

LEARNING IS FOR EVERYONE

WORKBOOK



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INTRODUCTION

The workbook Learning Is for Everyone (LIFE) is a practical tool for designing your teaching. The workbook is based on the Universal Design for Learning (UDL) framework, which aims to create equal opportunities for everyone to learn and to be successful. Accessibility and inclusion are essential. CAST (Center for Applied Special Technology) has developed the UDL framework based on research and practical experiments.

The LIFE workbook includes a wheel of design to provide an initial overview of the process of learning design. After this, the workbook is divided into three sections: engagement (why should I learn), multiple means of presenting information (what am I studying) and multiple means of action and expression (how am I studying). Each section contains background information and practical exercises that can be used to develop your own teaching.

For example, you can select one course as your starting point and use that course to go through each section. The learner is at the center of the design process. The goal is to provide individual support to each learner's cognitive processes through varied methods and motivating engagement.

UNIVERSAL DESIGN FOR LEARNING FRAMEWORK

The Universal Design for Learning (UDL) framework takes all students into account in teaching. The framework supports alternatives in teaching with the focus on design. Universal Design for Learning framework contains three main guidelines that offer a method for designing areas of teaching so that they are accessible for everyone. The guidelines can be used to design teaching materials, assessment methods and different functional methods, for example. The guidelines are described on page 5.

As the focus of the UDL framework is on design, teachers and instructors play an important role in it. A wheel of design has been created to aid the instructors. The wheel of design provides an initial overview of the process of learning design. The different sections of the design wheel are described on the next page. A total of six sections have been identified. The wheel of design is on next page.

This workbook applies the UDL guidelines by CAST in designing teaching to be accessible for everyone.



**LEARNING
IS FOR
EVERYONE**



1
Consider your organization's curriculum, implementation plans, and their learning objectives

2
Go through the learning objectives. Identify the skills and concepts that students should master after the course. Identify obstacles to learning

3
Design assessment in relation to the objectives. How can students demonstrate achievements aligned with the objectives in various ways?

6

Reflect and ask feedback. Revise the course based on feedback.

5

Design accessible content and materials. In what different ways can information be presented and diverse content be produced?

4

Consider learning support. How and in what ways do teachers support the learning process?

3

UNIVERSAL DESIGN FOR LEARNING GUIDELINES



**1. Multiple
means
of
engagement**



**2. Multiple
means
of
representation**



**3. Multiple
means
of
actions
and expressions**



GUIDELINE 1: MULTIPLE MEANS OF ENGAGEMENT– WHY SHOULD I LEARN?

Commitment to learning is an important stage that is involved in every UDL guideline throughout the whole learning process. This guideline supports the learners' engagement and motivation in various ways while ensuring the teaching is inclusive.

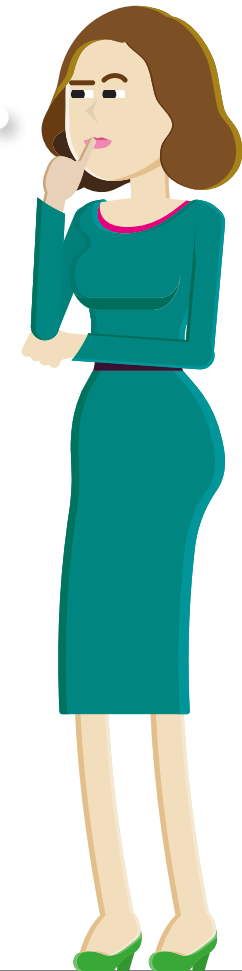
Commitment to and engagement in learning starts with considering the needs of your own learners. We all study in different ways and may need support in learning. It has been estimated that 10–20% of the population have some kind of learning difficulty. These can include difficulties in reading, writing, mathematics, learning foreign languages, using digital tools, motor skills, conceptualization and concentration.

In inclusive teaching, students are treated equally, and they are not categorized according to their characteristics or tendencies. The following pages help you to reflect on your own thoughts about inclusive teaching and what kinds of challenges the learners may have.

REFLECT (1)



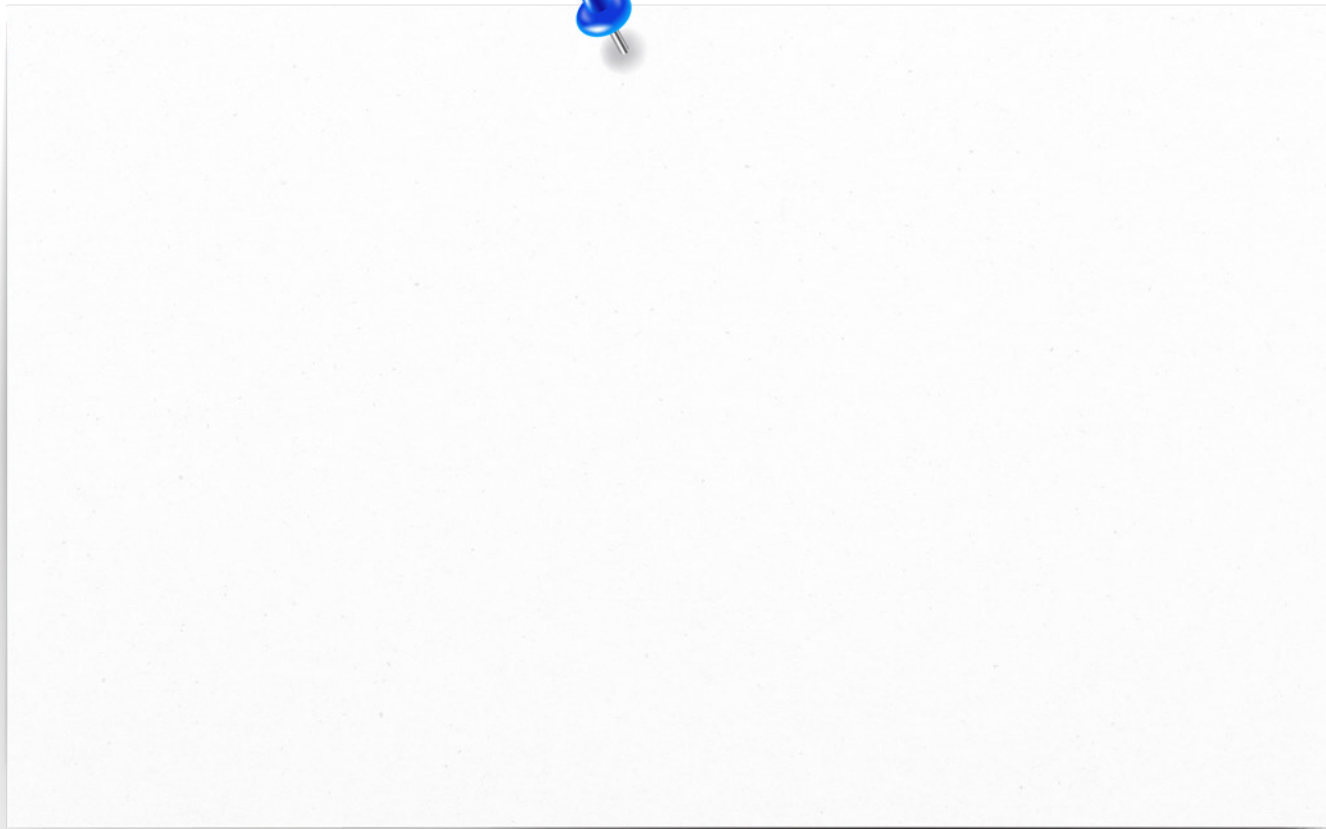
What are your thoughts regarding inclusive teaching?

A large, empty white rectangular area with a subtle texture, intended for writing or drawing. It is positioned below the question and to the left of the thinking woman.

REFLECT (2)



Think about your learners. Can you identify different learner types?



PERSONA



It is beneficial to identify learner personas and take these different personas into consideration when planning and implementing your teaching. Create personas for your own learners.

Name	General	
<input type="text"/>		
	What motivates them?	What interests them?
	What frustrates?	Hobbies:
Age:		
Living	Digital channels in use:	Goals and dreams:
Occupation		

INTRINSIC AND EXTRINSIC MOTIVATION



Self-determination theory is one of the theories explaining people's motivation. Two psychologists called Edward Deci and Richard Ryan outlined this theory and their starting point was the idea that a person is, by nature, proactive, self-motivated and self-directing. According to the theory, we are all human beings who set goals and challenge ourselves. The hypothesis of self-determination theory is that the most crucial thing is not how high your motivation is, but rather what its quality is.

There are two types of motivation: intrinsic (aka. natural) and extrinsic. Intrinsic motivation requires no separate rewards or punishments. In intrinsic motivation, there is a meaningful relationship and action between a person and the object of their motivation.

Extrinsic motivation means that a person acts and is motivated by rewards and punishments. In studies, extrinsic motivation is increased by, for example, grades, deadlines and expectations created by the social environment.

FEEDING INTRINSIC MOTIVATION



4 C



Feeding intrinsic motivation is important in teaching. Intrinsic motivation can be increased with assignments that are challenging in a good way and provide the learner with an understanding of performance.

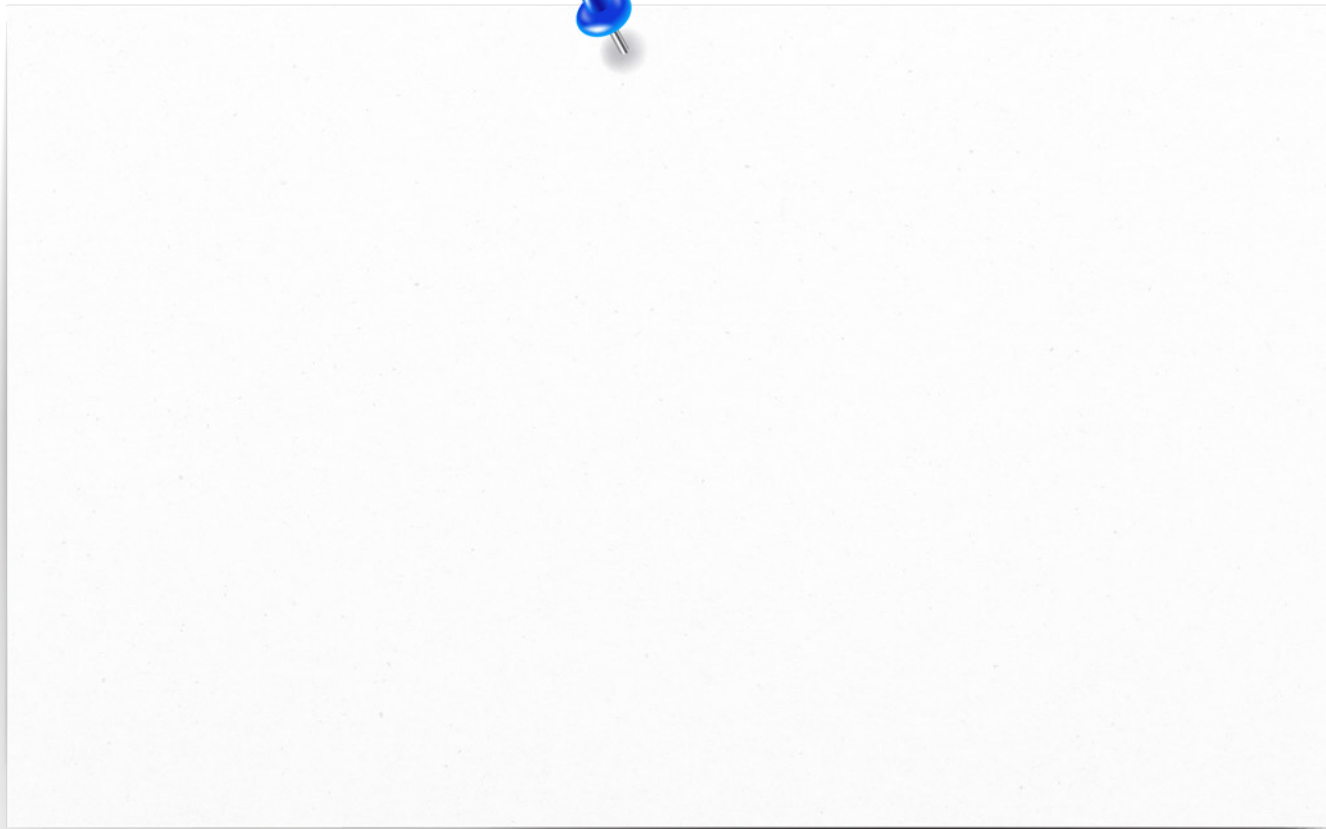
Take problem-based learning into consideration in your teaching and provide the learners with meaningful assignments. Learner engagement can be increased by providing feedback.

Intrinsic motivation is also fueled by the transparency of a study entity. This means, for example, that learners receive explicit information about all assignments and submission dates. Assessment criteria and the matters affecting the assessment also need to be highlighted. Intrinsic motivation is also stimulated by a sense of security. Create a safe learning environment where your learners know it does not matter even if they make mistakes.

REFLECT (3)



What are your thoughts on intrinsic motivation?



SUMMARY – MEANS OF ENGAGEMENT (1)



HOW TO ENGAGE AND MOTIVATE?

- Set clear learning objectives.
- Break down the lecture.
- Create a course structure that is consistent and easy to understand – transparency.
- Be quick to answer questions.
- Offer varied ways to engage learners, provide opportunities for guidance.
- Allow time for reflection either alone or with a pair.
- Illustrate the topic with interesting examples, spark a discussion.
- Allow students to complete some assignments alone or in groups.
- Ensure a sense of security for the students.



SUMMARY – MEANS OF ENGAGEMENT (2)



HOW TO KINDLE THE STUDENTS' INTEREST?

- Ask your students why they enrolled on the course and what they hope to learn.
- On the first day, provide interesting examples in your teaching, stimulate discussion.
- Be open about the expectations on the course and ask students to share their own expectations.
- Set clear goals (learning outcomes and objectives) for the course.
- Plan your scoring and assignments so that they are achievable.
- Give students an opportunity to see their progress.
- Assign smaller tasks instead of one major assignment.
- Provide feedback during the whole course.



NOTES (1)



GUIDELINE 2: MULTIPLE MEANS OF PRESENTING INFORMATION – WHAT AM I STUDYING?



The second section of the workbook, representation, is based on the UDL framework guideline of providing multiple means of representation for the learning content. Diversified teaching materials activate the recognition of information in the brain, i.e., what needs to be learned. Accessibility and clarity are an essential part of representation.

Everyone has their own way of perceiving information. Multiple means of representation support the learners' individual learning styles. The opportunity to make individual choices strengthens the learning experience, engagement and flexibility. When the information to be learned is presented using multiple means, you ensure all learners have access to the topic at hand. The topic becomes clearer when everyone has an opportunity to perceive information in a manner that is best suited for them. At the same time, diversification benefits learners in different situations, as not all days are the same for anyone.

DIVERSIFIED TEACHING MATERIALS



Online learning environments and digitality offer plenty of opportunities to introduce information and to support the study process. It is not enough to simply convert traditional text-based materials into a digital format. The topic should be presented in a flexible format that can include text, videos or podcasts, images, comics, graphs or tables, infographics or even interactive assignments. However, this does not mean that all information must be presented in every format possible. The teacher's expertise and familiarity with their own learners play a key role in the preparation of teaching materials.

After all, technology and diversification are only tools. Taking an individual's abilities into account is just as important as the available technical tools or different ways of presenting information in a learning environment. Teaching materials must be consciously designed to meet the needs of different learners in relation to the learning objectives. Identifying obstacles in advance also affects the design of teaching materials.

REFLECT (4)



Choose one thing from your teaching materials that the students have had a hard time understanding. Reconsider it. How could you present it through different forms of representation?



CLEAR EXPRESSIONS



Learning requires understanding. Clear, unambiguous language and support for understanding are part of representation. Explicit language and content with a uniform structure make understanding easier. It is a good idea to pay attention to instructions, as they often contain ambiguities.

- Think about your learners: What information do they already have on the topic? Has the topic already been introduced in their studies?
- What would you want learners to learn, remember, take in? Emphasize these things using different methods.
- Add explanatory and background information.
- Provide concrete examples that are linked with the current time and place, if possible.
- Use easy-to-understand vocabulary, explain concepts.
- Repeat difficult things, use different expressions when talking about a certain topic.
- Begin with familiar things and items, end with new things and details.
- Use clear sentence structures.
- Avoid unnecessary negative forms.

REFLECT (5)



Choose an example from your own assignments. Take a closer look at your own writing style. How could you make the assignment more explicit?



ACCESSIBLE TEACHING MATERIALS



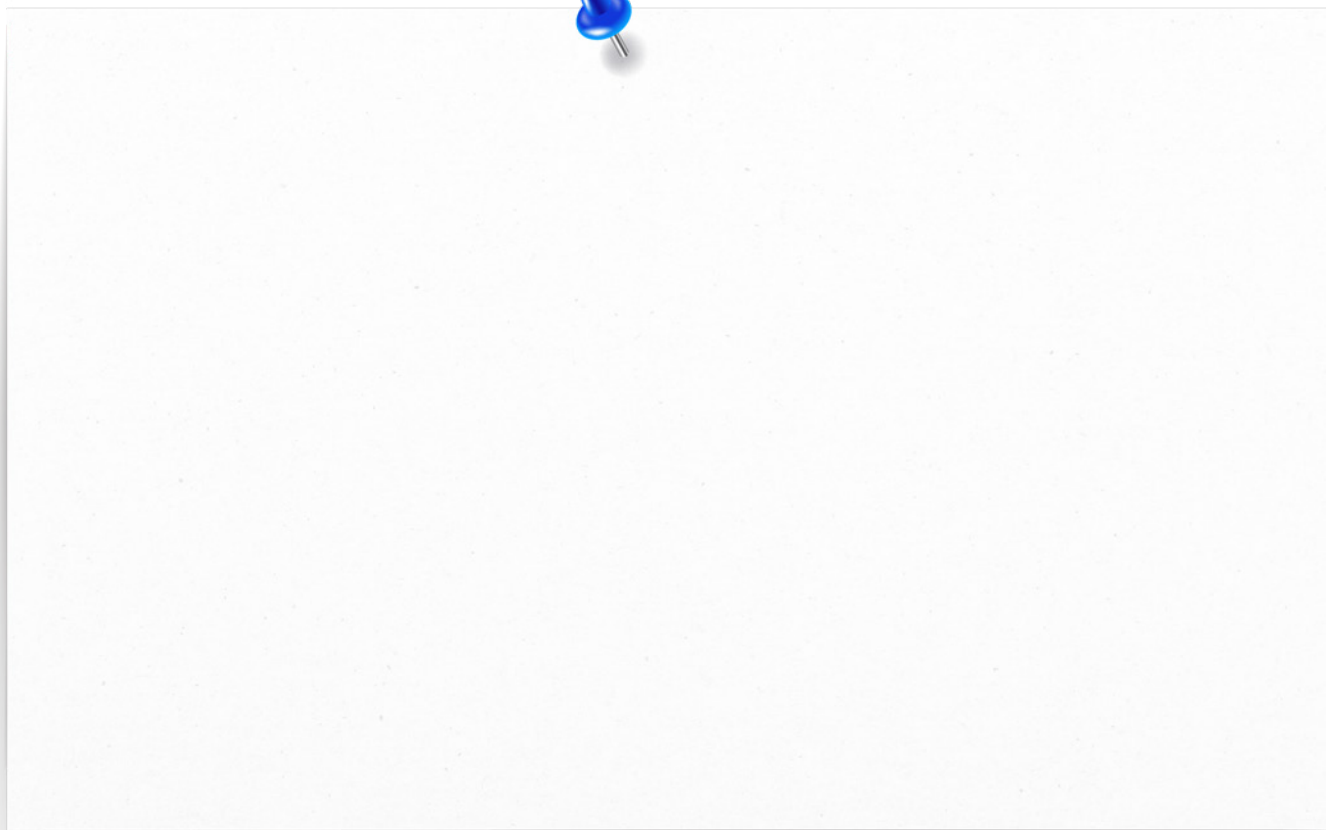
Accessibility means avoiding barriers in a digital environment. The understanding discussed above is a part of cognitive accessibility, which also includes usability and ease of use. Accessibility legislation defines the required features of websites, programs and online teaching materials. These requirements partly overlap with multiple means of representation. For example, video material that is freely available must be subtitled and audio material must have a text alternative. When you acknowledge the accessibility of online teaching materials, you ensure the equality of learners. To begin with, pay attention to the following:

- The structure of the online course is clear and logical
- Office files are accessible
- Images have alt texts, i.e., text alternatives
- Videos have subtitles
- Links have titles
- Colour contrasts and fonts are accessible

REFLECT (6)



How can you take accessibility into account in your teaching materials?



SUMMARY – MULTIPLE MEANS OF PRESENTING INFORMATION (1)



HOW CAN I PRESENT THE SAME CONTENT IN DIFFERENT WAYS?

Examples:

- Video subtitles
- Providing both written and spoken instructions
- Key concepts in a graphical form (illustrations, figures, tables)
- Illustrate with images
- Visual infographics
- Interactive assignments

HOW CAN I SUPPORT THE UNDERSTANDING OF THE CONTENT?

Examples:

- Explicit language and clear structures
- Add graphic symbols
- Highlight key elements in text
- Explain concepts with examples
- Provide an opportunity to independently check the level of learning with a quiz
- Group information into smaller elements

SUMMARY – MULTIPLE MEANS OF PRESENTING INFORMATION (2)



Key issues in a nutshell:

- Everyone can access what they should learn.
- Diversified and accessible teaching materials support the learners' unique ways of perceiving the topic at hand.
- Explicit language and highlighting key elements ensure.
- Accessibility benefits every learner.
- Learning process can be supported with different tools (e.g. checklists, automatic reminders, mind maps).

NOTES (2)



GUIDELINE 3: MULTIPLE MEANS OF ACTION AND EXPRESSION – HOW AM I STUDYING?



One of the UDL guidelines is to provide learners with different options of expressing their skills. This means that teachers should allow learners to choose how to demonstrate what they have learned. Some may excel at written assignments, while others may be able to express themselves well in speech or when using visual forms of expression.

UDL also encourages alternative ways of participating in learning situations and of interacting with others. Not everyone takes part in an oral discussion, but they can, for example, write their thoughts down or take part in a written conversation on the discussion forum of the learning platform.

UDL also supports learner independence and setting their own learning objectives. Each learner has their own strengths and weaknesses, and UDL encourages them to recognize these and to set realistic goals for their learning. This helps learners to take responsibility for their own learning.

Importance of feedback is emphasized in UDL. Teachers should provide regular feedback for their students on their progress and encourage the students to provide feedback on the teaching methods and the learning environment. This is a way to continuously improve the learning experience.

On the next page, you will find tips for providing your learners with different options for expressing their knowledge, alternatives for interaction and ways to help them reach their goals. There are also exercises to help you reflect and assess how diversified your own teaching is.

TIPS FOR EXPRESSING KNOWLEDGE



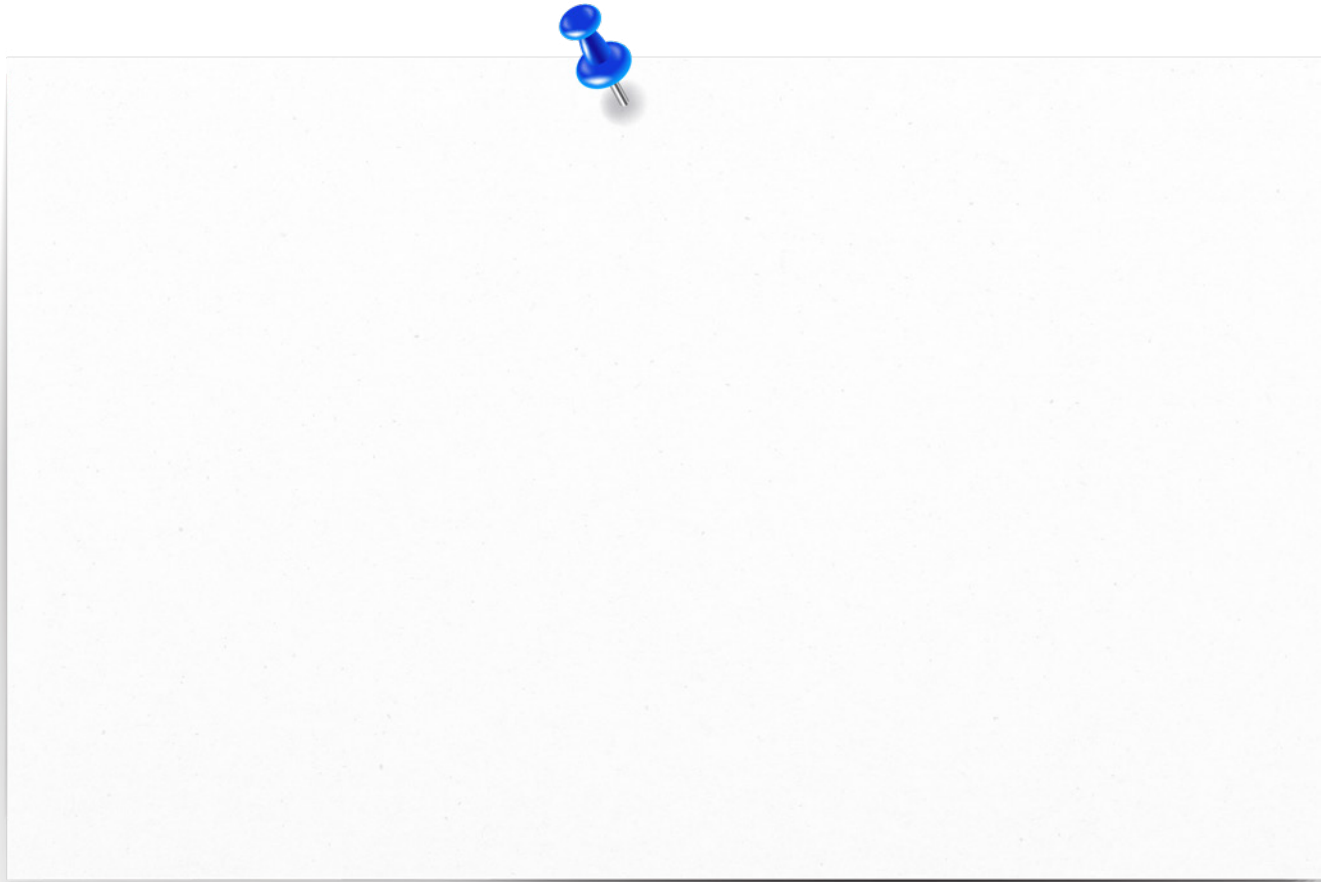
Here are some tips that help you offer your learners an opportunity to choose the most suitable way of expressing their knowledge. On the next page, you can think about different assignments and how they could support the objectives of your own course.

1. Accept different formats for assignment submissions: Use different submission formats, such as exams, oral presentations, videos, comics or work portfolios. Make sure you assess these submissions in different formats impartially: it is the quality that matters, not just quantity.
2. Clear assessment criteria: Clearly state the assessment criteria in advance so that your students know what to expect. This helps them focus their work on the right things.
3. Option to choose either group or individual work: Allow your students to choose whether they want to work in a group or alone.
4. Interactive assignments: Use interactive assignments, such as discussion forums or social media groups. These encourage the students to discuss and share their ideas.
5. Use tools: Allow your students to use different tools, such as spellcheckers, speech-to-text software or mind maps. These help them to express themselves more effectively.
6. Provide example answers for assignments. This gives your students an idea about what kinds of submissions are acceptable and what kinds of expectations there are.

REFLECT (7)



Write down some objectives for your teaching/course.



TIPS FOR INTERACTION



Each learner has their own way of participating and learning, and by offering alternatives, you can ensure that each learner can make the most of the learning experience. Below you can find some examples of different ways of interacting.

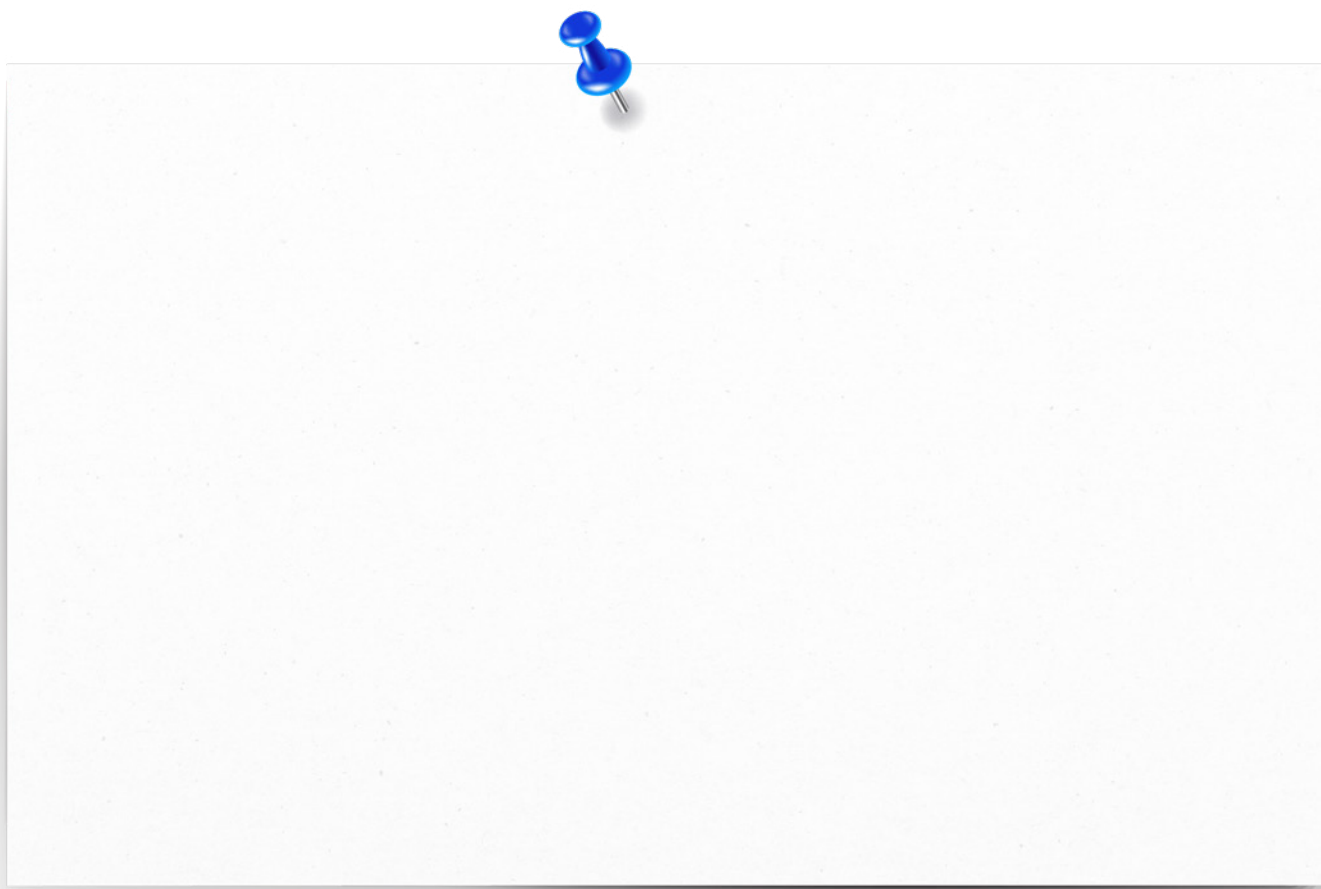
1. Enable multiple methods of interaction: Provide alternatives such as speech, chat, discussion forums or video messages, so that everyone can choose the best way for them to express their ideas.
2. Encourage information sharing: Encourage your students to share information and ideas with others. Collaboration and information sharing can contribute to learning and help learners to understand topics more thoroughly.
3. Use tools and software to support learning: Provide students with access to different tools and software that support learning. These make learning more varied compared to traditional notetaking on paper.

Next, consider the opportunities for interaction in your own course. In future, could you provide more alternatives?

REFLECT (8)



*What kinds of opportunities for interaction do you currently offer in your course?
In future, what kinds of alternative options could you offer?*



HELP LEARNERS TO ACHIEVE GOALS



It is important for learners to understand what is expected of them, and explicit descriptions of goals and objectives help this. The objectives of both the course and individual lessons need to be clearly defined and discussed with the learners.

Various assignments support learning. These assignments and related schedules must be communicated clearly to the learners so that they know what they need to do. It is also a good idea to regularly remind your students of the schedules and provide them with time estimates on how long it takes to complete a certain assignment. This helps learners in planning their own time management.

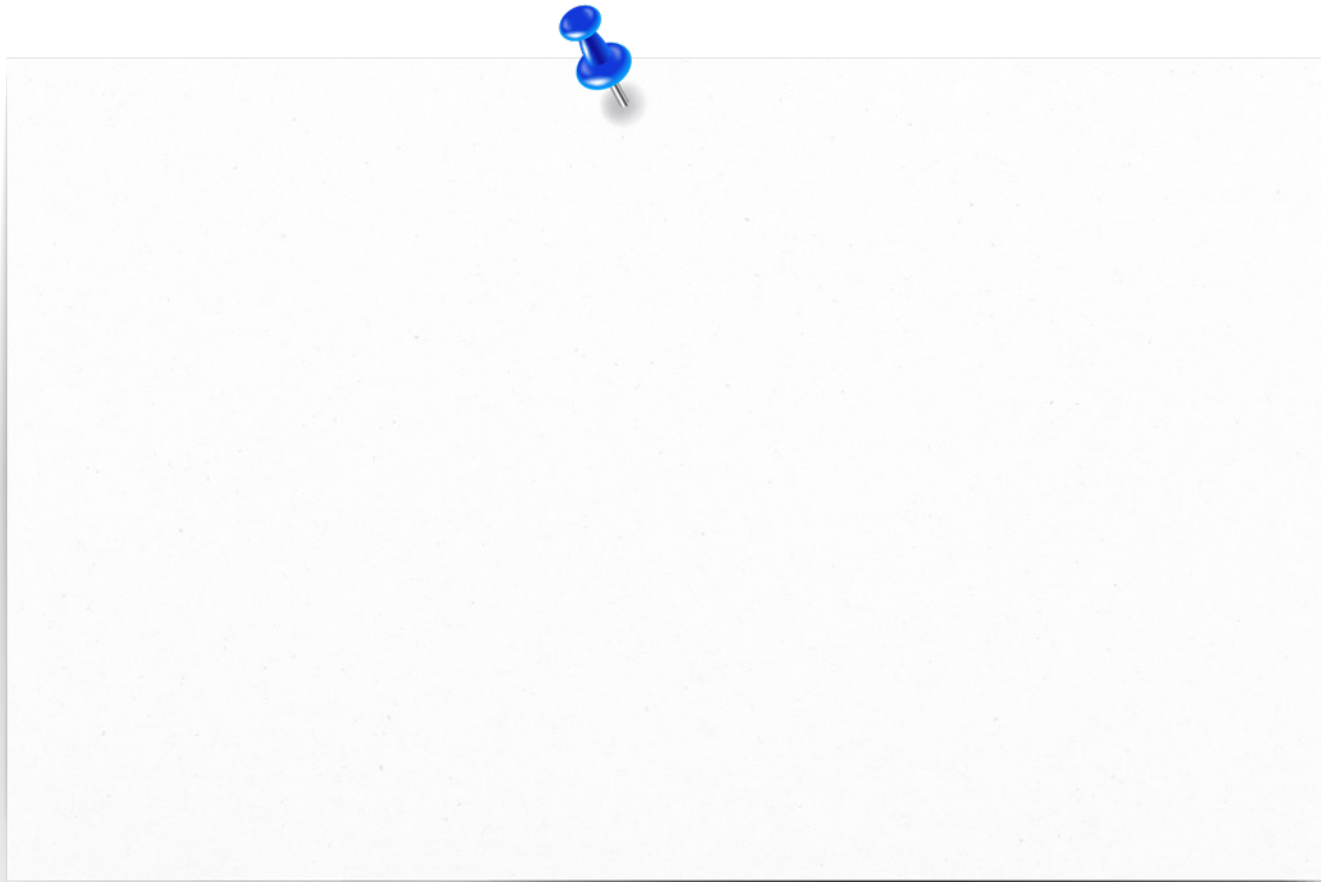
Breaking down the course into several sections, each with their own goals and assignments, also helps in achieving the objectives. These sections and related materials need to be designed in an order that supports learning.

In addition, different checklists and assignment templates help learners in achieving the objectives. These allow the learners to follow the instructions and ensure they do not forget anything essential.

REFLECT (9)



How could you improve your own learners' chances of achieving the course objectives?



PROVIDING FEEDBACK



WHICH OF THE FOLLOWING DO YOU USE ON YOUR COURSE?

ALREADY
IN USE

I INTEND TO
USE

I encourage self-assessment and reflection and provide templates that guide these.

I use peer feedback.

I provide feedback also during the course, not only at the end.

I explain the assessment criteria of an assignment in advance and as transparently as I can, and reflect these in the feedback I give.

I also ask the learners for feedback and show that I am interested in offering alternatives.

SUMMARY – MULTIPLE MEANS OF ACTION AND EXPRESSION



HOW TO EXPRESS KNOWLEDGE IN DIFFERENT WAYS?

- Offer alternatives for assignments, such as a presentation, a video, a portfolio.
- Provide opportunities for demonstrations of competence.
- Offer interactive assignments, such as discussion activities.

HOW TO PARTICIPATE IN DIFFERENT WAYS?

- Let learners choose between working in a group or alone.
- Provide assignment examples.
- Provide access to interactive software.

HOW TO SET GOALS AND GIVE FEEDBACK?

- Help the learners to set goals and create schedules.
- Be clear about the assessment criteria.
- Reflect the learning objectives and assessment criteria in your feedback.
- Make sure feedback and peer feedback are given in a timely manner.

NOTES (3)



MORE INFORMATION

Black, J. & Moore, E. J. 2019. UDL Navigators in Higher education. A Field Guide. CAST Professional Publishing

CAST. Universal Design for Learning UDL. <https://www.cast.org/impact/universal-design-for-learning-udl>

Kognitiivisen saavutettavuuden ohjeet. <https://www.selkeastimeille.fi/kognitiivinen-saavutettavuus/kognitiivisen-saavutettavuuden-ohjeet>

Laamanen, M. 2021. Verkko-opetus saavutettavaksi. Digikampus. <https://info.digicampus.fi/2020/06/04/verkko-opetus-saavutettavaksi/>

Lonka, K. 2015. Oivaltava oppiminen. Helsinki: Otava.

Miten huomioit saavutettavuuden oppimateriaaleissa. 2022. Avoin tiede:

<https://avointiede.fi/fi/asiantuntijaryhmat/oppimisen-avoimuus/miten-huomioit-saavutettavuuden-avoimissa-oppimateriaaleissa>

Tobin, T. J. & Behling K. T. 2018. Reach Everyone, Teach Everyone. Universal Design for Learning in Higher Education. West Virginia University Press

Universal Design for Learning : A best practice guideline. 2017. Erasmus project.

UDLL. HOWEST (SIHO), AHEAD and NTNU (Universell). <https://ahead.ie/userfiles/files/shop/free/UDLL%20Online.pdf>

UDL Tips for Assessment. CAST:

<https://www.cast.org/binaries/content/assets/common/publications/downloads/cast-udltipsforassessment-20200920-a11y.pdf>



**LAU
REA**

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