengths of a multilogue.
- Lack of opportunities for reflection: Topics that do not offer meaningful opportunities for student reflection on their learning experiences, personal growth, and the impact of their actions may be less suitable for a multilogue.





Step 2: Check whether your learning objectives and skills fit a multilogue learning experience

A commonly used taxonomy for learning objectives was already introduced in the 1950s by Bloom et al.¹² and revisited by Anderson and Kratwohl, amongst others. In the revised version, six levels of learning objectives with mounting complexity are proposed:¹³

- Remember
- Understand
- Apply
- Analyze
- Evaluate
- Create

With the help of action verbs (“Which level of mastery is to be achieved?”) and learning objects (“Which content is to be mastered?”), lecturers can create specific learning objectives for their learning format. McPheat (2023) proposes the following action verbs to help you define specific learning objectives for each of the six levels of mastery:¹⁴

Action verbs according to McPheat:

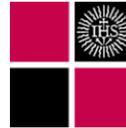
Level	Category	Action Verbs
1	Remembering	define, identify, label, list, name, recall, recognise, reproduce, select
2	Understanding	classify, describe, discuss, explain, express, identify, indicate, locate, recognise, report, restate, review, select, translate

¹² Bloom (ed.), *Taxonomy of educational objectives*, p. 18.

¹³ Anderson and Kratwohl, *A Taxonomy for Learning*.

¹⁴ Skills Hub, ‘Using Bloom’s Taxonomy for Setting Learning Objectives’, 2023, [website], (<https://www.skillshub.com/blog/using-blooms-taxonomy-for-setting-learning-objectives/>).





3	Applying	apply, choose, demonstrate, dramatise, employ, illustrate, interpret, operate, practise, schedule, sketch, solve, use
4	Analysing	analyse, appraise, calculate, categorise, compare, contrast, criticise, differentiate, discriminate, distinguish, examine, experiment, question, test
5	Evaluating	appraise, argue, assess, choose, compare, conclude, criticise, decide, defend, evaluate, judge, justify, prioritise, rate, select
6	Creating	arrange, assemble, collect, combine, compose, construct, create, design, develop, formulate, generate, organise, plan, prepare, produce, propose, rearrange, reorganise, revise, summarise, write

As multilogues are designed to engage students in solving real-world problems or addressing complex challenges, they are more suited to achieve learning objectives from the last three levels, e.g. developing solutions for community well-being, or analysing interdisciplinary approaches for a sustainable future. Due to their open-ended and exploratory nature, they may not be suited for delivering foundational knowledge or basic facts, enhancing the mastery of basic skills that require repetitive practice and reinforcement or for achieving learning objectives that require highly structured, step-by-step learning experiences. However, multilogues emphasise the development of critical thinking, adaptability, and decision-making in the context of real-world challenges and are helpful to nurture the following skills:¹⁵

- Problem solving: Identify and define complex real-world problems/propose and implement effective solutions
- Innovation and creativity: Foster innovative thinking to develop novel solutions/encourage creative approaches to problem-solving
- Critical thinking: analyse and evaluate the implications of different solutions/assess the validity of information and arguments in the context of the challenge

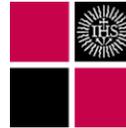
¹⁵ For a similar list of skills potentially important in the future, see D. Marco et al. (2021), 'Defining the skills citizens will need in the future world of work'.





- **Research skills:** Conduct research to gather relevant information for addressing the challenge/synthesise information from various sources to inform decision-making
- **Application of knowledge:** Apply theoretical concepts and academic knowledge to real-world challenges/bridge the gap between academic learning and practical application
- **Interdisciplinary understanding:** Recognize the interdisciplinary nature of challenges and draw on knowledge from multiple fields/integrate insights from various disciplines to develop holistic solutions
- **Project management:** Plan and execute a project to address the challenge/manage time and resources effectively
- **Communication skills:** Communicate ideas and solutions effectively to diverse audiences/collaborate with team members to convey complex information
- **Teamwork:** Collaborate with diverse team members and various stakeholders from within and without academia to achieve common goals/resolve conflicts within the team
- **Leadership skills:** Take on leadership roles within the team when necessary/motivate and inspire team members to contribute effectively
- **Civic engagement:** Develop a sense of civic responsibility and social awareness/engage actively with society at large in addressing community issues and fostering positive change
- **Empathy and cultural competence:** Understand and appreciate diverse perspectives within society/demonstrate empathy and cultural competence in working with community members
- **Adaptability:** Adapt to changing circumstances and unexpected challenges/develop a flexible approach to problem-solving
- **Resilience:** Demonstrate perseverance in the face of challenges, setbacks and ambiguous environments/learn from failures and use them as opportunities for improvement
- **Self-Reflection:** Reflect on personal growth and learning throughout the challenge/assess strengths and areas for improvement as a learner and problem solver





Step 3: Check the defining parameters and possible restrictions of your multilogue learning experience

When integrating elements of a multilogue in your higher education course, it is essential to be aware of a number of course parameters and potential restrictions. The following checklist is meant to help you create transparency regarding key course parameters in order to allow for informed decisions when planning your course:

What are the planned course objectives and learning outcomes?

- What are the specific learning objectives or outcomes you want to achieve with your course?
- Compare with the objectives and skills compiled in step 2 to make sure they fit the multilogue format.

What is the desired or possible runtime of the learning experience?

- Determine the overall duration of the course, whether it's a one-day workshop, a semester-long course, or some other time frame.
- If you plan to include all multilogue building blocks into your course, you should probably be planning with a minimum duration of 4–6 weeks to allow for enough time to identify and invite external participants.

What is the required workload for students?

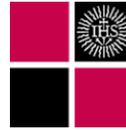
- Define the expected workload for students, including project work, preparatory readings, and other assignments.
- Consider the balance between individual and group work to manage student workload effectively.

What is the size of the group?

- What is the overall number of students to participate in your course?
- Using multilogue formats with larger groups (> 40 students) will be more challenging and resource-intensive.

What are the characteristics of the learners and the audience?





- Understand the characteristics, needs, and prior knowledge of the target audience (students or other participants) to tailor the course appropriately.
- Be aware of cultural diversity and design the course content and activities to be inclusive and culturally sensitive.
- What are the proportions of remote and on-site participants?

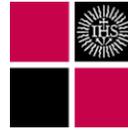
Which degree of digital enhancement is desired or possible?

- Define the degree of digital enhancement, taking into consideration the use of online platforms, collaboration tools, and digital resources.
- Determine how blended (or hybrid) the learning format is supposed to be by balancing in-person and online components.
- Make sure that the level of digital enhancement matches your personal comfort and skill level. Check also whether your institution and the participants are equipped with the respective IT infrastructure (steps 4 & 5)

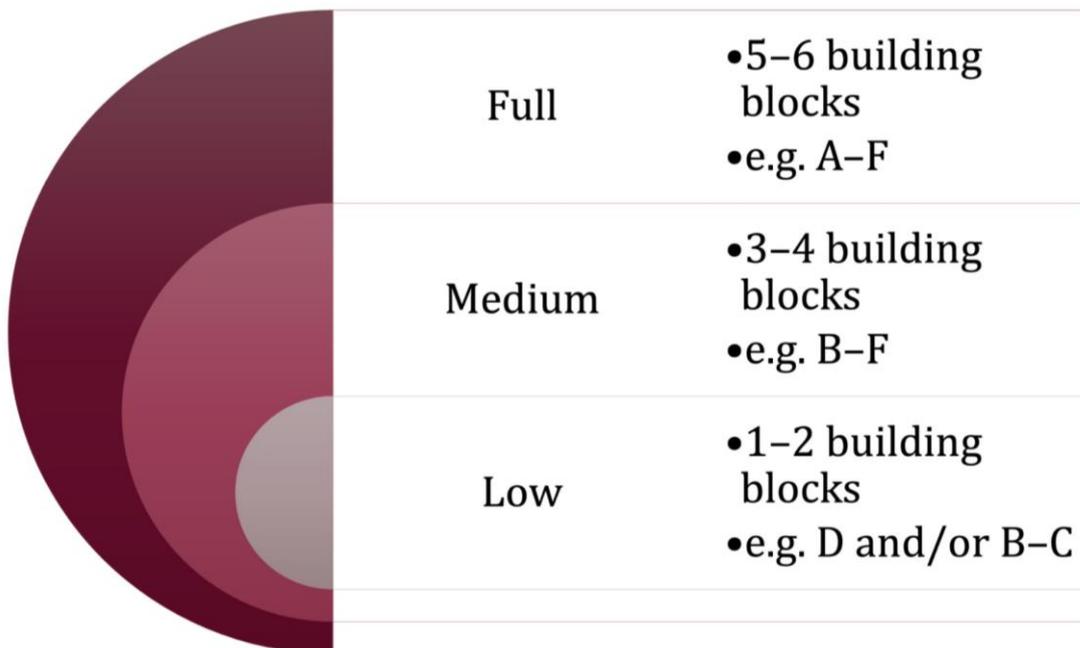
To which degree do you want to integrate the multilogue and be open to external participants?

- Multilogues in higher education are a teaching-learning format allowing for varying degrees of integration. Design options range from multilogues as small add-ons to more conventional lectures up to fully integrated solutions as illustrated below.
- Integrating a multilogue with relevant stakeholders outside of higher education to the lecture or seminar on a low level is an easy way to add value to the learning setting. This design expands the experience of all participants, much like an excursion would.
- In a medium degree of integration, the “core” multilogue element may be supplemented by both a preparation and a follow-up component.
- A fully integrated multilogue design allows non-higher education stakeholders to participate and be involved over a longer period. During the preparatory and follow-up phases of one or even multiple multilogues, there is extensive opportunity for collaboration between students, educators, interested parties, and other stakeholders – both inside and outside of higher education.
- Related to this question is the level of openness to external participants, such as citizens, NGOs, politicians, industry experts, guest speakers, or professionals who can contribute to the multilogue experience.





- A high degree of openness promises more insights and perspectives, while it also comes with technical and logistical challenges (such as participants living in different time zones).



Design approaches: various degrees of multilogue integration

What are the examination or evaluation requirements for participants?

- What are the examination, assessment and evaluation requirements and criteria for both individual and group project work and how can they be aligned with the open nature of the multilogue?
- Do students need a grade or just a pass/no-pass for the course?

How many teachers and staff are available?

- Will you be the only educator or will there be further staff available (e.g. for the facilitation of workshops)?
- Will you have assistance in technical and logistical matters?





Step 4: Check the digital infrastructure to which you have access

The following checklist is designed to help educators assess the technical and digital infrastructure available in their organisation in order a) to understand potential constraints to the degree of digital enhancement and b) to identify additional requirements for its successful implementation:

Internet connection:

- Is there a reliable high-speed internet connection available for conducting virtual lectures and accessing digital resources?
- Is the connection (and the digital landscape) easily accessible for non-campus participants?

Computer and devices:

- Do educators and students have access to a computer or device capable of running the necessary digital tools and applications?
- Is the hardware capable of handling multimedia content and virtual collaboration?

Microphone and camera:

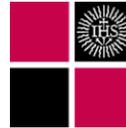
- Are functional microphones and loudspeakers available to provide clear audio during virtual lectures, discussions or to watch video footage?
- Is a built-in webcam or external camera available for video conferencing and virtual interactions?

Technical support services:

- Is there a dedicated technical support team available to assist educators and students with digital tools and platforms?
- Are there resources or guides available for troubleshooting common technical issues?

E-Library and database access:





- Is there online access to an extensive e-library or databases for research and reference materials?
- Are students and educators provided with guidance on accessing digital (library) resources?

Accessibility features:

- Is the digital infrastructure designed with accessibility features to accommodate students with diverse needs?
- Are lecture materials, including slides, videos, and readings, available in digital formats for online distribution?
- Are materials provided in multiple formats to support various learning preferences?

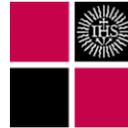
Data security measures:

- Are there robust security measures in place to protect student data and privacy?
- Are educators aware of and trained on data security and privacy guidelines when handling student information in digital formats?
- Is there a clear understanding of compliance with data protection regulations?
- In which legal framework regarding data protection do you operate and which legal constraints exist regarding data protection and privacy, for example? Which IT-tools are to be excluded to make sure that both the educators' and the students' data is handled in accordance with relevant regulations?

Tools and applications:

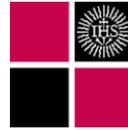
- Recommendations for specific tools and applications can be found in the method profiles in Step 7 and in the toollist.
- However, there are certain baseline requirements for the digital implementation of higher education learning formats which are not specifically included in the profiles but have to be covered here in order to guarantee a smooth digital implementation.
- These baseline requirements include:
 - Learning management system (LMS): Is there a LMS in place for course management, content delivery, and student engagement? Are course materials, assignments, and assessments accessible through the LMS?





- Video conferencing tools: Are reliable video conferencing tools available for virtual lectures, discussions, and office hours? Is there support for synchronous and asynchronous communication?
- Collaboration platforms: Are collaboration platforms (e.g. for video conferencing, group discussions etc.) accessible for group work and real-time collaboration? Can students easily collaborate on documents, presentations, and projects?
- Content creation tools: Are tools available for creating and sharing multimedia content, such as lecture recordings, podcasts, or interactive presentations? Can educators easily create and share digital resources with students?
- Online assessment tools: Are there tools for creating and administering online assessments, quizzes, and exams securely? Can educators provide timely feedback on digital assessments
- Plagiarism detection software: Is plagiarism detection software integrated into the assessment process to maintain academic integrity?
Are educators trained on the use of plagiarism detection tools?
- For these functions, you as an educator need to make sure that the required software applications and tools (e.g. video conferencing, content creation, assessment tools) are installed and up to date and that you have familiarised yourself with their features and functionalities.

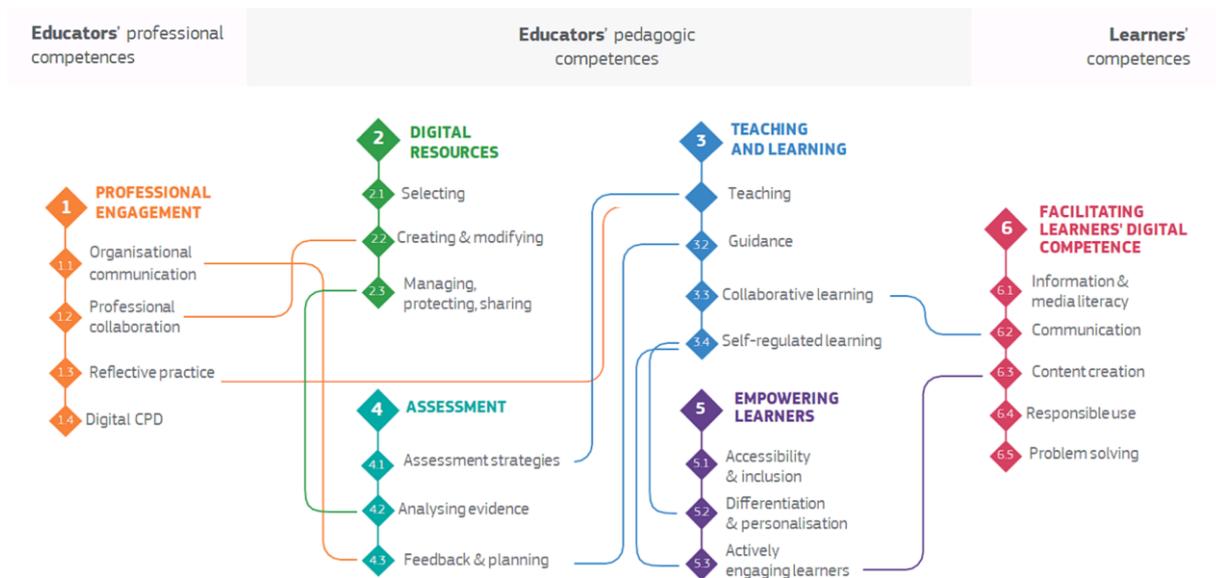




Step 5: Assess your digital competences and identify areas of further personal development

It makes sense to critically evaluate your own digital competences before embarking on the journey of designing a multilogue. We have added a short self-assessment test in this toolkit but you will also find online options such as the one offered by *europass*.¹⁶

In a higher education context, the six key competence areas (and the 22 specific competences) proposed in the EU Digital Competence Framework (DigCompEdu) offer a good guideline to map your individual competence profile:



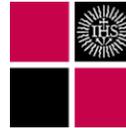
Source: DigCompEdu (<https://joint-research-centre.ec.europa.eu/digcompedu/digcompedu-framework-en>)

According to the DigCompEdu Self-reflection Tool, you can use it to “identify [your] strengths and gaps and plan [your] professional learning and development”¹⁷ regarding your digital competence. Additionally, the self-assessment below is based

¹⁶ Test your digital skills! Europass [website], <https://europa.eu/europass/digitalskills/screen/home>.

¹⁷ Economou, 'SELFIEforTEACHERS', p. 6.





on the DigCompEdu one and is intended to quickly help you identify strengths and areas for growth in your digital competences as an educator. Please rate your proficiency in the five categories pertaining to digital implementation of learning formats given below. The results may help you reflect on areas where you may seek further professional development or support. They can also act as guidelines regarding the technological means you can employ competently for your multilogue experience. For example, while online tools simulating a white board are usually not difficult to use, if you feel uncomfortable doing so in a hybrid setting, you might want to find an (analogue) alternative to your planned brainstorming session or choose a different learning method altogether.

Information and data literacy:

I can effectively search for, critically evaluate, and use digital information.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

I can organise and manage digital content efficiently.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

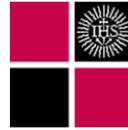
I can interpret and analyse data to inform decision-making in an educational context.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

Communication and collaboration:

I can use digital tools for effective communication with students and colleagues.





- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

I can facilitate collaborative online learning activities.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

I can integrate digital tools to support communication in diverse educational settings.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

Digital content creation:

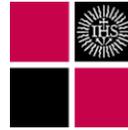
I can create engaging and interactive digital learning materials.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

I can develop multimedia content for educational purposes.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient





I can adapt content creation tools to meet specific learning objectives.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

Safety and data protection:

I am aware of and implement digital safety measures for students.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

I can guide students on responsible and ethical use of digital technologies.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

I understand and adhere to privacy and data security regulations related to digital tools and platforms.

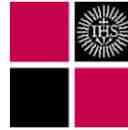
- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

Problem solving:

I can troubleshoot common technical issues related to digital tools.

- Not proficient





- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

I can use digital technologies to enhance problem-solving skills in teaching.

- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient

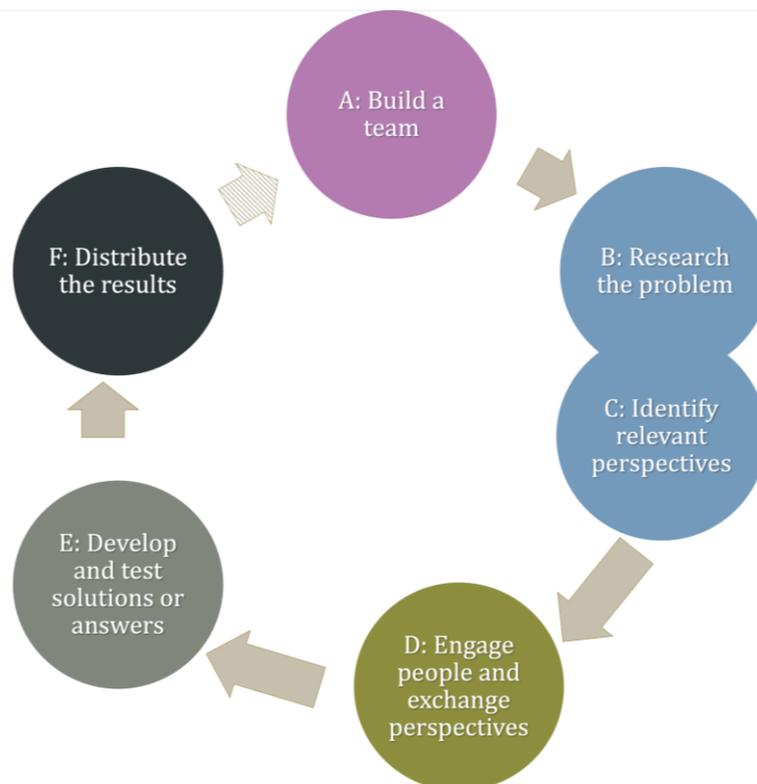
I can adapt to new digital tools and technologies to address educational challenges.

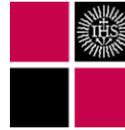
- Not proficient
- Limited proficiency
- Moderate proficiency
- Proficient
- Very proficient



Step 6: Familiarise yourself with the building blocks of a multilogue learning experience

The building blocks described here are meant to help educators structure the creation of a multilogue learning experience. They are based on all the considerations regarding existing models mentioned above and also the peculiarities of the multilogue format. The building blocks are archetypical in nature and not necessarily to be understood as elements of a monodirectional sequence; they might have to be deployed at multiple points during the learning experience. They each serve a specific didactic purpose. For each of the building blocks, a range of methods is at the disposal of the educator when designing the learning experience (see step 7). The actual design of the multilogue experience and the choice of the methods used in the building block is to be informed by the parameters of your learning experience (which you have already gathered in step 3). The building blocks were extensively described above, which is why only the diagram is repeated here:





Step 7: Design your building blocks by matching methods and tools

The following section presents profiles of 20 teaching methods you can use to design your learning experience while matching them to one or several of the objectives of the archetypal multilogue building blocks.¹⁸ “X” indicates that a method is clearly suitable for a certain building block; “(x)” means that the method could be employed here but might need a little adjusting.

	Building block	A: Build a team/create group cohesion	B: Research the problem/gather information	C: Identify relevant perspectives and people	D: Engage people and exchange perspectives	E: Develop and test solutions or answers	F: Distribute the results
1	People Bingo	X		(x)	(x)		
2	Partner interview	X		X	(x)		
3	Group expert rally/jigsaw puzzle	X	X		(x)		(x)
4	Station rotation	(x)	X				
5	Roleplay/change of perspective	X		X	(x)		
6	World Café	(x)	X	X	(x)		
7	Online survey/poll	(x)	X	X	(x)		(x)

¹⁸ The structure of the collection of methods and the presentation of the methods was inspired by: Von Analog zu Digital. 7x5 interaktive Workshop-Methoden, die auch online begeistern, *Read Book Creator* [website], <https://read.bookcreator.com/VBTBmiXkvoUE98PpAUaM4DNGZvl2/77ZfcLDwTrumhFpRkmr9EA/MsKWX189QZuTld3oFzZLEQ>.





	Building block	A:	B:	C:	D:	E:	F:
	Method	Build a team/create group cohesion	Research the problem/gather information	Identify relevant perspectives and people	Engage people and exchange perspectives	Develop and test solutions or answers	Distribute the results
8	Board of definitions	(x)	X	X			
9	Gallery Walk/Vernissage		X		(x)		(x)
10	Quizzes	(x)	X		X		(x)
11	Brainstorming		X	X	(x)		
12	Mind mapping		X	X	(x)		
13	Open Space		X	X	(x)		
14	Headstand/reverse brainstorming		X	X	(x)		
15	Visualising power structures	X		X	(x)		
16	Fishbowl discussion			X	X	(x)	
17	Story creation/story telling	(x)		X	(x)		X
18	Forum Theatre	(x)		X		X	(x)
19	Press conference		(x)	X		X	(x)
20	E-Portfolio/collaborative writing				(x)	X	X





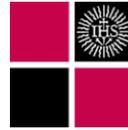
By picking and choosing from the methods, you can emphasise the different building blocks depending on your learning objectives. If you want to work towards learning objectives such as acquiring foundational knowledge about a certain subject, for example, you would include more methods from the building block “B: Research the problem”. However, if the course is aimed at fostering communication and collaboration skills, you would implement more methods from building block “D: Engage people and exchange perspectives”.

When picking tools for the digital enhancement of the method, make sure the tool complies with the data protection and privacy requirements of your jurisdiction and your organisation and that you are comfortable with regards to the competence level required (see step 5). Also make sure to read up on best-practice examples regarding how to ensure a high level of student engagement and interaction (see the “Further reading” section of this toolkit).

Method profiles

1. People Bingo
2. Partner interview
3. Group expert rally/jigsaw puzzle
4. Station rotation
5. Roleplay/change of perspective
6. World Café
7. Online survey/poll
8. Board of definitions
9. Gallery Walk/Vernissage
10. Quizzes
11. Brainstorming
12. Mind mapping
13. Open Space
14. Headstand/reverse brainstorming
15. Visualising power structures
16. Fishbowl discussion
17. Story creation/story telling
18. Forum Theatre
19. Press conference
20. E-Portfolio/collaborative writing





Abbreviations

☐ = approx. up to one hour

☐☐ = approx. one to three hours

☐☐☐ = more than three hours

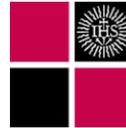
♣ = small group of up to ten participants

♣♣ = medium-sized group of 10–20 participants

♣♣♣ = large group of more than 20 participants



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1. People bingo

What is it?

People bingo is an engaging icebreaker game designed to facilitate interaction and acquaintanceship among participants, creating a lively atmosphere and fostering better understanding.

What is the objective?

The goal is to facilitate a fun and interactive activity that encourages participants to mingle, learn about each other, and discover commonalities while energising the classroom environment.

How does it work?

The people bingo icebreaker method involves participants receiving bingo cards prepared by the facilitators with various traits listed in separate squares (three by three, five by five etc.). They mingle and engage in conversations to find individuals who match these traits, writing down their names in corresponding squares. As they interact and discover matching traits among peers, the goal is to complete a row of squares horizontally, vertically or diagonally, marking (and announcing) it as “Bingo!”.

As an alternative, instead of personal traits (which might be a problem for some participants), the organisers can choose to list interests or areas of expertise that relate to the topic of the multilogue event – such as the 17 UN Sustainable Development Goals or a more narrow selection of items. The game can therefore help participants gather a diverse group of experts (to complete their bingo card), but also, along the way, let them find people with common interests or fields of study, both of which can be used for subsequent activities.

Requirements

Time: ☒

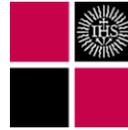
Staff: one teacher or more for preparation and facilitation

Group size: 1-1111

Space: sufficient space for participants to mingle and interact comfortably



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Further information

Tutorials, best-practice examples, evaluations

<https://www.thoughtco.com/ice-breaker-game-people-bingo-31382>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

People bingo can introduce people from diverse backgrounds to one another by highlighting their character traits or interests.

Particularly suitable for which of the building blocks?

A: Build a team/create a cohesive group

(C: Identify relevant perspectives)

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

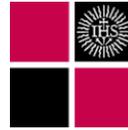
→ Communication and collaboration tools

Tools for creating people bingo cards: [Teach-nology](#), [Print Bingo](#), [Virtual Bingo](#)

Which constraints might or do exist?

In a blended setup, it can be challenging to balance the participation of both online and offline individuals. Sharing personal information can also be an issue for some people.





2. Partner interview

What is it?

Partner interviews involve two people (or perhaps groups) that take turns in asking each other questions about them, their role or position regarding a certain part of the discussion and/or other relevant questions depending on the goal of the method. The interviewer later presents the answers they received to the group (if they are allowed).

What is the objective?

The participants learn about each other, are encouraged to listen carefully and summarise what they have heard in their own words.

How does it work?

The participants are divided into pairs; working with small groups can also work but needs to be done carefully lest focus is lost in the exercise. One partner asks the other a question or more that can relate to them personally or professionally, depending on the aim of the exercise (team building or learning about a topic). Once the questions have been answered, the roles are switched. When both persons have been interviewed, the entire group gathers again and the answers are summarised by each interviewer or the most peculiar or interesting piece of information is shared (as long as it is not confidential). This method is not suitable for a big group of people unless they are disciplined enough to listen to a lot of summaries at the end.

Requirements

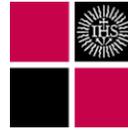
Time: 20-30

Staff: one teacher or more etc.

Group size: 1-3

Space: enough to allow for conducting the interviews without disturbances





Further information

Tutorials, best-practice examples, evaluations

<https://metodes.lv/partner-interview/>

<https://www.youtube.com/watch?v=zi4ui4Rp0wc> (German)

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Interviewers need to engage with new perspectives.

Particularly suitable for which of the building blocks?

A: Build a team/create a cohesive group

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

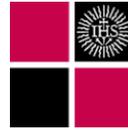
→ Communication and collaboration tools

Pen and notebook or digital equivalent

Which constraints might or do exist?

It should be agreed in advance which (sensitive) information can be the subject of the interview and/or shared with the group.





3. Group expert rally/jigsaw puzzle

What is it?

The jigsaw teaching technique is a cooperative learning strategy where the participants become experts on a specific topic and then share their knowledge with their peers. To this end, groups are formed and information is only given partially.

What is the objective?

By assigning students specific roles and tasks within their groups, the method aims to foster a sense of responsibility, encourage active engagement, and create an environment where each participant contributes to the collective learning experience.

How does it work?

Step 1: Select a topic and prepare information on it but in such a way that it can be split into several chunks that can be distributed to different people with little or no overlap.

Step 2 (optional): Divide the participants into small groups, each consisting of as many members as parts into which the central topic is divided.

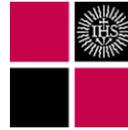
Step 3: Provide a chunk of information to each participant, making sure that they do not see each other's information, and also ensure that all chunks are distributed among the participants, so as to cover all parts of the main topic. If the groups from step two were formed, each member of such a group needs to receive a different chunk of information so that the group as a whole keeps the entire information provided.

Step 4: Have the participants study their respective chunk of information without sharing it with others.

Step 5: Let all participants with the same chunk of information form "expert groups" in which they discuss their particular set of information and where they can rehearse their presentation of this information to other participants.

Step 6: If you formed groups in step 2 already, have the participants return to these groups, otherwise let them form new groups in which each member is "expert" on a different topic but all aspects of the main topic are covered. In these groups, all

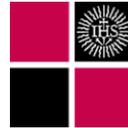




“experts” share their knowledge on their respective subject, making the entire group knowledgeable about the main topic at large. The exercise may be concluded with a final discussion among all participants.



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Requirements

Time: 22-222

Staff: one teacher or more etc.

Group size: 11-111

Space: large enough to allow for various sub groups to be formed that can work undisturbed

Further information

Tutorials, best-practice examples, evaluations

<https://www.jigsaw.org/>

<https://www.theteachertoolkit.com/index.php/tool/jigsaw>

<https://www.youtube.com/watch?v=euhtXUgBEts>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

The group expert rally method encourages eye-to-eye collaboration and taking responsibility. It allows for digesting new information and appreciating the information provided by every participant. People joining online can work together with those present in person.

Particularly suitable for which of the building blocks?

A: Build a team/create a cohesive group

B: Research the problem/gather information

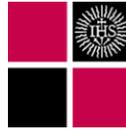
(D: Engage people and exchange perspectives)

(F: Distribute the results)

Which (digital) tools can be used?

→ Communication and collaboration tools



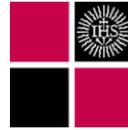


Which constraints might or do exist?

The group expert rally only fits situations where a topic can actually be subdivided as required by the method, and if information on it is already available.



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4. Station rotation/learning stations

What is it?

A station rotation is a selection of various stations, each of which offer different modes of learning about a given subject, such as reading a text, watching a video, playing an educational game or talking to an expert.

What is the objective?

The participants can experience different modes of learning that complement one another or, at the very least, there is a good chance for every participant to find one method that suits them best. The retention of knowledge is improved by having a number of different ways of learning about one and the same subject.

How does it work?

Set up at least three different stations provided with enough research material and/or expert staff so they can accommodate a small group of participants. The topic should be more or less the same but the methods should differ from one station to the other. Examples include texts to read, educational videos, virtual or hands-on exercises, talks with an expert, personal tuition and feedback (which can be combined with other methods) and group work. Participants can either move freely between the stations or in groups and according to a schedule.

Requirements

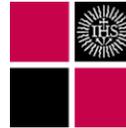
Time: 20-30 min

Staff: one teacher or more etc.

Group size: 4-6

Space: enough for the different stations to work without disturbance from the others





Further information

Tutorials, best-practice examples, evaluations

<https://www.youtube.com/watch?v=tgr3lnCl5QY>

<https://medium.com/inspired-ideas-prek-12/how-to-use-workstations-in-the-math-classroom-ba5096cb6b3b>

<https://www.easygenerator.com/en/blog/blended-learning/rotate-your-classroom/>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

The station rotation accommodates different types of learners and their respective experiences. It allows them to digest new information in a variety of ways without the same need for power structures as in a traditional lecture.

Particularly suitable for which of the building blocks?

(A: Build a team/create a cohesive group)

B: Research the problem/gather information

Which (digital) tools can be used?

→ Communication and collaboration tools

→ Educational and quizzing tools

→ Video platforms for demonstrations

Which constraints might or do exist?

Participants might not be given enough time for a station if there is a schedule. Not all topics are suitable.

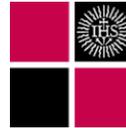
Feedback on the method application:

“The learning station provided me with a nice overview of key concepts and terms useful for thinking and talking about sustainability.”

“I am not a specialist and it helped me get along with some of the concepts.”

“... it gave me a taste of what to expect from this project.”





5. Roleplay/change of perspective

What is it?

In a roleplay exercise, the participants adopt the role of a person, entity or archetype (the critic, the dreamer, the joker etc.) and act according to this newly-acquired perspective, its rules and its context.

What is the objective?

A roleplay exercise is a prime example of changing one's own perspective to learn about the beliefs and actions of other people and the social, cultural or economic structures of which they are part. Aside from this, it can be used to force a certain approach to a topic – exploring how an opponent in a debate would counter the issue at hand, for example, and to use this “feedback” to make the actual argument more convincing (→ Headstand/reverse brainstorming).

How does it work?

In a group, some or all participants are assigned (or can choose to play) the role of a person, entity or archetype related to the topic to be explored. With this setup being clear to everyone involved, discussions should be initiated in which the participants speak and act according to their role. This can happen by presenting their “new” perspective or by commenting on someone else's statements from a certain angle. The participants are thereby exposed to other or even conflicting points of view, or have to conceive them, and so experience a different way to process new information or react to it than they would otherwise have done. A final discussion can be useful to collect any insights gained and to clearly separate the in-character parts of the exercise from the out-of-character situation.

Requirements

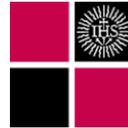
Time: 20–30

Staff: one teacher or more etc.

Group size: 3–6

Space: depending on the group size





Further information

Tutorials, best-practice examples, evaluations

<https://www.niu.edu/citl/resources/guides/instructional-guide/role-playing.shtml#:~:text=Role%20play%20exercises%20give%20students,out%20a%20more%20complex%20scenario>

https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1428-6_1768

<https://learninginnovation.duke.edu/blog/2019/07/role-playing-games/#:~:text=Role%2Dplaying%20games%20stimulate%20real,optimal%20use%20of%20limited%20resources.>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Roleplay is one of the most immersive methods to engage with different perspectives and their context. Participants from various backgrounds can be encouraged to embrace a conflicting opinion within a roleplay situation and gain insights they would not have gained otherwise.

Particularly suitable for which of the building blocks?

A: Build a team/create a cohesive group

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

→ Communication and collaboration tools

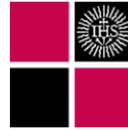
→ Online role-playing and simulations

Pen and notebook or digital equivalent

Which constraints might or do exist?

People are inclined to choose roles that match their own character, which will not provide as many new insights as if they had chosen a largely different personality or archetype. Also, being in character can lead to exceeding the boundaries of politeness or decency, especially with offensive archetypes. Teachers should act as moderators.





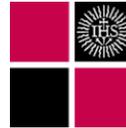
Feedback on the method application:

“(…) role-playing as an investor/politician/environmentalist while listening was very useful to enlarge my original perspective.”

“It was really funny and good to be able to play different roles and try to understand the difference in evaluation of an idea according to different agents/professions etc.”

“(…) I also liked the constructive criticism that came, in a creative way, from different groups of society.”





6. World café

What is it?

World café is a kind of → brainstorming in small rotating groups with the character of relaxed coffee table discussions.

What is the objective?

The participants can freely discuss the given topic (or a series of topics) and learn from their fellow participants at various “coffee tables”.

How does it work?

Prepare one or several topics (which can be related) that are formulated in a sufficiently open way that encourages discussion. Divide the participants into small groups, each of which have a space to discuss that radiates the comfortable atmosphere of a coffee table (actual beverages and biscuits etc. can be present; even using an actual café might be possible). One person at each table acts as the host and stays there for the entire exercise. When given a topic, each coffee table group discusses it respectfully and with an interest in learning something new. After some time, a new topic can be given and the participants mix again, forming new coffee table groups. Only the hosts remain at their tables so that they can summarise the previous discussion to the new group.

A variation is the so-called “conversation café”, in which a topic is discussed at a table in four rounds: In the first two rounds, each participant may speak for one minute while everyone else must listen. This can be symbolised through a “talking object”, the current owner of which is the only one allowed to speak. The third round is more open with 20–40 minutes of discussion time. For the fourth round, the participants once again take turns (using the “talking object” if necessary) in stating their personal insights gained during the conversation. A moderator ensures respectful behaviour and that, for example, understanding is valued more than proving a point or convincing others.

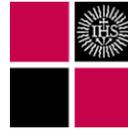
Requirements

Time: 20–30 min

Staff: one teacher or more etc.

Group size: 4–6





Space: enough space to accommodate the various groups without one disturbing the next

Further information

Tutorials, best-practice examples, evaluations

https://www.fsg.org/wp-content/uploads/2021/08/World-Cafe-Method_0.pdf

<https://involve.org.uk/resource/world-cafe>

<https://wp.uni-koblenz.de/ressourcenundkonflikte/wp-content/uploads/sites/117/2020/06/World-Caf%C3%A9-Anleitung-der-Methode.pdf> (German)

<https://www.sessionlab.com/methods/conversation-cafe>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

The World Café method accommodates diverse perspectives, allows for open-mindedness and fosters creativity. The relaxed atmosphere reduces anxiety.

Particularly suitable for which of the building blocks?

(A: Build a team/create a cohesive group)

B: Research the problem/gather information

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

→ Communication and collaboration tools

→ Whiteboarding and mind mapping

Pen and notebook or digital equivalent





Which constraints might or do exist?

A blended learning environment may be difficult to manage. Also, the method is not suitable if tangible results or solutions are expected.

Feedback on the method application:

“(…) I liked that there were many other people and how we cooperated. Yes it helped me a lot. I can learn a lot through discussion.”

“It was really good and sparked many good and fruitful conversations. I was already familiar with the topics, but it was great to get different inputs on solutions and problems.”

7. Online survey/poll

What is it?

An online survey or poll is both an engaging activity for those who create it and a good method to gather information on a specific topic. On a smaller scale, it can be used as an icebreaker method within the group.

What is the objective?

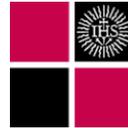
One possible objective can be to engage with a topic or problem by designing a poll or survey on it – bearing in mind the methodological challenges of such an endeavour. The second is to actually gather information by having people take part in it.

How does it work?

Let the participants discuss and collect what kind of data they would need to help them with a certain topic. Based on this, they are supposed to create a survey or poll that will provide this data or information when people take part in it. It makes sense to recruit someone with experience with this method to avoid leading questions, for example, or even use blinding methods to avoid bias. The survey should be accessible and accommodate different perspectives. With the help of digital tools, create the survey as an online version to be better shareable with the intended audience. If the actual gathering of data is desired, the survey or poll should be made public, participation encouraged and the results examined later.

As a variation, a poll can also be made (and created in advance) to learn more about the participants involved – either anonymously or, which is better for an icebreaker





method, openly. This can be turned into a “sociometric” exercise by having the participants move to a spot in the (virtual) room that represents either a geographical location (“Where are you from on a world map?”) or a spot on a scale (“How many languages do you speak?”, “How knowledgeable/experienced are you in this field?”).

Requirements

Time: 20–30 min

Staff: one teacher or more etc.

Group size: 1–3

Space: depending on the size of the group in the case of the “sociometric” exercise

Further information

Tutorials, best-practice examples, evaluations

<https://www.qualtrics.com/blog/how-to-create-a-survey/>

<https://www.pewresearch.org/our-methods/u-s-surveys/writing-survey-questions/>

<https://link.springer.com/article/10.1007/s11135-005-8081-8>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Online surveys allow for gathering information from a variety of stakeholders, even though not every kind of information is suitable for such a survey in the first place. Designing a poll or survey requires thorough engagement with a topic and the pitfalls of the methodology. It is advisable to have someone with experience in the design of polls and surveys nearby whom the participants can consult.

Particularly suitable for which of the building blocks?

(A: Build a team/create a cohesive group)

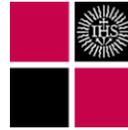
B: Research the problem/gather information

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)



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(F: Distribute the results)

Which (digital) tools can be used?

→ Communication and collaboration tools

→ Educational and quizzing Tools

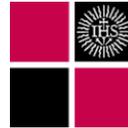
→ Video platforms for demonstrations

Which constraints might or do exist?

Not every topic will be appropriate to explore with the help of questionnaires or polls. Leading questions and other forms of bias might distort the result or render it useless entirely.



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8. Board of definitions

What is it?

A number of important terms are collected and then defined, along with their equivalents in the native languages of the participants.

What is the objective?

The exercise promotes reflection on the meaning of terms and how they differ between languages, which could lead to cases of misunderstanding or talking at cross-purposes.

How does it work?

A collection of terms to be discussed is either provided by the teachers or suggested by the participants. The participants then collaboratively compile and write down translations of these terms and how they are defined. Highlighting different nuances in the understanding of these terms will help the participants grasp potentially different mindsets and attitudes shaped by these definitions. In turn, this can broaden the participants' own understanding of certain terms and make them more sensitive to new perspectives. In the case of a group of people from different (linguistic) backgrounds, the board of definitions can be a good start to prevent talking at cross purposes later.

Requirements

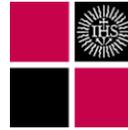
Time: 20–30 min

Staff: one teacher or more etc.

Group size: 10–15

Space: depending on the group size





Further information

Tutorials, best-practice examples, evaluations

It seems like this is no common exercise, so you have to rely on our suggestions here.

Which multilogue aspects are mainly addressed and which challenges could be overcome?

In the case of a group of people from different (linguistic) backgrounds, the board of definitions can be a good start to avoid talking at cross purposes later.

Particularly suitable for which of the building blocks?

(A: Build a team/create a cohesive group)

B: Research the problem/gather information

C: Identify relevant perspectives

Which (digital) tools can be used?

→ Communication and collaboration tools

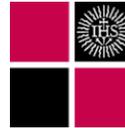
→ Whiteboarding and mind mapping

Pens, stickers etc. to capture ideas

Which constraints might or do exist?

The method only fits topics or goals where the meaning of terms plays a significant role.





9. Gallery walk/vernissage

What is it?

The gallery walk exercise combines group work with a poster session and encourages students to present the result of their work to a small group of peers.

What is the objective?

The participants are supposed to research a topic collaboratively and then create a visualisation of the topic or subject. When this is done, each member will present it to an audience unfamiliar to the topic. When not presenting themselves, the participants are supposed to listen to the presentations of their peers.

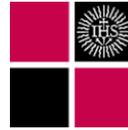
How does it work?

The participants are divided into groups, each of which is assigned a task or topic. The groups then self-organise to work on the task and, for example, identify the elements that are crucial to convey to a person unfamiliar with the subject. Finally, the group creates a poster or similar product that is ideally self-explanatory and informs about the topic they were given or their results, respectively. The students then form a new set of groups, each of which consists of one member from each of the former groups, if possible. These new groups now “walk the gallery” of posters or similar visual publications, stopping at every one of them so that the one person in the group who was involved in its creation can present it.

The various parts of the gallery walk exercise can be adjusted to the subject, the number, skills and experience of the participants and other factors. The subject itself should be suitable for visualisation, unless one deliberately wants to pose a challenge. The mode of visualisation – a hand-drawn and -written poster, print, assemblage of several media and stickers, digital presentation and/or animation (e.g. in the case of remote or hybrid classes) etc. – can be prescribed, depending on the intended purpose of the exercise and the degree (and kind) of creativity desired. The group size and composition may be adjusted just as well as the time allotted for both the creation of the visualisation and the actual gallery walk at the end.

A variant of this exercise, the carousel or tandem, has the group divided into small groups or pairs of people who attend different stations dedicated to a question or topic. The stations require them to share (e.g. write down) their knowledge or thoughts, perhaps considering what has been left by a previous group. They then

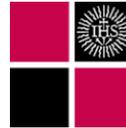




move on to the next station until they have visited all of them. There is some similarity to the → station rotation method.



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Requirements:

Time: 22-222

Staff: at least one teacher

Group size: 11-111

Space: enough space for each small group

Further information:

Tutorials, best-practice examples, evaluations:

<https://www.youtube.com/watch?v=pSt5echeRrM>

<https://serc.carleton.edu/introgeo/gallerywalk/index.html>

<https://www.mudandinkteaching.org/new-blog/2016/8/18/best-practices-the-gallery-walk>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

The method allows for bringing participants from diverse backgrounds together. On-site and remote participants can work in parallel to some extent. Preparing presentations in advance, e.g. by digitising hand-made posters, can be used for asynchronous work ("flipped classroom").

Particularly suitable for which of the building blocks?

B: Research the problem/gather information

(D: Engage people and exchange perspectives)

(F: Distribute the results)

Which (digital) tools can be used?

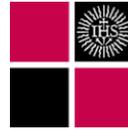
Posters/large paper sheets, pens and markers, glue and tape, white boards

→ Whiteboarding and mind mapping

→ Communication and collaboration tools

→ Visual and design tools





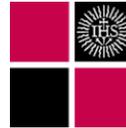
Pens, stickers etc. to capture ideas

Which constraints might or do exist?

Too big groups can be difficult to manage digitally.



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10. Quizzes

What is it?

Participants create quizzes with which they subsequently test others. Different types of quiz are possible, depending on the subjects and group composition, allowing for a wide range of options.

What is the objective?

Participants engage with one or several topics or subjects through both the creation of a quiz and by taking it. The learning environment is more playful than in an actual test.

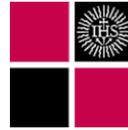
How does it work?

A quiz related to the desired topic or subject can either be created by a teacher/supervisor, individual participants or small groups. They can be handwritten, printed or created with software tools. Regarding their type, they can require answers formed independently, chosen from multiple options or through yet another adequate way. The quiz may be intentionally difficult or even misleading to prompt greater engagement with the topic, but it should be solvable with the information given – unless having no solution (or several) is part of the design. Once the quiz is finished, one or more participants who were not involved with its creation attempt to solve it, perhaps with the help of the “quiz masters”. Whether the results are presented and discussed openly or whether several groups try to achieve the highest score depends on the setup and its purpose. Feedback on the answers can be given, but the quiz ought to be more relaxed than a formal test. For online quizzes, a number of tools are available; the collaborative creation of quizzes requires assigning participants to breakout rooms.

Other types of quiz include:

- Sequencing: The quiz takers need to sort the steps of a process into the correct order, thereby using their skills in logic.
- Labelling: The quiz takers need to put names or labels on various objects, images etc., which can be used to test their knowledge of terminology, for example.
- Filling in the blanks: The quiz takers complete sentences or other strings of words – or even describe missing parts of a process.

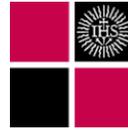




- Matching: The quiz takers need to put together parts of a whole, objects, phrases etc., thereby showing their knowledge or capability to organise.



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Requirements

Time: 22-222

Staff: at least one teacher

Group size: 1-111

Space: one room or several if this is done as group work

Further information

Tutorials, best-practice examples, evaluations

<https://www.continu.com/blog/educational-quizzes-corporate-learning>

<https://www.educationquizzes.com/knowledge-bank/why-are-quizzes-valuable-in-education>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Quizzes allow for accommodating diverse perspectives, foster creativity and, thanks to them being games, promote the transmission of knowledge without the rigidity and hierarchies commonly associated with lectures.

Particularly suitable for which of the building blocks?

(A: Build a team/create a cohesive group)

B: Research the problem/gather information

D: Engage people and exchange perspectives

(F: Distribute the results)

Which (digital) tools can be used?

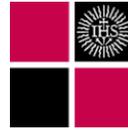
→ Communication and collaboration tools

→ Educational and quizzing tools

→ Visual and design tools

Pens, stickers etc. to capture ideas



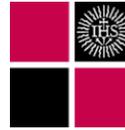


Which constraints might or do exist?

It mostly makes sense for topics and/or types of knowledge that can be turned into quizzes.



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11. Brainstorming

What is it?

Brainstorming is a collaborative teaching method that involves generating creative ideas and solutions through open discussion. Participants freely express thoughts and suggestions related to a specific topic, fostering a diverse range of perspectives.

What is the objective?

The primary objective of brainstorming is to encourage critical thinking, creativity, and active participation among students. This method aims to facilitate the exploration of ideas, problem-solving, and the generation of innovative solutions to academic challenges. Additionally, it promotes a supportive and inclusive learning environment, allowing students to build on each other's ideas.

How does it work?

A supervisor or teacher will introduce a topic or question to the participants, encouraging them to suggest ideas spontaneously, without judgement (but with critical comments), in a free-flowing exchange of thoughts. The generated ideas can be discussed, built upon or combined in order to refine them. At the end, the key points and insights gained through the brainstorming session should be summarised. It depends on the setup whether the group should then discuss any potential next steps or how the generated ideas can be applied.

A variation of brainstorming is the paper plane method, which adds a stimulating element of fun or silliness to the ideation process. Each participant writes an idea (even an absurd one) onto a paper plane and throws it to someone else. The recipient then adds one suggestion for improvement to it – in a supportive manner – and subsequently passes the plane on to yet another person. After a few steps, there may be enough suggestions to an original idea that render it much more workable. If someone receives a paper plane and sees no room for further improvement, they can present the result to the entire group.

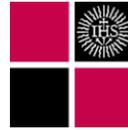
Requirements

Time: 20–30 min

Staff: one teacher or more etc.

Group size: 5–10





Space: depending on the group size

Further information

Tutorials, best-practice examples, evaluations

<https://www.mindtools.com/acv0de1/brainstorming>

<https://www.teaching.unsw.edu.au/brainstorming#:~:text=What%20is%20brainstorming%3F,or%20by%20introducing%20a%20topic>

<https://www.creativityatwork.com/brainstorming-tool-air-liche/#:~:text=For%20instance%2C%20you%20might%20have,one%20from%20all%20the%20groups.>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Brainstorming allows for accommodating diverse perspectives and fosters creativity. It does not discriminate against certain kinds of knowledge.

Particularly suitable for which of the building blocks?

B: Research the problem/gather information

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

→ Communication and collaboration tools

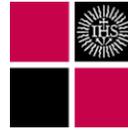
→ Whiteboarding and mind mapping

Pens, stickers etc. to capture ideas

Which constraints might or do exist?

It can be a challenge to balance the focus on the topic and the free-flowing contributions.





Feedback on the method application:

“... It (brainstorming) helped me to get an idea of what I thought was one of the more fundamental problems that is in the core of all the problems.”

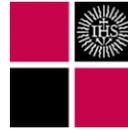
Quotes by participants on the paper plane method:

“It was funny, I really enjoyed that and I would like to use it in my future career as a teacher.”

“I found the method creative, but the most fruitful aspect of the method was that we brainstormed together as a group.”



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12. Mind mapping

What is it?

Mind mapping is a visual teaching method that involves creating a diagram to represent ideas, concepts, and their relationships. It typically starts with a central idea and branches out into subtopics, creating a visual representation of interconnected information.

What is the objective?

By visually organising information, the participants can grasp complex concepts, identify relationships between ideas, and synthesise information more effectively. Mind mapping also stimulates creativity and encourages approaching topics in a holistic manner. Finally, the information on it is better memorised because of the visuality and the spatial structuring.

How does it work?

At the start, a topic, issue or question is added – typically in the centre – to a whiteboard, large sheet of paper or a virtual equivalent. The participants are now encouraged to contribute related ideas, subtopics and other content to the map. Different colours, symbols, images and connecting lines can be used to express relations and hierarchies between the entities on the map. If necessary, dedicated groups of participants can work on subtopics. Different levels of guidance through supervisors are possible, depending on the purpose of the task. The results of a mind mapping session can be used as memory aids or for subsequent projects, depending on the purpose or results.

Requirements

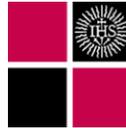
Time: 2-22

Staff: one teacher or more etc.

Group size: 1-11

Space: large enough for the participating group





Further information

Tutorials, best-practice examples, evaluations

<https://www.studysmarter.co.uk/magazine/advantages-of-mind-mapping/>

https://www.youtube.com/watch?v=g7j_CoKD1Xs

<https://www.youtube.com/watch?v=O0lEj2d-ipE>

https://www.youtube.com/watch?v=5zT_2aBP6vM

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Mind mapping allows for accommodating diverse perspectives and fosters creativity. It does not discriminate against certain kinds of knowledge.

Particularly suitable for which of the building blocks?

B: Research the problem/gather information

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

→ Communication and collaboration tools

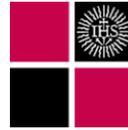
→ Whiteboarding and mind mapping

Pens, stickers etc. to capture ideas

Which constraints might or do exist?

Mind maps may be in need of restructuring when they get too chaotic. Big mind maps might be difficult to display or manage.





13. Open space

What is it?

Harrison Owen's "Open Space" method is a dynamic, participant-driven approach in which participants actively shape the agenda, fostering spontaneous discussions and activities in an environment where self-organisation and shared responsibility drive the learning process.

What is the objective?

Open Space aims to let the participants discuss a topic without predetermined rules or structures. The method seeks to unleash collective creativity and knowledge exchange in a self-organised setting, breaking down hierarchical teaching structures to create a space where diverse perspectives thrive and collaborative solutions emerge organically.

How does it work?

The self-organisational aspect of this method should be conveyed clearly to the participants beforehand. At the start, state a topic and encourage the participants to suggest aspects of it, questions or sub-topics worth discussing. These are collected on a physical or virtual board, poster or similar device. Based on this initial collection, the participants then form a number of sessions, each of which is allotted a certain time for discussing the topic(s) planned for it. The sessions take place either in dedicated spaces within a larger venue (the so-called "market place") or in virtual breakout rooms. The participants can join a session of their liking and are encouraged to move freely between the sessions until they find one in which they can learn and/or contribute. This is Owen's "Law of Two Feet": any participant may walk away or move on if they run the risk of wasting their time. The exact end of an Open Space depends on its topic and purpose, but can be a final discussion with the entire group or some time reserved for individual or collaborative reflection.

Requirements

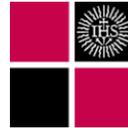
Time: 20-25

Staff: two or more teachers recommended

Group size: 10-15



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Space: large enough to allow for various sub groups to be formed that can work undisturbed

Further information:

Tutorials, best-practice examples, evaluations:

<https://www.mind.org.uk/media-a/4924/open-space-method.pdf>

<https://peggyholman.com/wp-content/uploads/2010/04/ToolsForOpeningSpace.pdf>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

The Open Space method accommodates diverse perspectives and allows for creativity. The “Law of the Two Feet” means people can constantly look for a session or part of the topic to which they feel the greatest connection.

Particularly suitable for which of the building blocks?

B: Research the problem/gather information

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

<https://www.mind.org.uk/media-a/4924/open-space-method.pdf>

<https://peggyholman.com/wp-content/uploads/2010/04/ToolsForOpeningSpace.pdf>

→ Whiteboarding and mind mapping

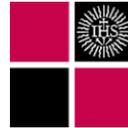
→ Communication and collaboration tools

Pens, stickers etc. to capture ideas

Which constraints might or do exist?

The participants might need some guidance to get started if they have little experience in self-organising.





14. Headstand/reverse brainstorming

What is it?

The headstand is an inverted brainstorming: Participants collect ideas about the opposite of the actual topic or problem, like asking how a project can fail or how a conflict can be prolonged or intensified rather than solved.

What is the objective?

Thinking about the opposite of something can be easier than trying to solve a problem, for example, as creativity is directed in a different way. In a later step, the participants might come up with actual solutions by re-inverting the “headstand ideas” they suggested earlier.

How does it work?

The participants are given a topic or problem and are encouraged not to learn about it or improve a situation but suggest ideas and methods that do the opposite – for example, make a situation worse. The rules are the same as in regular brainstorming. If enough “headstand” suggestions have been collected, the participants attempt to turn them on their feet again, as it were. Perhaps they find new solutions to a problem that had not been apparent before, or at least they find more reasons why ideas that were already known are relevant.

It makes sense to describe both the “headstand” ideas and their opposites in more complex ways than by using a simple negation (“...is not...”), as the latter may not yield a fundamentally new insight. Note that the headstand approach can be applied to other methods listed here.

Requirements

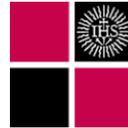
Time: 20–30 min

Staff: one teacher or more etc.

Group size: 1–10

Space: depending on the group size





Further information

Tutorials, best-practice examples, evaluations

<https://www.methodenkartei.uni-oldenburg.de/methode/kopfstand/> (German)

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Just as brainstorming, the headstand method allows for accommodating diverse perspectives and fosters creativity. It does not discriminate against certain kinds of knowledge.

Particularly suitable for which of the building blocks?

B: Research the problem/gather information

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

→ Communication and collaboration tools

→ Whiteboarding and mind mapping

Pens, stickers etc. to capture ideas

Which constraints might or do exist?

It can be a challenge to balance the focus on the topic and the free-flowing contributions. Not all topics can be flipped or reversed for the aims of this method.

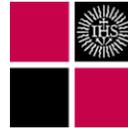
Feedback on the method application:

“It was interesting, seeing as it is a method that I haven’t tried previously, but I nonetheless found it useful.”

“I really liked this method, every time it brought a different perspective and ideas to the same topic.”

“A new way of brainstorming that could be used in one’s toolkit.”





15. Visualising power structures/power mapping

What is it?

This method challenges the participants to identify power structures either within their present group or in a given context or problem.

What is the objective?

The participants should learn to identify power structures and power-based relationships between people and/or entities. They should critically analyse these structures and become aware of cases in which they did not perceive them to exist, and learn how they affect processes or people's actions.

How does it work?

A group of participants is given a problem or context (which can be the composition of their own group). They then → brainstorm to identify power structures and power-based relationships in this context: the actors involved, the strategies at play, the means through which power is obtained, exercised and how it is lost. This process can be captured through → mind mapping. The effects and consequences of these structures should be discussed just as much as how they can be changed – if they have to. It is important that power structures that are not visible to certain actors are identified and critically analysed, too. The result of this exercise can be discussed in the group and/or captured in writing or a mind map.

Requirements

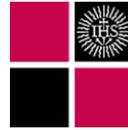
Time: 20-30 min

Staff: one teacher or more etc.

Group size: 5-15

Space: depending on the group size





Further information

Tutorials, best-practice examples, evaluations

https://www.youtube.com/watch?v=c_Eutci7ack

<https://commonslibrary.org/guide-power-mapping-and-analysis/>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Analysing power structures can uncover different perspectives among the participants and point out cases of unperceived privilege, especially in the case of a diverse group of people.

Particularly suitable for which of the building blocks?

A: Build a team/create a cohesive group

C: Identify relevant perspectives

(D: Engage people and exchange perspectives)

Which (digital) tools can be used?

→ Communication and collaboration tools

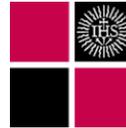
→ Whiteboarding and mind mapping

→ Visual and design tools

Which constraints might or do exist?

Most participants will be influenced by power-related ideological beliefs and concepts in one way or another, which needs to be analysed critically but also politely.





16. Fishbowl discussion

What is it?

The “fishbowl” is a small group of debaters (typically five) surrounded by an audience that can, at times, intervene.

What is the objective?

The fishbowl method helps structure a debate among a medium or large group of participants by allowing only a small selection of speakers at a time.

How does it work?

A “fishbowl” of approximately five debaters (each on a chair, if possible) is created in the centre of the available space. The rest of the participants are seated around them so that they can listen. In an open “fishbowl”, one of the central chairs is left empty and audience members can, at any time, take a place there and join the discussion, while one of the former debaters leaves their chair and joins the audience. A closed “fishbowl” has a fixed number of speakers that are replaced after a certain time. A moderator introduces the topic to discuss and ensures good conduct. The audience can be tasked to track the discussion and note down important issues that were mentioned, or even evaluate the contributions of the debaters. The “fishbowl” can also be reduced to a debate of two, with the audience able to replace one of the debaters at any time or after a certain amount of time has passed. The results of the discussion(s) can be summarised later by the moderator.

Requirements

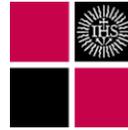
Time: 20–25

Staff: one moderator/host

Group size: 1–3

Space: enough space to accommodate the entire group, and plenty of chairs (or the virtual equivalent)





Further information

Tutorials, best-practice examples, evaluations

[https://en.wikipedia.org/wiki/Fishbowl_\(conversation\)](https://en.wikipedia.org/wiki/Fishbowl_(conversation))

<https://www.youtube.com/watch?v=sB143EA1ZGU>

<https://www.youtube.com/watch?v=JVCFGLVZA3w> (with monitoring to teach debating)

Which multilogue aspects are mainly addressed and which challenges could be overcome?

A “Fishbowl” discussion can bring multiple perspectives together but also allows for input from the audience. It can be useful for having a discussion with a large group that would otherwise be difficult to manage.

Particularly suitable for which of the building blocks?

C: Identify relevant perspectives

D: Engage people and exchange perspectives

(E: Develop and test solutions or answers)

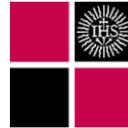
Which (digital) tools can be used?

→ Communication and collaboration tools

Which constraints might or do exist?

Introverted participants might be reluctant to join the inner circle.





17. Story creation/storytelling

What is it?

The participants create (and later tell) a story that conveys e.g. an ethical problem.

What is the objective?

This task challenges the participants' creativity to transform or break down a potentially complicated topic. The result – the story – manages to convey the topic intuitively, even to a non-specialist audience.

How does it work?

A topic (e.g. an ethical question) is either given or developed as part of a discussion in the group. Then, the entire group or several sub-groups work on creating a story that conveys the message of the topic. They have to critically assess the topic in order to identify its central problem(s) or challenge to humanity. Participants from diverse backgrounds can share their perspectives and so shape the story. Once the story is complete, it can be told to an audience and discussed with it afterwards. If several groups worked on stories about the same topic or question, they can be compared regarding their narrative strategies or the aspects of the topic on which they focussed. The story can be written down, memorised and told orally and/or captured on video.

Requirements

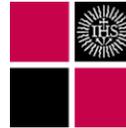
Time: 20-30 min

Staff: one teacher or more etc.

Group size: 1-3

Space: depending on the group size





Further information

Tutorials, best-practice examples, evaluations

<https://lehrblick.de/en/storytelling-in-three-steps-how-to-teach-and-fascinate-people-using-stories/> (<https://doi.org/10.5283/zhw/20221208.EN>)

<https://www.harvardbusiness.org/what-makes-storytelling-so-effective-for-learning/>

<https://www.waterford.org/resources/6-strategies-for-teaching-story-structure/>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

Participants from diverse backgrounds can share their perspectives to shape the emerging story. The result should be accessible not only to experts and so convey a message to stakeholders unfamiliar with the specifics of the topic.

Particularly suitable for which of the building blocks?

(A: Build a team/create a cohesive group)

B: Research the problem/gather information

(D: Engage people and exchange perspectives)

F: Distribute the results

Which (digital) tools can be used?

→ Communication and collaboration tools

→ Whiteboarding and mind mapping

→ Visual and design tools

Audio (+ video) recording devices/software

Zoom (which has a recording function), <https://obsproject.com/>

Which constraints might or do exist?

Care should be taken to pick a topic/ethical question that is apt for story creation. Participants might also have different opinions on the type of story or its narrative that might not be reconcilable.





18. Forum Theatre/theatre of the oppressed

What is it?

“Forum Theatre”, a method developed by Brazilian theatre practitioner Augusto Boal, is an interactive and participatory approach in academic education. It involves presenting a scenario depicting a real-world issue or challenge, and students engage by becoming spect-actors, both observing as members of the audience and stepping into the scene as actors to propose alternative solutions. The primary function of Forum Theatre is to promote critical thinking, empathy, and problem-solving skills.

What is the objective?

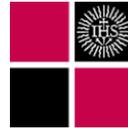
Forum Theatre serves as a platform for open dialogue, breaking down hierarchical barriers between students and educators. Its strengths lie in its ability to stimulate active participation and foster a deeper understanding of complex issues. It is particularly effective in addressing issues related to social justice, discrimination, and interpersonal dynamics, offering a dynamic and engaging way to enhance learning, provoke critical reflection and instil active citizenship and social awareness in the participants.

How does it work?

Forum Theatre typically features a concise play enacted by participants or amateur actors, portraying everyday situations with inherent problems or conflicts. Following the initial performance, audience members are invited to step into the roles, substituting for actors one at a time or introducing new characters, such as bystanders. During this second rendition, participants have the opportunity to intervene, alter the storyline and address the presented conflict, thereby fostering awareness. They can also shout “Stop!” while still being seated and only then come to the stage. The remaining cast members may improvise and continue the play, but resolving the issue is not obligatory. Subsequently, the session may lead to a comprehensive discussion with the audience, contingent upon the intended objectives of the exercise.

Staging a theatre play in a blended learning environment can be challenging but should be possible. If there are no technological barriers (such as video and audio quality), both the acting group and the spect-actors can participate in “mixed” states, on-site and remotely. For practical reasons, however, it might be better to have each of the two groups entirely on site or joining online.





Requirements

Time: 22

Staff: one teacher or more etc.

Group size: 1 (as primary actor group) 1-11 (as potential spect-actors)

Space: a small stage and room for an audience

Further information

Tutorials, best-practice examples, evaluations

<https://imagination.org/media/our-methods/theatre-of-the-oppressed-2>

<https://journals.sagepub.com/doi/full/10.1177/1477971419842884>

<https://www.youtube.com/watch?v=NbYx01re-ec>

<https://www.youtube.com/watch?v=vcLcXeXJVDU>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

The Forum Theatre method allows for intervening with a different perspective in an obvious way. Instead of limiting oneself to theoretical considerations, it can be used to show how certain problems occur and how they might be solved.

Particularly suitable for which of the building blocks?

(A: Build a team/create a cohesive group)

C: Identify relevant perspectives

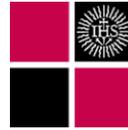
D: Engage people and exchange perspectives

(F: Distribute the results)

Which (digital) tools can be used?

→ Communication and collaboration tools



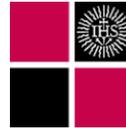


Which constraints might or do exist?

The topic has to be one that can be touched upon or even discussed on a stage. Participants must be comfortable with performing publicly.



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19. Press conference

What is it?

The press conference exercise has several participants prepare to be questioned by journalists, who are also played by a number of participants.

What is the objective?

The participants learn about a certain topic and prepare either for presenting it to an audience or asking questions, some of which may present themselves.

How does it work?

The group is split into at least two groups, “experts” and “journalists”. Having several expert or journalist groups is also possible. Each group is given a topic to prepare, perhaps also background information (depending on the goal of the exercise). The expert group tries to prepare for presenting the topic and to anticipate the questions asked by the journalists. The journalists, in turn, collect questions and attempt to ask about crucial aspects of the topic. Whether or not the experts roleplay as stakeholders (or the journalists are rather citizens affected by an issue, for example) whose personal involvement can be part of the discussion depends on the setup and goals of the exercise. The press conference exercise can encourage intensive engagement with the topic at hand and with potential ways of communicating it to an audience. If creative approaches and ideas are conceived along the way, they can be noted down for further use. The exercise can also be used to prepare for the visit of actual experts on a given topic, or for presenting something as experts.

Requirements

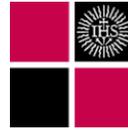
Time: 2-222

Staff: one teacher or more etc.

Group size: 1-111

Space: sufficient space for preparation of the groups and for all participants during the press conference





Further information

Tutorials, best-practice examples, evaluations

<https://dbp.theatredance.utexas.edu/teaching-strategies/talk-showpress-conference>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

The press conference method can partly be used to gather information, but it is more appropriate to simulate different stakeholders being brought together, and encourage the exchange of perspectives that comes with it.

Particularly suitable for which of the building blocks?

(B: Research the problem/gather information)

C: Identify relevant perspectives

E: Develop and test solutions or answers

(F: Distribute the results)

Which (digital) tools can be used?

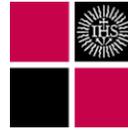
→ Communication and collaboration tools

→ Whiteboarding and mind mapping

Which constraints might or do exist?

The method might not be suitable for all topics and participants who have trouble with speaking freely.





20. E-Portfolio/collaborative writing

What is it?

The participants prepare a written and/or illustrated and/or animated publication that comprises all the relevant information gathered. This may include a plan for dissemination to a possible audience.

What is the objective?

The participants learn how to arrange the information or arguments they have collected and prepare it in such a way that someone from the intended target audience can grasp the topic and appreciate the different perspectives represented therein.

How does it work?

The participants, divided into groups if this is feasible, devise a publication concept that fits the information to be disseminated, the plurality of perspectives visible in that information, and the intended target audience. Once an agreement has been reached regarding these points (or perhaps even earlier), the participants collaboratively write and/or draw and/or animate the various parts of the publication. While doing so, they consider how the information is to be disseminated, choosing an adequate complexity of the text's language (or which language(s) to choose in the first place), for example, or adjusting the length of the finished text or video. Once the product is proofread, edited and ready, it can be published. If possible, its reception can be monitored to help with future publications.

Requirements

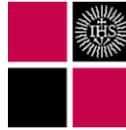
Time: ☐☐☐

Staff: one supervisor or more etc.

Group size: 1-3

Space: enough space for individual working groups





Further information

Tutorials, best-practice examples, evaluations

<https://www.una.edu/writingcenter/docs/Writing-Resources/Collaborative%20Writing%20Strategies.pdf>

<https://link.springer.com/article/10.1007/s40037-021-00668-7>

Which multilogue aspects are mainly addressed and which challenges could be overcome?

As the multilogue is supposed to tackle and improve real-world situations, publishing the results of the collaborative work that has been done is a crucial part of the process.

Particularly suitable for which of the building blocks?

(D: Engage people and exchange perspectives)

E: Develop and test solutions or answers

F: Distribute the results

Which (digital) tools can be used?

→ Communication and collaboration tools

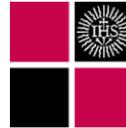
→ Whiteboarding and mind mapping

Tools that allow for collaborative writing such as GoogleDocs, Microsoft Teams etc.

Which constraints might or do exist?

Having many contributors might make it necessary to manage them closely.





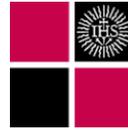
Additional resources to match methods and tools

Disclaimer: The following list of software tools is provided for informational purposes only. All tools listed here were available as of 16 July 2024. Before using them, please consult the disclaimer at the beginning of this toolkit. Please check whether these tools require a registered account or not, whether they are for free or require purchasing a licence and whether they conform to your parent institution's privacy requirements.

Communication and collaboration tools:

1. [Zoom](#): Breakout rooms, screen recording, video conferencing
2. [Skype](#): Video conferencing, communication
3. [Slack](#): Collaboration, communication
4. [Google Tools](#):
 - a. [Google Meet](#): Video conferencing
 - b. [Google Classroom](#): Educational groups
 - c. [Google Docs](#): Document creation and sharing
 - d. [Google Forms](#): Surveys and data collection
5. [Microsoft Tools](#):
 - a. [Microsoft Teams](#): Collaboration, communication
 - b. [Microsoft Whiteboard](#): Whiteboarding
6. [Gather town](#): Virtual gathering space
7. [Veertly Event Platform](#): Virtual event platform
8. [BigBlueButton](#): Video conferencing
9. <https://stormboard.com/home>
10. <https://www.mindmeister.com/de>





Educational and quizzing tools:

1. [Kahoot!](#): Quizzes, gamified learning
2. [Quizizz](#): Interactive quizzes
3. [SurveyMonkey](#): Surveys, data collection
4. [Teaching.unsw.edu.au](#): Educational best practices
5. [Mentimeter](#): Interactive presentations, polling

Visual and design tools:

1. [Canva](#): Document creation, design
2. [Pinterest](#): Visual curation, idea boards
3. [Book Creator](#): Digital book creation
4. [Google slides](#): Presentation

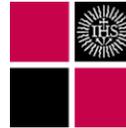
Miscellaneous:

[PDF Wondershare OCR](#): Image to text conversion

[SimpleOCR](#): Image to text conversion

[Hyhyve](#): Virtual event platform





Step 8: Think about a code of conduct for the multilogue

The whole idea of a multilogue learning experience hinges on the respectful and inclusive exchange of perspectives amongst a diverse group of participants. Therefore, establishing a code of conduct at the beginning of the learning experience can be immensely beneficial.

A code of conduct establishes an agreed-upon framework of principles that defines the boundaries of acceptable behaviour. By setting clear expectations for civility, participants are reminded of their responsibility to engage in discourse with dignity and respect towards the other participants and refrain from practices such as *ad hominem* attacks, disrespectful statements, hostility or misinformation.

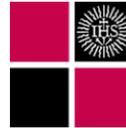
Moreover, a code of conduct can foster inclusivity by creating a safe and welcoming environment for all participants, regardless of their background, identity, or beliefs. In an era marked by increasing polarisation and divisiveness, it is imperative to cultivate spaces where individuals feel empowered to express themselves freely, without fear of intimidation or marginalisation. By promoting empathy and tolerance, a code of conduct can nurture a culture of openness and mutual respect, enriching the collective dialogue with a range of diverse perspectives.

Furthermore, a code of conduct can serve as a safeguard against the dissemination of misinformation and harmful rhetoric. By upholding standards of accuracy, honesty, and integrity, a code of conduct elevates the quality of discussions and can serve as a compass that steers conversations towards mutual respect, understanding, and constructive engagement.

If no such code exists yet at your higher education institution, you could draft your own version before starting your multilogue or even develop it with the students at the beginning of the learning experience. Guiding questions for the creation of such a framework could be:

- How do we want to treat and communicate with each other?
- Which core values are at the heart of the code of conduct?
- What are the requirements and boundaries for open and inclusive communication vis-à-vis a multi-perspective, multi-cultural, multi-background exchange that is likely being conducted in a hybrid setting?
- Are there any specific behaviours or actions that need to be addressed?





Step 9: Think about ways to gather feedback from the participants to evaluate and improve the learning experience

Finally, before beginning your learning experience you will need to think about ways to make sure that participants are able to give feedback and that the format receives a proper evaluation. Given the open nature of the multilogue format, it is recommended to not only invite feedback at the end of the course (e.g. through a questionnaire) but already during the learning experience, too. This allows you to make adjustments to the design of the course on the fly.

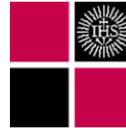
To achieve this, utilise established methods for gathering participants' feedback, including surveys, group feedback sessions, and quick polls at the end of each meeting. Employ both open-ended and closed questions when collecting feedback. However, it is advisable to include at least one open-ended question, framed in a manner that encourages a positive and proactive response from the participants.¹⁹ Following an example given in guidelines by Stanford University, try to ask “What is one thing you would change about the learning activities in this course?” rather than “What did you dislike about the lectures?”. In addition, make the questions clear and focused in purpose to avoid generalisations. For example, it is more fruitful to ask for feedback on a specific learning material than to ask if the students enjoyed the learning materials in general.²⁰

As noted by Radboud University, to achieve high response rates it is important to formally include the evaluation phase in the official program and encourage participants to complete the evaluation by discussing its purpose. This way, participants know that their feedback will be taken seriously and will be more likely to complete the evaluation. It may also be helpful to offer small incentives for participating in the evaluation. You can find descriptions of tested methods and

¹⁹ Gathering Student Feedback, *Stanford Teaching Commons* [website], <https://teachingcommons.stanford.edu/teaching-guides/foundations-course-design/improving-teaching-effectiveness/gathering-student>.

²⁰ Evaluating a course, *Radboud University* [website], <https://www.ru.nl/en/staff/lecturers/evaluating-education/evaluating-a-course>.





inspiration regarding the type of questions to be used in your evaluation in the “Further reading” section at the end of this document.

With this last of the nine steps completed, you should be all set to create your very own blended multilogue. We hope it will be a great learning experience for everyone involved – and not the last multilogue you organise!

Further reading

All internet sources were available on 16 July 2024.

On different learning approaches

Bringle, R. G. and Hatcher, J. A., ‘Implementing service learning in higher education’, *The Journal of Higher Education*, vol. 67, no. 2, 1996, pp. 221–239. <https://www.tandfonline.com/doi/pdf/10.1080/00221546.1996.11780257>.

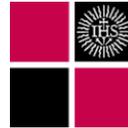
Gallagher, S. E. and Savage, T., ‘Challenge-based learning in higher education: an exploratory literature review’, *Teaching in Higher Education*, vol. 28, no. 6, 2023, pp. 1135–1157, https://www.tandfonline.com/doi/abs/10.1080/13562517.2020.1863354?casa_token=J6V5Ql2GipgAAAAA:fRZsLnpZyfyh1Kbcl3bW2qFBjqcmw42ktREZ-9pbQETRMgZZDLxDD_AOyGlxwTU5eipdo7q7tw.

Guo, P. et al., ‘A review of project-based learning in higher education: Student outcomes and measures’, *International Journal of Educational Research*, vol. 102, no. 101586, 2020, <https://doi.org/10.1016/j.ijer.2020.101586>.

Salam, M. et al., ‘Service learning in higher education: a systematic literature review’, *Asia Pacific Educ. Rev.*, vol. 20, 2019, pp. 573–593, <https://doi.org/10.1007/s12564-019-09580-6>.

Shpeizer, R., ‘Towards a successful integration of project-based learning in higher education: Challenges, technologies and methods of implementation’, *Universal Journal of Educational Research*, vol. 7, no. 8, 2019, pp. 1765–1771, https://www.researchgate.net/profile/Raz-Shpeizer/publication/335055773_Towards_a_Successful_Integration_of_Project-based_Learning_in_Higher_Education_Challenges_Technologies_and_Methods_of_Implementation/links/5d4c51474585153e594763fc/Towards-a-Successful-





[Integration-of-Project-based-Learning-in-Higher-Education-Challenges-Technologies-and-Methods-of-Implementation.pdf](#)

On civic engagement

Ata, A., 'Fostering Students' Civic Skills: Education for Sustainable Democracy', *Georgia Educational Research Assosiation*, vol. 16, no.1, 2019, <https://digitalcommons.georgiasouthern.edu/gerjournal/vol16/iss1/7>.

The State University of New York, '7 ways to foster civic engagement this semester', [website], <https://blog.suny.edu/6969/7-ways-to-foster-civic-engagement-this-semester/>.

On learning objectives (step 2)

Boston College Center for Teaching Excellence, 'Learning Objectives' [website], <https://cteresources.bc.edu/documentation/learning-objectives/>.

McPheat, S., 'Using Bloom's Taxonomy for Setting Learning Objectives', *Skills Hub* [website], <https://www.skillshub.com/blog/using-blooms-taxonomy-for-setting-learning-objectives/>.

On course descriptions (step 3)

Leuphana University Lüneburg Teaching Service, *Suggestions for creating course descriptions*, [website], <https://www.leuphana.de/en/teaching/design/conceptualise/course-description-syllabus.html>.

On remote learning and student engagement (step 7)

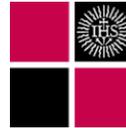
Bruff, D., 'Active Learning in Hybrid and Physically Distanced Classrooms', *Vanderbilt University* [website], <https://cft.vanderbilt.edu/2020/06/active-learning-in-hybrid-and-socially-distanced-classrooms/>.

Seif, E., 'Dimensions Of Deep Learning: Levels Of Engagement And Learning', *ascd* [web blog], 16 November 2018, <https://www.ascd.org/blogs/dimensions-of-deep-learning-levels-of-engagement-and-learning>.

Hodges, C. B. et al., 'The difference between emergency remote teaching and online learning', *EDUCAUSE Review* [website],



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<https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>.

On gathering feedback (step 9)

Stanford University Teaching Commons, 'Suggestions for gathering student feedback', [website], <https://teachingcommons.stanford.edu/teaching-guides/foundations-course-design/improving-teaching-effectiveness/gathering-student>.

Radboud University, 'Evaluating a course', [website], <https://www.ru.nl/en/staff/lecturers/evaluating-education/evaluating-a-course>.

University of Wisconsin-Madison, 'Best practices and sample questions for course evaluation surveys', [website], <https://assessment.wisc.edu/best-practices-and-sample-questions-for-course-evaluation-surveys/>.

Boston College Teaching Strategies, 'Course evaluation questions', [website], <https://cteresources.bc.edu/documentation/course-evaluation-questions/#-1107776926-ewmwq8>.

References

All internet sources were available on 8 May 2024.

Anderson, L. W. and Krathwohl, D. R., *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*, complete edition, New York: Longman, 2001.

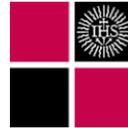
Bloom, B. S. et al. (eds.), *Taxonomy of educational objectives. The classification of educational goals. Handbook 1: Cognitive domain*, New York: Longman, 1956.

Course Evaluation Questions, *Center for Teaching Excellence Boston College* [website], <https://cteresources.bc.edu/documentation/course-evaluation-questions/#-1107776926-ewmwq8>.

Bringle, R. G. and Hatcher, J. A., 'Implementing service learning in higher education', *The Journal of Higher Education*, vol. 67, no. 2, 1996, pp. 221–239, <https://www.tandfonline.com/doi/pdf/10.1080/00221546.1996.11780257>.

Design Thinking Bootleg, *d.school Stanford* [website], <https://dschool.stanford.edu/resources/design-thinking-bootleg>.





[berlin.de/server/api/core/bitstreams/fc1df162-ece1-49bc-8fd3-3c44976d491b/content](https://www.berlin.de/server/api/core/bitstreams/fc1df162-ece1-49bc-8fd3-3c44976d491b/content).

Hrastinski, S., 'What Do We Mean by Blended Learning?', *TechTrends*, vol. 36, no. 5, 2019, pp. 564–569, <https://doi.org/10.1007/s11528-019-00375-5>.

In Drei Phasen zur guten Bürgerbeteiligung, *Wer Beteiligt Wie* [website], <https://werbeteiligtwie.de/in-drei-phasen-zu-guter-buergerbeteiligung-906>.

Kezar, A. and Rhoads, R. A., 'The dynamic tensions of service learning in higher education: A philosophical perspective', *The Journal of Higher Education*, vol. 72, no. 2, 2001, pp. 148–171, https://www.tandfonline.com/doi/pdf/10.1080/00221546.2001.11778876?casa_token=g0g45jMAZCUAAAAA:_FHyqWM3DEBxCH2eIk_1ovUCFpMpJ8NPYCsOA4TQWgt0HnHizTER_eypU5QEs-sxcxnmVTgNkF0.

Marco D. et al., 'Defining the skills citizens will need in the future world of work', *McKinsey & Co*, 2021 [website], <https://www.mckinsey.com/industries/public-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work>.

McPheat, S., 'Using Bloom's Taxonomy for Setting Learning Objectives', *Skills Hub* [website], <https://www.skillshub.com/blog/using-blooms-taxonomy-for-setting-learning-objectives/>.

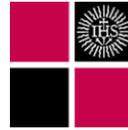
Pacific policy research center., '21st century skills for students and teachers', *Honolulu Kamehameha Schools, Research & Evaluation Division*, 2010, pp. 6–7, <https://www.scirp.org/reference/referencespapers?referenceid=2802777>.

Project Based Learning, *Boston University Center for Teaching & Learning* [website], https://www.bu.edu/ctl/ctl_resource/project-based-learning-teaching-guide/.

Salam, M. et al., 'Service learning in higher education: a systematic literature review' *Asia Pacific Educ*, vol. 20, 2019, pp. 573–593, <https://doi.org/10.1007/s12564-019-09580-6>.

Shpeizer, R., *Towards a Successful Integration of Project-based Learning in Higher Education: Challenges, Technologies and Methods of Implementation*, Israel, Department of Post-Graduate Teacher Education, Kaye Academic College of Education, 2019.





Test your Digital skills, *Europass* [website],
<https://europa.eu/europass/digitalskills/screen/home>.

Lerngruppe "Von Analog zu Digital MOOCamp 2020", *Von Analog zu Digital: 7x5 interaktive Workshop-Methoden, die auch online begeistern*,
<https://read.bookcreator.com/VBTBmiXkvoUE98PpAUaM4DNGZvl2/77ZfclDwTrumhFpRkmr9EA/2PIbitZjSCOzKNNIAMKKWQ>.



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