



PEDAGOGICAL CARD DECK FOR TEACHERS

Teaching planning tools

LESSON PREPARATION

Models, structure and planning

These cards allow you to build teaching modules consisting of monological (A), dialogical (B) and triological (C) learning models and various pedagogical solutions (1–7).

To plan a single teaching package:

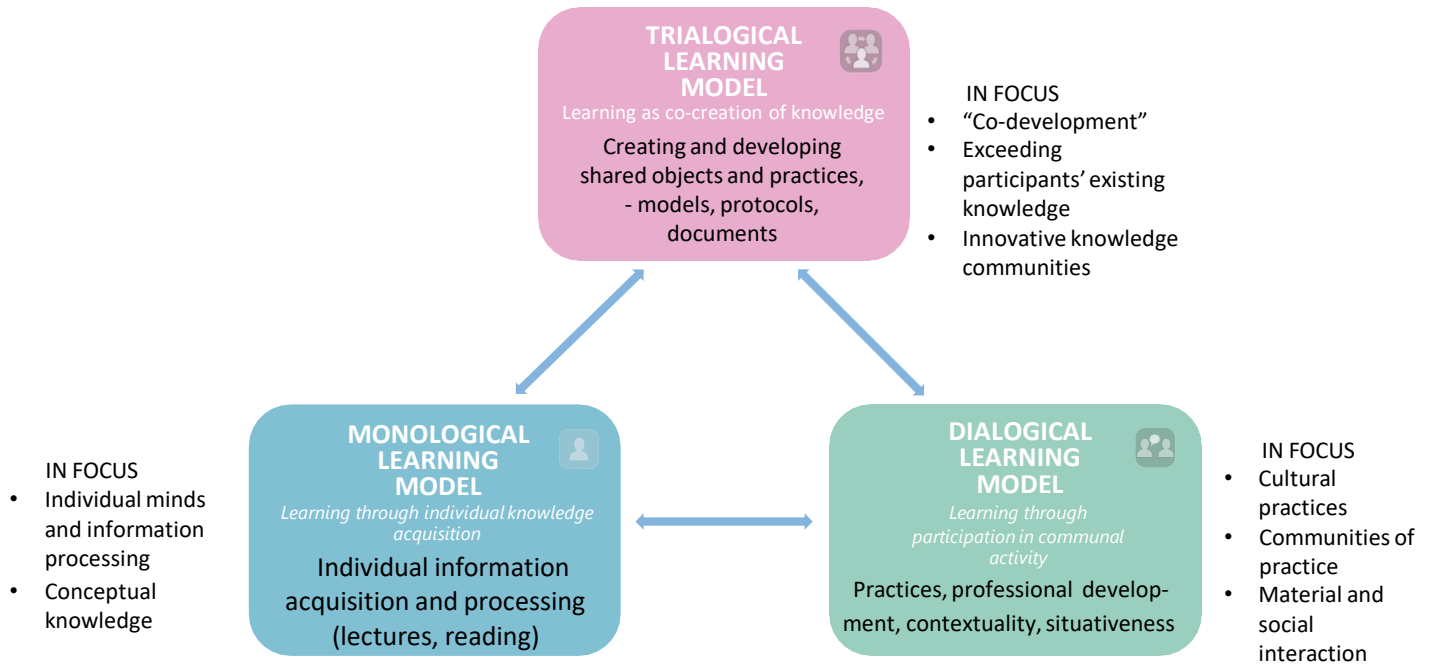
1. Select card model A, B or C.
 2. Select the appropriate solution (1–5) from the cards.
 3. You can also select more than one model and pedagogical solution for your package.
- Each model and solution is designed to enable learners to learn specific skills in addition to knowledge.
Variety helps keep students engaged.



TIPS FOR PLANNING

- What are the topic and objective of the teaching session? Explore the models and solutions and select those that support the objectives.
- Schedule and test the duration of each selected model and solution, as some solutions require more time than others.
- Don't forget to specify the learning aims and objectives, the mode of participation and the assignment delivery methods.
- Look at the whole. Does each solution form the intended design? Is any learning model overrepresented?
- Take into account different learning styles.
- If possible, create stories, situations and characters that help internalise new information.

LEARNING MODELS



Paavola & Hakkarainen, 2005 & 2009, Muukkonen, 2013

A

MONOLOGICAL LEARNING MODEL



A\B\C

Learning through individual knowledge acquisition

- Objective and methodology: The learner processes factual, conceptual information, for example by attending a lecture, taking a MOOC course independently or reading a textbook.
- Supports the internalisation of concepts and the development of a knowledge base on a selected topic, promotes the practical application of knowledge, for example in practical training.
- Knowledge acquisition can be assessed by e.g. exams or multiple choice questions.
- Interaction: Interaction is often one-way, from the teacher or learning material to the student.
- Digitality: Many digital learning platforms support monological learning.



APPLICABILITY OF THE MONOLOGICAL LEARNING MODEL

- Supports the internalisation of concepts and the development of a knowledge base on a selected topic, promotes the practical application of knowledge, for example in practical training.
- Examples: SotePeda24/7 project MOOCs, online lectures, literature material.
- Assessment: Measurement of conceptual knowledge. Knowledge acquisition can be assessed by e.g. exams or multiple choice questions.

B

DIALOGICAL LEARNING MODEL

Learning through participation in communal activity



A\B\C

- **Objective and methodology:** Learning based on a master–apprenticeship model: participating in the community of practice and absorbing field-specific experiential knowledge, working methods and practices, values and building blocks of professional identity through social interaction. The situationality of learning and expertise is a key feature.
- **Interaction:** Dialogical learning requires versatile and multidirectional interaction, as learning takes place through social interaction.
- **Digitality:** The learning platform and learning process must support versatile and multidirectional interaction.



APPLICABILITY OF THE DIALOGICAL LEARNING MODEL

- Supports the adoption of field-specific practices, professional development, the application of theory, and practice.
- Examples: practical training, group assignment, virtual simulation
- Assessment: Assessment discussions with the teacher, an essay in which the learner reflects on their own learning process, dialogue with other learners and on the studied topic.



TRIALOGICAL LEARNING MODEL

A\B\C

- Objective and methodology: Aims for the co-creation of knowledge that exceeds group members' existing knowledge, for example in project studies. Organised around shared objects that are created and developed together, e.g. a prototype or a document. Seeks to solve real-world problems and create knowledge that can be applied in practice.
- Interaction: Requires versatile and multidirectional interaction and opportunities for shared reflection. A long-term process facilitated by the teacher.
- Digitality: The learning platform and tools must support versatile and multidirectional interaction as well as long-term work processes, co-creation, versioning and reflection.



APPLICABILITY OF THE TRIALOGICAL LEARNING MODEL

- Suitable for multidisciplinary project-based learning across discipline boundaries. Aimed at e.g. developing solutions to real-world challenges in a collaborative process.
- Examples: A joint project or learning assignment with students representing different disciplines, practical training, digital LivingLab
- Assessment: Reflective group discussions, continuous feedback from both the teacher and peers. Reflective writing assignments to support assessment. Learning is situationally dependent.

FACILITATION

enabling collaboration

- Facilitation means making the work of a group easier by using various methods and structures.
- For example, it can help a group of students formulate a common understanding and objectives.
- Instead of suggesting ready-made solutions, the facilitator creates a setting in which students can work together to develop solutions.
- As a “neutral outsider”, the facilitator does not participate in the group’s work per se; they only support and guide it towards its objective.

ONLINE FACILITATION

- Facilitation supports virtual teamwork by creating a safe and confidential working environment.
- Reciprocal dialogue can be supported and facilitated by various warm-up exercises and by outlining group rules and practices, such as how to take turns speaking and advising participants to activate their camera when speaking.
- Enables group members to collaborate and participate actively before, during and after the workshop. Participants can complete some of the assignments in advance or after the workshop, which shortens the length of the joint workshop and enables long-term work.
- Virtual facilitation can be implemented in the following ways:
 - simultaneously from a number of locations
 - from a number of locations at different times
 - from a single location simultaneously by using digital tools
- A successful workshop requires good planning from the facilitator, precise scripting, presentation of the workshop's objectives and working methods to the participants, engaging exercises and appropriately scheduled breaks.

01

MICROS

module structure and planning



DURATION
WORKLOAD:



PEDAGOGICAL SOLUTION

A micro is a pedagogically coherent, short module, usually consisting of just one learning objective. For example, it can consist of an information package, a set of assignments, a video, image or podcast, and a related assessment if applicable.

- Micros are designed to activate different types of learners and approach the topic from different perspectives and modes of learning.
- They are “ nuggets” approximately 5–15 minutes in length, each of which focuses on one objective and/or part of the module content.
- A module can include a number of micros that together form a coherent set of contents around a topic.
- Micros can also be used in online delivery, for example, as part of online courses or MOOCs.



AN EXAMPLE OF A MICRO

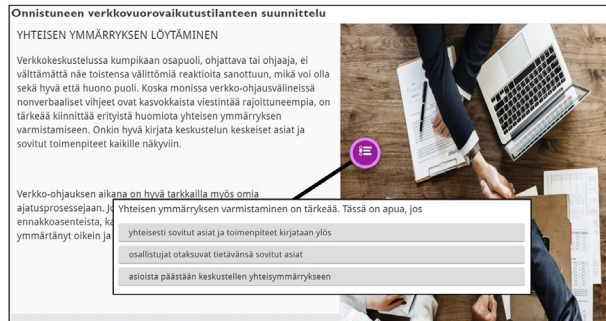
- An interactive micro implemented with the H5P feature that combines learning content and supporting questions which can be clicked on during the presentation.
- Can be used to stimulate students, support concentration and structure the learning contents.
- Facilitates the application of learned content. Students test their own competence by answering questions about the material during the presentation.
- The assessment criteria can specify e.g. how many questions students should answer correctly in order to pass. Students receive immediate feedback on their answers and can retake the questions.

Onnistuneen verkko-uorivaikutustilanteen suunnittelu

YHTEISEN YMMÄRRYKSEN LÖYTÄMINEN

Verkkokeskustelussa kumpikaan osapuoli, ohjattava tai ohjaaja, ei välttämättä näe toistensa välittömiä reaktioita sanottuun, mikä voi olla sekä hyvä että huono puoli. Koska monissa verkko-ohjausaineissa numerbaaliset vihiheet ovat kapeokkaista viestintää rajoittuneempia, on tärkeää kiinnittää erityistä huomiota yhteisen ymmärryksen varmistamiseen. Onkin hyvä kirjata keskustelun keskeiset asiat ja sovitut toimenpiteet kaikille näkyviin.

Verkko-ohjauksen aikana on hyvä tarkkailla myös omia ajatusprosessejaan. Jotta yhteisen ymmärryksen varmistaminen on tärkeää. Tässä on apua, jos ennakoivasti huomaat, että yhteisesti sovitut asiat ja toimenpiteet kirjataan ylös ymmärtänyt oikein ja osallistajat otaksuvat tietävänsä sovitut asiat asioista päästään keskustellen yhteisymmärrykseen



The image shows a presentation slide with a question and a list of options. The question is: "Yhteisen ymmärryksen varmistaminen on tärkeää. Tässä on apua, jos yhteisesti sovitut asiat ja toimenpiteet kirjataan ylös". The options are: "osallistajat otaksuvat tietävänsä sovitut asiat" and "asioista päästään keskustellen yhteisymmärrykseen". There is a purple circular icon with a white question mark on the slide.

02

MOOC

massive open online course



DURATION: ▶ ◆ ◆ ◆
WORKLOAD: ▶ ◆ ◆ ◆

PEDAGOGICAL SOLUTION

- MOOCs/They are typically pre-defined by their subject and/or time span and delivered in a digital learning environment.
 - The courses are open access, available to anyone with internet access, and the student groups are often large due to the open-access policy.
 - Various kinds of MOOC are available.
 - When designing a MOOC, a teacher should take into account things like the course timings and the possible time-bound of the course, the number of students, interaction opportunities, course instructions, and instructor resources.
- When creating open-access learning materials, it is good to take into account also the copyright issues and open publishing licenses (e.g. Creative Commons).



DESIGNING A MOOC

- Structure, scope and workload: What is the course structure, how much time will be needed to complete each section and activity of the MOOC?
- Course accomplishment order: what is the order of the MOOC sections and activities, can students choose the order in which they complete the course, or is the order predetermined?
- Assessment: (1) is the course assessment fully automatic, partly automatic or manual;
 - 2) what is the grading scale,
 - 3) what is required for a pass?

The assessment should be aligned with the intended learning outcomes.
- Feedback: students are offered the opportunity to provide feedback on the MOOC for further development purposes.
- Interaction: Depending on the MOOC course, it can include various options and opportunities for interaction.

Students should at least have access to a discussion forum where they can chat and share information in the context of the MOOC.
- Accessibility: for example, video clips can include subtitles and/or alternative text.
- Copyright and open publishing licences: it is advisable to visibly mark the designers of the MOOC course and the applicable licence, e.g. a CC licence, for the course and its materials.

03 NETWORK BASED SIMULATION

Simulated problem-oriented digital learning



DURATION 
WORKLOAD 

Simulated learning is based on experiential learning and guided reflection

Network based simulation refers to a simulated learning environment created using data networks, where all simulated activities take place online.

- Simulations are learning situations that model various real-world situations in which the expected professional skills can be practised in a safe learning environment.
- The objective is to combine theoretical knowledge and skills and transfer them to practical situations.



NETWORK BASED SIMULATION EXAMPLE

The interaction features a network-based simulation that is real-time, immersive and highly realistic and uses an actor as a patient.

Description: Admission interview with a psychiatric patient

Participants: Active participants (1–2), a simulation actor, observers,

the teacher Objectives:

- The student will be able to use different types of questions and reflective listening in an admission interview
- The student will be able to assess a patient's mental health during an admission interview
- The student will be able to highlight key issues in an admission interview

Preparation: Students familiarise themselves with the case and advance materials and work together on a shared document in the planning and preparation phase on a 24/7 basis. Students attend a guidance meeting before the scenario.

Implementation: The scenario is implemented online in real time. A learning review discussion is held after the scenario.

04 VR ESCAPE GAME

problem-solving in virtual reality



DURATION
WORKLOAD



PEDAGOGICAL SOLUTION

A virtual game for exploring challenges in the digitalisation of health and social care services.

The game can include preparatory and debriefing tasks.

- The game introduces students to the possibilities and challenges of digitalisation in health and social care.
- The game uses Oculus Quest glasses and controls (game accessible from anywhere) or VR glasses connected to a computer. The game can also be played on a PC (without the virtual dimension).
- The game can be played by one student at a time, so you should also plan tasks for the rest of the group.
- Note: VR is not suitable for everyone, as playing can trigger e.g. epilepsy or migraine.



VR ESCAPE GAME, INSTRUCTIONS

A single-player game, i.e. each player solves problems independently.

- The view can be shared with spectators (glasses and screen on the same Wi-Fi network)

Before playing

- Ensure that the glasses and controls have power, don't forget spare batteries.
- Calibrate the glasses when changing to a different game mode (instructions on the glasses).

Playing (approx. 20 minutes)

- Introduction to the game and the controls.
- Control room: emergency! Problem-solving in various settings.
- The problems are randomised (the game can be played through multiple times).

After playing.



- Reflecting on the experience independently (e.g. in writing) or with the group (e.g. an online discussion)
- Applying the lessons-learned in practice (e.g. producing a customer referral plan).

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05 DIGITAL LIVING LAB

user-centred research, development and evaluation



DURATION: 
WORKLOAD: 

PEDAGOGICAL SOLUTION

A user-centred development environment for research, development and innovation carried out in an environment that simulates a real-world workplace.

- Digital Living Lab enables RDI collaboration with businesses and communities. Solutions are co-created in cooperation with students. Living Lab offers students authentic workplace experiences and concrete development challenges in which they can apply theory into practice.
- Students can also develop solutions based on their own ideas in the digital Living Lab environment.



DIGITAL LIVING LAB – EXAMPLE

Multidisciplinary student groups work on a challenge identified by a private/public sector operator or RDI project organisation. For example, the task could involve producing a proposed solution for promoting and monitoring self-care among home care clients with heart failure. The project is implemented in an online learning environment (e.g. Moodle) using collaborative platforms (e.g. Miro). The participants include the commissioning organisation and the intended users and stakeholder representatives.



Objectives: Students develop solutions by using service design and co-creation methods. The end result can be e.g. user interfaces of a product/service built using prototyping software (e.g. Figma).

Preparation: Before project launch: design the multidisciplinary implementation, agree the assignment, negotiate stakeholder participation (e.g. interviews) and handle contractual matters. Introduce the project to the students before the assignment starts in each discipline or course.

Implementation: The implementation includes independent group work, online workshops and guidance sessions (e.g. in Zoom). The work starts with a grouping session, production of a presentation video about the group, and a current-state analysis. The commissioning organisation gives a project briefing at the kick-off workshop. The work stages include project planning, customer insight, ideate, concept 1 (service process), concept 2 (user interface sketches) and prototyping. Stakeholders participate in information gathering and the evaluation of outputs, for example in Padlet. Finally, the outputs are presented at a showroom event to the commissioning organisation.

06 DIGITAL ENGAGEMENT



DURATION: 
VORKLOAD: 

Digital engagement refers to the participation and involvement of individuals and different groups, for example, in the development of a service by various digital means. The aim is to provide information, increase interaction, and encourage and highlight the perspectives of all parties in an equal and efficient manner.

Digital engagement includes

Self-engagement

- Deepening one's own understanding of one's own living environment. Sharing personal experiences for use in the development work.

Engaging outsiders

- Gathering experiences of various stakeholders, such as users or networks, by involving them in activities such as service design.

Expert engagement

- Generating in-depth discussions about the topic with the help of an expert, and opening up new perspectives and ideas.



EXAMPLES OF DIGITAL ENGAGEMENT

Self-engagement

- The student observes and explores the selected topic (e.g. challenges in everyday well-being), by studying his/her own daily life and living environment using the [Seppo game](#) and by producing an audio or video log. Possible themes include personal home environment, an external environment or topics relating to the use of technology.

Engaging outsiders

- The aim is to increase understanding of the chosen topic by involving relevant groups; for example, to gain insight into challenges relating to wellness at work. The student interviews his/her immediate family or friends, using a computer or phone to record the interview, or by sharing an online survey in various social networks. Alternatively, the student can use a paper-based [QR survey](#) in a public space where passers-by can respond to the survey.

Expert engagement

- The expert creates an environment for discussion that can generate new perspectives on the challenge at hand, e.g. wellness at work. The student discusses with the expert, for example via an online meeting service or the [Flipgrid](#) videochat, which enables them to participate in conversations anywhere and anytime.

When implementing digital engagement, it is important to note how external participants feel about being recorded and to provide clear instructions and information about the selected tool.

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07

FLASH HACK

Fast-paced team development



DURATION: 
WORKLOAD: 

PEDAGOGICAL SOLUTION

Flash Hack is a form of fast online co-creation. The aim is to create innovative and rapid solutions based on a given assignment.

Flash Hack can be implemented by bringing students from different fields into a single multidisciplinary team, or it can be used to encourage students to engage in creative and rapid thinking and collaboration.

- Various remote working solutions and digital platforms can be used.
- Flash Hack supports creative and rapid problem-solving in teams.
- The timed approach forces teams to develop rapid, well-defined and creative solutions to various challenges.
- Note: If your students are new to the applications, let them try them out first before the Flash Hack, so that they don't have to learn a new app during the fast-paced Flash Hack session.



FLASH HACK – EXAMPLE

The task is to innovate intangible or concrete solutions on a selected topic, such as everyday well-being / coping at work. A time limit of approx. 1.5 – 2h will be set for the assignment, within which the students must develop the solution on a collaboration platform, e.g. Miro.

The completed solution and presentation are submitted by the deadline via the selected platform (e.g. Padlet) for presentation to other groups

Objectives: The student teams develop a solution to a given problem in a fast-paced online exercise. The aim is to produce content such as promotional materials and a short pitch of approx. 1–2 minutes which explains the solution’s intended purpose, content, user groups etc.

Preparation: Students are divided into (preferably) multidisciplinary teams of approximately 3–5 people. Students are given an opportunity to familiarise themselves with the tools before the Flash Hack session.

Implementation: Implemented online in real time, but each team works in a separate online workspace. Separate workspaces can be created in Zoom. At the end of the designated time, the teams meet again to give short pitches of their creations.

Example platforms: [Miro](#) – for joint planning, [Padlet](#) – for collecting feedback, [Canva](#) – for creating promotional materials, [Powtoon](#) – for animated presentations

FEEDBACK AND ASSESSMENT

summary, evaluation, feedback and additional information



Give the students a summary of the learning outcomes and aims. Collect student feedback. You can see where you succeeded and where the module requires further development. Assess the students.

- Point them to resources for further information about the topic.
- Share the course feedback survey and collect comments on the module from students / participants.
- Note how long the module took compared to the estimate and whether each session/meeting took as long as envisaged.
- Make a note of students enrolled vs. passed.
- In addition to best-performing students, don't forget to commend those who improved the most at individual level or made a significant contribution to the team.
- Don't forget to assign badges.

BADGES

- A badge is a digital and visual documentary on competence
It can be used to recognise, validate and demonstrate various types of competence. For example knowledge, skills, or a specific role or task.
- The badge contains metadata such as the badge title, description and criteria, date of issuance (and validity period), certificates and information about the issuer. The recipient has demonstrated the knowledge and skills specified by the badge criteria.
- Organisations can create and award badges by using e.g. the Finnish Open Badge Passport Factory (OBF). A badge recipient can keep track of their badges by using e.g. the Open Badge Passport service, which allows them to:
manage how they display and share their badges in e.g. LinkedIn, Twitter, visual CV.

For more information on badges, see the following keywords: # badge, # Open Badge.



CANVAS BADGE

BADGE TITLE		
Responsible institution = who grants /admits the badge after the project Work package (during the project)		
Keywords Category (theme)		
Learning outcomes		
Why is the badge worth earning?	Significance to the recipient?	Significance to the grantor?
What skills/knowledge does the badge signify?		
How is the relevant competence evidenced? What does the applicant have to do to meet the badge criteria?		
Assessment criteria / grounds for rejection		
Badge referee (Optional)		
When does the badge expire? When should its content be updated?		
Other relevant information:	Recognition or credit award?	

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