UNIVERSITY OF SILESIA IN KATOWICE

SOFIA UNIVERSITY ST. KLIMENT OHRIDSKI

VYTAUTAS MAGNUS UNIVERSITY

Project "Activating Students in Online Classes"
2020-1-PL01-KA226-HE-096358

Intellectual Output 2.

Teacher training material 02

2022

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KATOWICE 2022

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Guidance

on organisation and assignment planning FC

IO2 Teachers Training Materials AC Project

Dr Małgorzata Gwadera
University of Silesia in Katowice, Poland

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www.us.edu.pl

Teachers Training Materials – Guidance

What is Flipped classroom approach?

Students' first exposure to new material in the course, and their steps in basic learning of that material, will take place outside of synchronous meetings (wherever and however they are conducted) and will be individual because students can take advantage of unstructured time to interact with the material at their own pace, and because basic cognitive tasks do not require as much intensive expert assistance as higher-level tasks. Having moved the first-person experience out of the classroom (real or virtual), the entire course encounter is now open to higher-level questions and tasks-the kinds of complex, challenging work that students must do in a group space during classes to assimilate the information they have seen and that will benefit the most from social interaction with peers and close guidance from an expert (teacher).

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Teachers Training Materials – Guidance

General stages of organisation part 1

- Select the topic – requires conceptual thinking;
- Prepare and locate resources for pre-reading, make them available to all students outside the class;
- Make the students accountable for their learning, provide the students motivation to learn;
- Provide environment in class for appilcation of the concepts; encourage deeper learning while maintaining enthusiasm.

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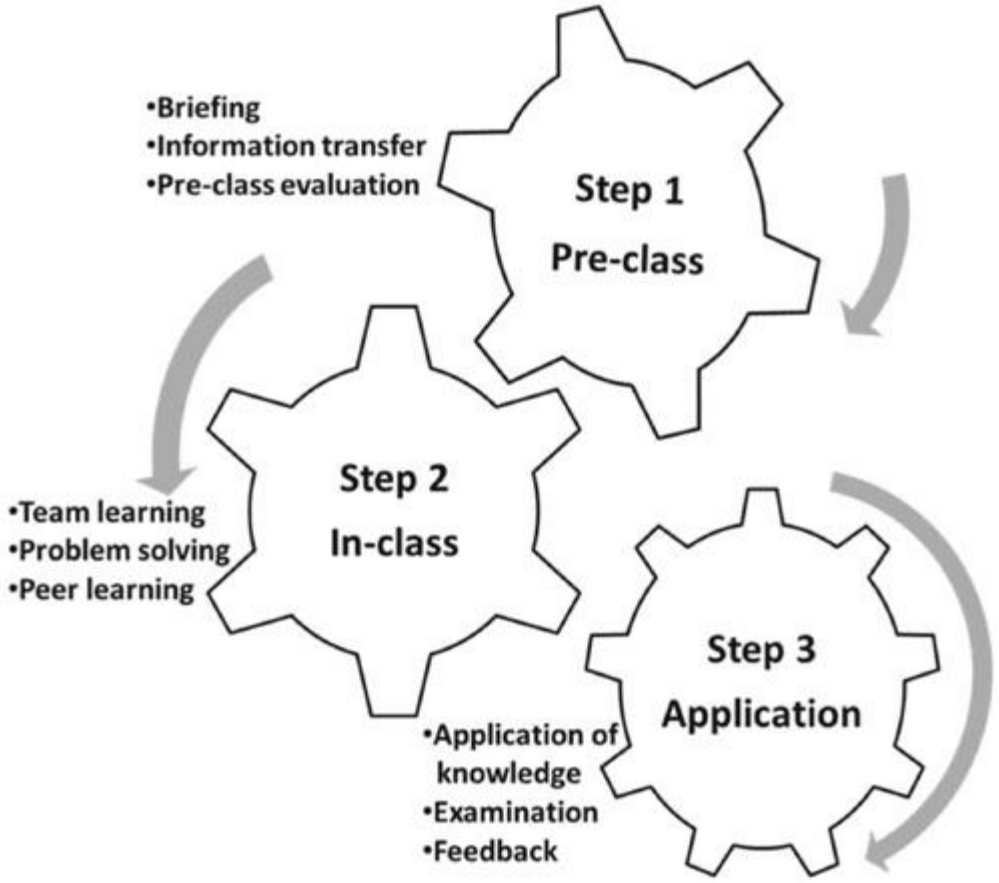
General stages of organisation part 2



Source: https://www.indianpediatrics.net/june2018/june-507-512.htm

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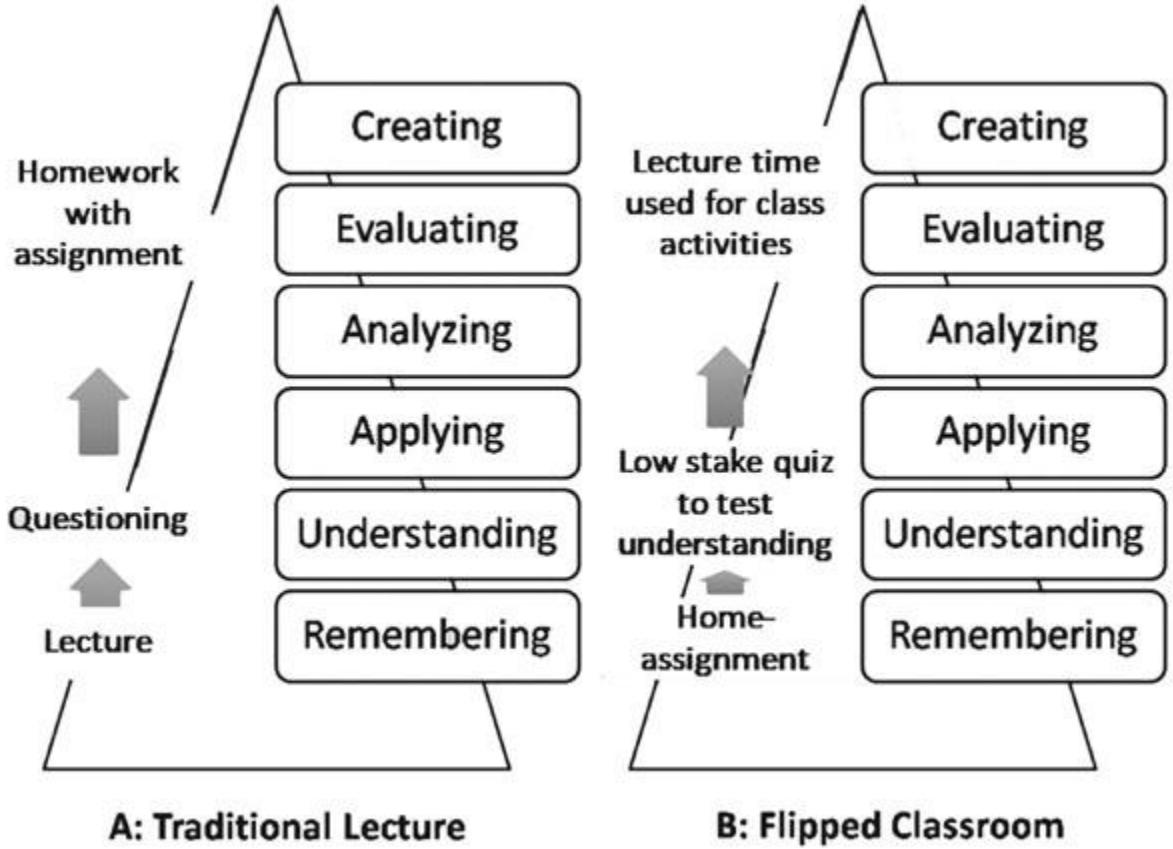
Teachers Training Materials – Guidance

The process of traditional classroom (A) and flipped classroom (B) as aligned with revised Bloom's taxonomy.



Source: https://www.indianpediatrics.net/june2018/june-507-512.htm

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Two basic conditions that a teacher must meet in order for the method to make sense are:

- excellent knowledge of the taught subject (mastery!);
- excellent knowledge of the group of students with whom he/she works (cultural, psychological, social, economic and technical conditions).

Teachers Training Materials – Guidance

How to make videos your students will love

- Keep it short;
- Animate your voice;
- Create the video with antoher teacher;
- Add humor;
- Do not waste your students' time;
- Add annotations;
- Add callouts;
- Zoom in and out;
- Keep it copyright friendly.

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Teachers Training Materials – Guidance

Time management in class (exemplary)

Traditional Classroom		Flipped Classroom	
Activity	*Time*	*Activity*	*Time*
Warm-up activity	5 min.	Warm-up activity	5 min.
Go over previous night's homework	20 min.	Q&A time on video	10 min.
Lecture new content	30–45 min.	Guided and independent practice and/or lab activity	75 min.
Guided and independent practice and/or lab activity	20–35 min.		

Source: J. Bergmann, A. Sams (2012), Flip your classroom.p.15

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Teachers Training Materials – Guidance

10 Practical principles

of flipped classroom design

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Teachers Training Materials – Guidance

1. Practical principles of flipped classroom design:

Providing students clearly written (also discussed!) and well-organised instructions (without students' full acceptance of the application of the method, success will not occur). The teacher's primary task is to explain to students the goals and principles of the flipped classroom, provide clear and precise instructions, and guidelines for participation in classes.

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Teachers Training Materials – Guidance

1. Practical principles of flipped classroom design:

A cycle of training in IT, self-work skills, independent learning, organisation and time management, responsibility for one's learning style and pace, and participation in team problem solving may be necessary.

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1. Practical principles of flipped classroom design:

- Awareness and acceptance of the purpose and principles of the flipped classroom method;
- Awareness and acceptance of the learning outcomes;
- Awareness and acceptance of self-motivation need during the tasks implementation – the specific teacher's role and the students' roles.

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2. Practical principles of flipped classroom design:

Planning and providing adequate time to complete assignments according to the group possibilities and limitations (agreed with students).

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Teachers Training Materials – Guidance

3. Practical principles of flipped classroom design:

Quality of didactic materials

Provide opportunities for students to acquire preliminary information before the classes (**professional teacher's created** materials: videos, animations, articles, presentations, sound materials, websites, applications or **good quality** ready-made web materials).

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4. Practical principles of flipped classroom design:

The appropriate selection of educational tools

Ensuring the use of familiar technology that students can easily access (a good understanding of the capabilities and limitations of a specific group of students is needed - in terms of economic (technical) capacity and software skills.

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5. Practical principles of flipped classroom design:

Students' motivation system

Encouraging students to watch online lectures and prepare before the classes (designing or finding good quality data online, presented appropriately to a particular group of students' perceptual abilities and expectations).

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6. Practical principles of flipped classroom design:

Combining out-of-class activities and in-class activities

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6. Practical principles of flipped classroom design:

Students Learning Home Activities (exemplary)

- Students will watch YouTube videos (total length depends on the group).
- While watching the videos, students will complete an attached note sheet designed to help them collect information, draw pictures, e.g. of the specific models, and write questions that they still have.
- Students will complete a brief Google Form when they finish watching the videos sharing one thing they understand well and one question or uncertain topic. The teacher will review these questions and use them to develop the instruction in the in-class.

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6. Practical principles of flipped classroom design:

Students Class Activities (exemplary)

1. The class will open with a question and answer session, and the teacher will ask questions raised by students (Google Form) if no one provides questions in class (discussion).
2. Students that did not watch the videos will go to the back of the room to watch them on their phones or different equipment.
3. Students will work in small groups to complete the side of the material presented. The teacher will lead a discussion on the note sheet after students have time to work. Students will be placed in groups based on their strengths and weaknesses based on the Google form results. Each group can work at their own pace and revisit the multimedia material using their smartphones. The teacher serves as an expert to each group during the classes, answering their questions and setting their objectives. Working cards are a great way to do this in the classroom; work cards, brainstorming, debate, exercises with iconographic, SWOT analysis, WebQuest, etc.

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6. Practical principles of flipped classroom design:

Students Class Activities (exemplary)

4. Teacher will lead students in the discussion of notes. Students will be asked to use phones or other equipment to research some of the videos' images and experiments that weren't covered. The teacher will create a collaborative note sheet (displayed on the screen) as students find information and will be shared with all students in the class.

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7. Practical principles of flipped classroom design:

Encouraging students to form a learning community (necessary for teamwork, collaboration and sharing in-class).

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8. Practical principles of flipped classroom design:

Providing immediate feedback on individual or group work

(using the appropriate, available platforms to maintain regular contact and meet all students' needs).

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9. Practical principles of flipped classroom design:

Organising assessment methods – possible forms

quiz, computer-based multiple-choice tests, written essays or short answers, educational games, project work, peer to peer valuation, e-portfolios (an online compendium of student work, assignments questionnaires and exam answers), individual lent participation rates in online activities, such as self-assessment questions, discussion forums, podcasts; qualitative analysis e discussion forums, for instance, the quality and range of comments, indicating the level or depth of engagement or thinking.

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Teachers Training Materials – Guidance

9. Practical principles of flipped classroom design:

Organising assessment methods - types of evaluation:

Individual student work outside the class:

Diagnostic assessment: Its aim is to gather information so in this case grades are not given. We do this type of assessment at the beginning of the academic year or when introducing a new subject.

Formative assessment: It is based on regular monitoring. It gives feedback to students and to the teacher during the activities.

Summative assessment: This happens at the end of an activity, to check to what extent the objectives were met.

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9. Practical principles of flipped classroom design:

Organising assessment methods - types of evaluation:

<u>In terms of who is involved in the assessment:</u>

- Teacher evaluates individual student development;
- Teacher evaluates team work;
- Student self-assessment;
- Student assessment by peers.

Instruction needs to be provided by the teacher at the beginning, so students gradually learn how to provide feedback about their own performance or about their peers'performance.

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10. Practical principles of flipped classroom design:

Assessment is not an end in itself, class time cannot be used just to prepare students for tests, nor can home time be considered homework.

The objective of assessment is to improve the quality of learning

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Methods possibly used before/ouside class activities

Audiovisual lecture, using the demonstration method, conducted with an appropriate technological tool – pre-recorded and made available to students before/outside the class, using appropriate technology tools.

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Methods possibly used during in-class activities

Collaborative learning/Teamwork – fosters students engagement during class time integrating technology

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PROJECT

The project method is one of many teaching methods based on learners' own activity. The term "project" refers to the entirety of activities undertaken by students on the basis of predefined assumptions. The project makes use of the student's natural curiosity, allows for different problem-solving strategies.

Project phases

1) Initiating the project.
2) Writing the contract.
3) Choice of topic.
4) Dividing into groups.
5) Formulating general and specific objectives of the project.
6) Preparing the work schedule, task division.
7) To select literature and search for sources of knowledge.
8) Implementation of the project.
9) Presentation of the project results.
10) Evaluation.

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DEBATE, DISCUSSION

1) **Panel discussion**: participants first have the opportunity to listen to opinions, information from people who are experts on the topic or can share their experience. Then they prepare questions for the panellists and can start the discussion. Both panellists and listeners take part in the discussion. It is good to end the meeting with a reflection, e.g. by proposing the question "What have I learned today about myself and the world?„
2) **Oxford debate**: a form of debate on a specific thesis. The participants are divided into two teams: supporters and opponents of a given thesis. They decide which side they are on before the debate starts. It is also worth choosing from among the participants a secretary in the team, who will write down the conclusions of each side, questions and watch over the time. In an Oxford debate, it is necessary to follow the rules written in the contract. We work on facts, open questions and not judgements. You can change sides in the debate during the course.

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DEBATE, DISCUSSION

3) "Aquarium" discussion: the intention of the "aquarium" type of discussion is for team members to learn from each other and improve their discussion skills. The procedure in brief: setting the topic of the discussion, duration of one round (e.g. 20 minutes), choosing discussants (3-5 persons from the group) who start talking among themselves in the middle of the room. After the round, the others give feedback to the discussants on how the discussion was conducted (not on their views or opinions).Then the following persons can start the discussion.

4) Socratic discussion: a form of intellectual conversation based on a specific publication known to all participants (text, strategy, report, poem, recording, article, picture) - they usually read it before the group meeting. They can propose it themselves. The discussion is based on questions that the moderator can write out. Sample questions: What is the thesis? What are the facts? What do the facts imply? What premises support the thesis? What supports the thesis? What can be learned from this? What is important here? Why talk about it? What can be implemented in our organisation?

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BRAINSTORMING

Brainstorming is a group creativity method by which efforts are made to find a conclusion for a specific problem by gathering a list of ideas spontaneously contributed by its members. It is a situation where a group of people meet to generate new ideas and solutions around a specific domain of interest by removing inhibitions. Students are able to think more freely and they suggest as many spontaneous new ideas as possible. All the ideas are noted down without criticism and after the brainstorming session the ideas are evaluated. A group of students could write ideas on sticky notes as part of a brainstorming session.

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CASE STUDY

A method of analysis of a specific case, event, phenomenon, allowing to draw conclusions as to causes and results of its course, characteristics, technical, cultural, social conditions, etc. It develops creative thinking, inspires learning and a comprehensive look at the problem.
Case study can also be a form of presentation of the completed project. It shows the goals, challenges, problems and chosen paths of action, which were taken by a particular group. Thanks to such practice, we can learn from the experience of other people, organisations.

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CASE STUDY

Example stages of group work with a selected case study:

1) Getting acquainted with the case study prepared by the process facilitator;
2) Creating a map of context/knowledge/facts: establishing what we know, what comes from the description and our information that we currently have, and naming what we don't know and need to check;.
3) Identifying problems and their causes and effects;
4) Determining the main problem, i.e. the key element that the team wants to address;
5) Checking, deepening information about the main problem and its causes - looking for data from verified sources. This is a learning moment - participants share their work in this field, collect data, pass acquired information and conclusions to each other;
6) Determining the main goal (usually a mirror image of the main problem);
7) Proposal of solutions (specific goals + concrete tasks to achieve them);
8) Action plan.

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PROBLEM-BASED LEARNING

Problem-based learning (PBL) is a student-centered pedagogy in which students learn about a subject through the experience of solving an open-ended problem found in trigger material. The PBL process does not focus on problem solving with a defined solution, but it allows for the development of other desirable skills and attributes. This includes knowledge acquisition, enhanced group collaboration and communication. The process involves clarifying terms, defining problems, brainstorming, structuring and hypothesis, learning objectives, independent study and synthesis. The identifying what the students already know, what they need to know, and how and where to access new information that may lead to the resolution of the problem.

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GAME-BASED LEARNING

Game-Based Learning (GBL) is designed to balance subject matter with gameplay and the ability of the player to retain and apply said subject matter to the real world, an effective method for making students work toward a goal, allowing them to learn through experimentation, practicing behaviours and thought processes that can be easily transferred from a simulated environment to real life. GBL is often mixed with gamification, understood as the application of game elements and digital game design techniques to non-game problems, such as business (growing in education technology) and social impact challenges. The line between GBL and gamification is sometimes very thin; the elements of gamification are normally present in a GBL activity.

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Stages that could be undertaken using game-based learning method - exemplary

1)*Watching and watching the film again*. Students watched and watched again at home the animation film sent by their teacher to the classroom group. They had been notified that the film could be watched as many times as needed to understand the content.

2)*Discussion with the teacher*. During the Zoom meeting, the teacher discussed with students the content of the animation film, offered support to students who had difficulties understanding the content, offered additional explanations, and corrected wrong conceptions.

3)*Game-based evaluation*. The game designed using the Wordwall platform was sent through the Zoom chat. After finishing the game, students received the score, information about the correct answers as well as the wrong ones.

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JIGSAW

The ‘Jigsaw Method’ is one form of a cooperative learning strategy and is designed to facilitate individual and group learning activities in education. The strategy requires that the learning is initially shared among the group and provides everyone in the class with an understanding of the entire topic or concept. For the activity, the class is divided into small ‘Jigsaw’ groups. The main topic is divided into several sub-topics which are then assigned to students within each group. Individual students must research their assigned sub-topic before joining up in expert groups with students who have been assigned the same sub-topic. The expert group allows students an opportunity to share and learn from one another and clarify any misconceptions garnered during the individual research stage.

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How to choose digital tools for higher education

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Erasmus +

www.us.edu.pl

Starting With “Why”: How I Choose Digital Tools to Support Students Learning

"Backward design" - that is, start with the question: "What learning effect should my students achieve?

When it is necessary to explain why my students participate in these activities, what would I say?

If we reflect on our "why", it is possible to step back from that result - at this point think about tools that can help our students.

Each tool should support three basic goals: motivation to develop independently; developing learning skills; mastering the standards.

Constructive allignment

https://www.teacher2teacher.education/2020/12/06/starting-with-why-how-i-choose-digital-tools-to-support-my-students/

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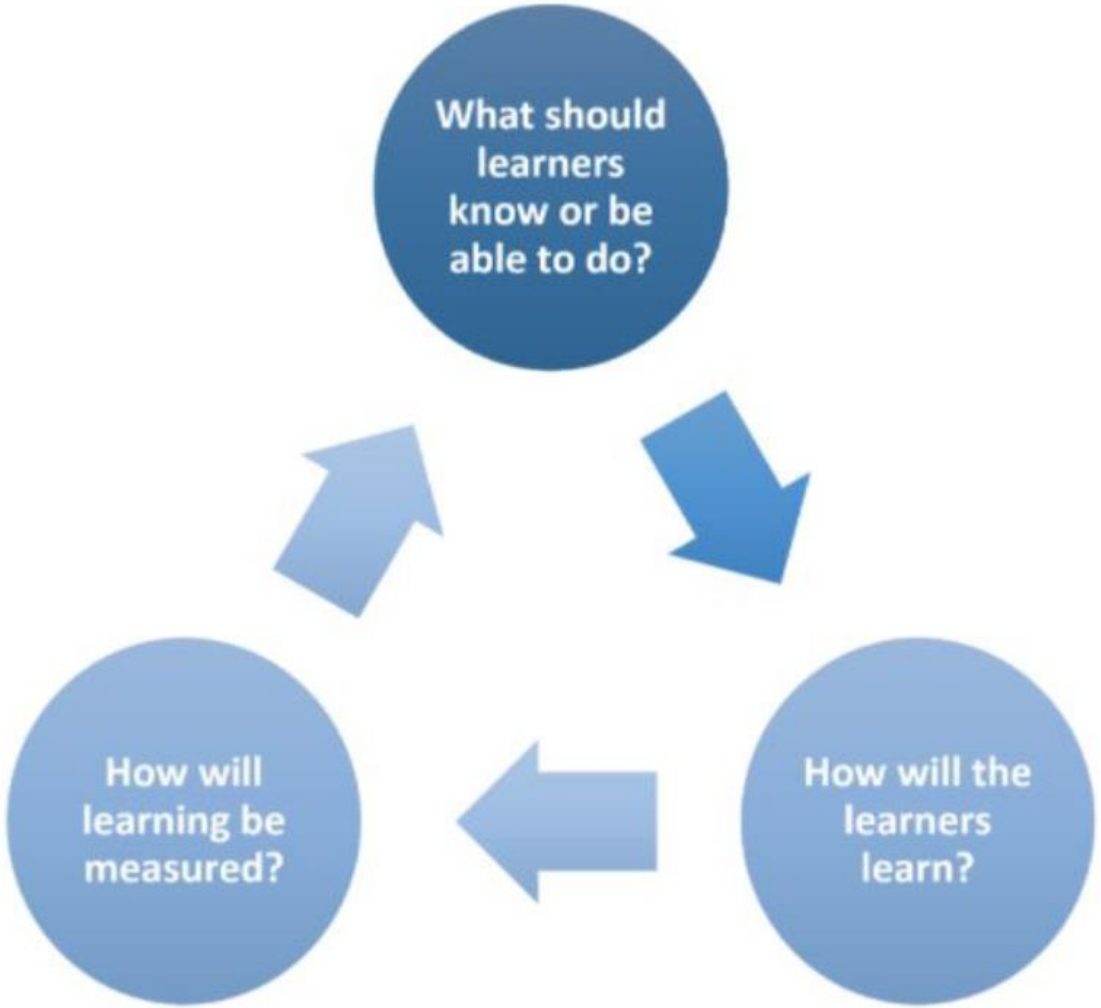
Constructive allignment



http://ectn.eu/work-groups/stem-cpd/

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Constructive allignment

Constructive alignment means synchronising pre-defined objectives, learning and teaching activities and assessment tools. It is strongly based on active learning and student involvement. It seems to be one of the most influential teaching philosophies in higher education today.

When creating a course (unit), ask yourself the following questions:

✓What should students know or be able to do after the course or course unit (what outcomes do you want to achieve with these students?)

✓What learning and teaching activities should you undertake to enable students to acquire these skills?

✓How to assess whether the learners have sufficiently mastered the intended competences?

http://ectn.eu/work-groups/stem-cpd/

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Constructive allignment

Step 1: Start with learning outcomes.
What do I want students to know and be able to do when they leave this course? Use skills across Bloom taxonomy to write your aims.

Step 2: Choose assessment methods
What kinds of tasks will reveal whether students have achieved the learning objectives I have identified? Think of assessment methods that allow students to demonstrate that the aim(s) of the course have been met.

Step 3: Decide on teaching and learning activities
What kinds of activities in and out of class will reinforce my learning objectives and prepare students for assessments?

http://ectn.eu/work-groups/stem-cpd/

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Starting With “Why”: How I Choose Digital Tools to Support My Students

Each tool should support three basic goals:

- motivation to develop independently;
- developing learning skills;
- mastering the standards.

https://www.teacher2teacher.education/2020/12/06/starting-with-why-how-i-choose-digital-tools-to-support-my-students/

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Starting With “Why”: How I Choose Digital Tools to Support My Students

1. Using virtual tools to promote voice and choice

2. Building learning skills by building edu-tech skills

3. Using digital feedback to promote student success

https://www.teacher2teacher.education/2020/12/06/starting-with-why-how-i-choose-digital-tools-to-support-my-students/

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1. **Using virtual tools to promote voice and choice**
   Teaching in the virtual classroom gives me really exciting tools to promote this differentiated learning: I use rooms / subgroups to create discussion groups, link them to shared Docs or Google Slides, and give each student a choice of how to engage and what is their responsibility

https://www.teacher2teacher.education/2020/12/06/starting-with-why-how-i-choose-digital-tools-to-support-my-students/

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2. Building learning skills by building ed tech skills

How skillfully students use digital tools? if the tool (e.g. at the beginning of the semester) is new for students, it would be good to use it in a simple way, so that the students feel confident and able to use it relatively independently.

At the same time, it is worth that the tool could be used for deeper learning in the long term. In this way, students become more adept at using digital methods of working independently and together. Additionally, their ed-tech skills enhance their learning skills.

https://www.teacher2teacher.education/2020/12/06/starting-with-why-how-i-choose-digital-tools-to-support-my-students/

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3. Using digital feedback to promote student success

Feedback is a complementary part of learning and therefore the third point also relates to the first (choice and communication).Feedback is suggested not only in writing (comments in a text file) or a descriptive evaluation but also for viewing or listening.

https://www.teacher2teacher.education/2020/12/06/starting-with-why-how-i-choose-digital-tools-to-support-my-students/

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At the beginning, it is worth browsing the available resources and finding ideas for using them. Here are some basic considerations when choosing a tool:

Is it free?

Do I need an account?

Do my students need an account? If yes, what kind of information does the service ask for?

Does it offer teacher accounts?

What are the Terms of Service? Can my students legally use the site?

Can my students' finished products be easily archived or shared?

https://www.edutopia.org/blog/best-tech-tools
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Consider working with a given tool and how it will be used by students. A few things to consider when getting to know the tool:

How long will it take my students to set up an account or log in?

What are the most vital workings of the tool that I will need to show my students to get them started?

How long will it take to produce a finished product?

How will my students hand in their work?

https://www.edutopia.org/blog/best-tech-tools

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Seven Items to Consider When Choosing Tools or Activities

Related to **technology** specifically, the education research indicates that underserved students benefit from:

- Opportunities to learn that include one-to-one access to devices.
- High-speed Internet access.
- Using technology designed to promote high levels of interactivity and emphasize discovery.
- The right blend of teachers and technology and only rarely one without the other

https://www.edsurge.com/news/2016-06-25-what-7-factors-should-educators-consider-when-choosing-digital-tools-for-underserved-students
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Seven Items to Consider When Choosing Tools or Activities

Related to the **context**, education research tells us that underserved students benefit from:

• Learning activities that focus on the development of higher order thinking skills (such as problem solving, making inferences, analyzing, and synthesizing) and 21st century skills.

• Learning activities that draw on culture and community, specifically activities that integrate culturally relevant practices

• Underserved students benefit from learning activities that provide them with opportunities to drive their own learning.

https://www.edsurge.com/news/2016-06-25-what-7-factors-should-educators-consider-when-choosing-digital-tools-for-underserved-students
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Successful technology implementation in education demonstrates a high degree of fit within and between these seven key elements.

The abilities, thinking and convictions of the learning community, including the teacher implementing the tool, but also members of the wider community, including other teachers, administrators, IT staff and parents.

It is worth preparing a step-by-step implementation plan with dates and measurable goals that will bring applications into high alignment within an acceptable time frame.

https://www.edsurge.com/news/2016-06-25-what-7-factors-should-educators-consider-when-choosing-digital-tools-for-underserved-students

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Seven key aspects to adapt when analyzing or adopting technology:

1.Student needs.

2.The specific learning objectives and intended outcomes

3.The details of the learning activitie

5.The specific features of the digital resource being used.

6.The model students will use for accessing the technology (e.g. BYOD).„

7.The site and district technology infrastructure

https://www.edsurge.com/news/2016-06-25-what-7-factors-should-educators-consider-when-choosing-digital-tools-for-underserved-students

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Tools can be divided according to various features, dividing lines. For the purposes of the presentation, the proposed tools have been divided according to the possibility of use / applicability.

Some tools can be used in several areas.

• **Open Educational Resources**

Offer ready-made educational materials freely available for teachers to use, adapt and distribute

• **Quick montage and editing tools**

For quick assembling all possible types of materials

• **Tools for communication, collaboration and sharing**

To make enable collaboration and innovative developments, collective file creation, games, activities. Offer space for discussion, sharing and storage.

• **Tools for student assessment and evaluation**

To collect information about students and his work and development

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Open Educational Resources

Khan Academy
PhET Science Simulations
TED
Coursera
GapMinder
Open Learn, The Open University
National Center For Case Study Teaching in Science
Play Decide
Library of Congres
Connexions Open Stax Textbooks
MIT OpenCourseWare

Applied Math and Science Education Repository
Merslot
OER Commons
The National Academies Press
Wikibooks
University of Hawai‘i OER
Open Textbook Library
Smithsonian Open Access
HippoCampus. org
BCCampus OpenEd
Open Stax.org

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Quick montage and editing tools

Clarisketch
Comixify
FilmoraGo
Kizoa
Lumen5
Pixton
PosterMyWall
Thinglink
Loom

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Tools for communication, collaboration and sharing

ActionBound
AnswerGarden
Blogger
Canva
Coggle
EdWordle
Emaze
Genially
Google Classroom
Google Drive
Khan Academy
Lino
Mentimeter
MindMup
MonkeyLearn
Moodle
MSTeams
LearningApps
Nearpod
OneDrive
Padlet
Prezi
Sway
Tagxedo
TED
Trello
Tricider
Wakelet
WordArt
WordItOut
Wordsift

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Tools for student assessment (Evaluation)

ActionBound
Coggle
Genially
Google Classroom
Kahoot
Khan Academy
LearningApps
MindMup
Moodle
MSTeams
Nearpod
Padlet
Quizizz
Socrative

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Atherton, P. (2018). *50 ways to use technology enhanced learning in the classroom: Practical strategies for teaching*. Learning Matters.

Boettcher, J. V., & Conrad, R. (2021). *The online teaching survival guide: Simple and practical pedagogical tips*. John Wiley & Sons.

Casey, M. et al.(2018). *Online teaching: Tools and techniques to achieve success with learners*. Rowman & Littlefield.

Cleveland, A., & Sharp, S. (2019). *50+ tech tools for school counselors: How to be more engaging, efficient, and effective*. Corwin Press.

Karchmer-Klein, R. (2020). *Improving online teacher education: Digital tools and evidence-based practices*. Teachers College Press.

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McKenzie, S. et al. (2020). *Tertiary online teaching and learning: TOTAL perspectives and resources for digital education.* Springer.

Supporting the continuation of teaching and learning during the COVID-19 Pandemic Annotated resources for online learning https://www.oecd.org/education/Supporting-the-continuation-of-teaching-and-learning-during-the-COVID-19-pandemic.pdf

The Most Comprehensive List of FREE Online Tools for Teachers https://ce.csueastbay.edu/files/docs/free-tools-blog-final.pdf

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Evaluation of Evidence-Based Practices in Online Learning A Meta-Analysis and Review of Online Learning Studies https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Starting With "Why": How I Choose Digital Tools to Support My Students https://www.teacher2teacher.education/2020/12/06/starting-with-why-how-i-choose-digital-tools-to-support-my-students/

Constructive Alignment https://www.teaching-learning.utas.edu.au/unit-design/constructive-alignment

Which Technology Tool Do I Choose? https://www.edutopia.org/blog/best-tech-tools

What 7 Factors Should Educators Consider When Choosing Digital Tools for Underserved Students? https://www.edsurge.com/news/2016-06-25-what-7-factors-should-educators-consider-when-choosing-digital-tools-for-underserved-students

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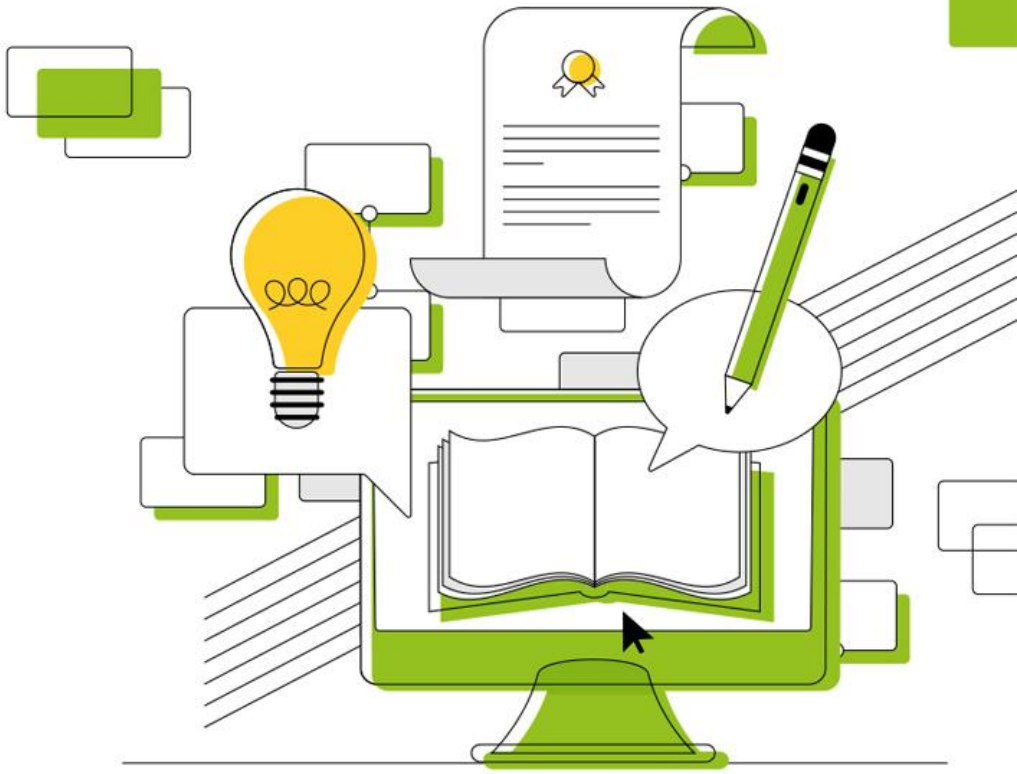
Project

“Activating Students in Online Classes”



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Topic

Assessment Strategies for Activating Students in Online Classes

Prepared by PhD Student Rasa Greenspon
Vytautas Magnus University

UNIWERSYTET ŚLĄSKI
W KATOWICACH

Assessment and Evaluation

Fundusze Europejskie Wiedza Edukacja Rozwój
Rzeczpospolita Polska
Unia Europejska Europejski Fundusz Społeczny

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Assessment

"Assessment performances are day-to-day activities that can also be authentic and engaging demonstrations of students' abilities to grapple with central challenges of a discipline in real life contexts" (Kulieke et al., 1990, p.2).

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Purposes of Assessment:

- To improve learning and to increase quality in teaching practices (Black et al., 2003; Popham, 2000; Boud, 2006).
- To inform stakeholders (teachers and administration) about the quality of studies and effectiveness of certain teaching strategies (Keppell et al., 2006).
- To help teachers to monitor learners' learning progress (Keppell et al., 2006).
- To assist learners in understanding curriculum, and learning goals and outcomes (Keppell et al., 2006).
- To assist in certification and accreditation process of students' knowledge and achievements (Brown et al., 2009)

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Evaluation

- "Term used when referring to evaluation of a study program in terms of its **quality** (Hurteau, Houle, and Mongiat, 2009).
- Evaluation is not commonly associated with tracking individual student learning, it is a much broader phenomenon that focuses on things such as overall **curriculum**, **study program, course, educational institution** at macro (holistic) level.

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W KATOWICACH

Assessment Strategies

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ASSESSMENT STRATEGIES (I)

- **SUMMATIVE**

"Any assessment activity which results in a mark or grade which is subsequently used as judgement on a student performance (Iron, 2008).

- **FORMATIVE**
- "A process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes" (McManus, 2008, p. 3).

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ASSESSMENT STRATEGIES (II)

- Diagnostic Assessment
- **Assessment *of* Learning (AoL)** => summative assessment aspect
- **Assessment *for* Learning (AfL)** => formative assessment aspect
- **Assessment *as* Learning (AaL)** => formative assessment aspect
- Peer assessment, self-assessment, sustainable assessment, alternative assessment (McMillan, 2017, p. 20), inclusive assessment
- **Learning-Oriented Assessment (LOA)** (Carless, 2007) => formative + summative assessment

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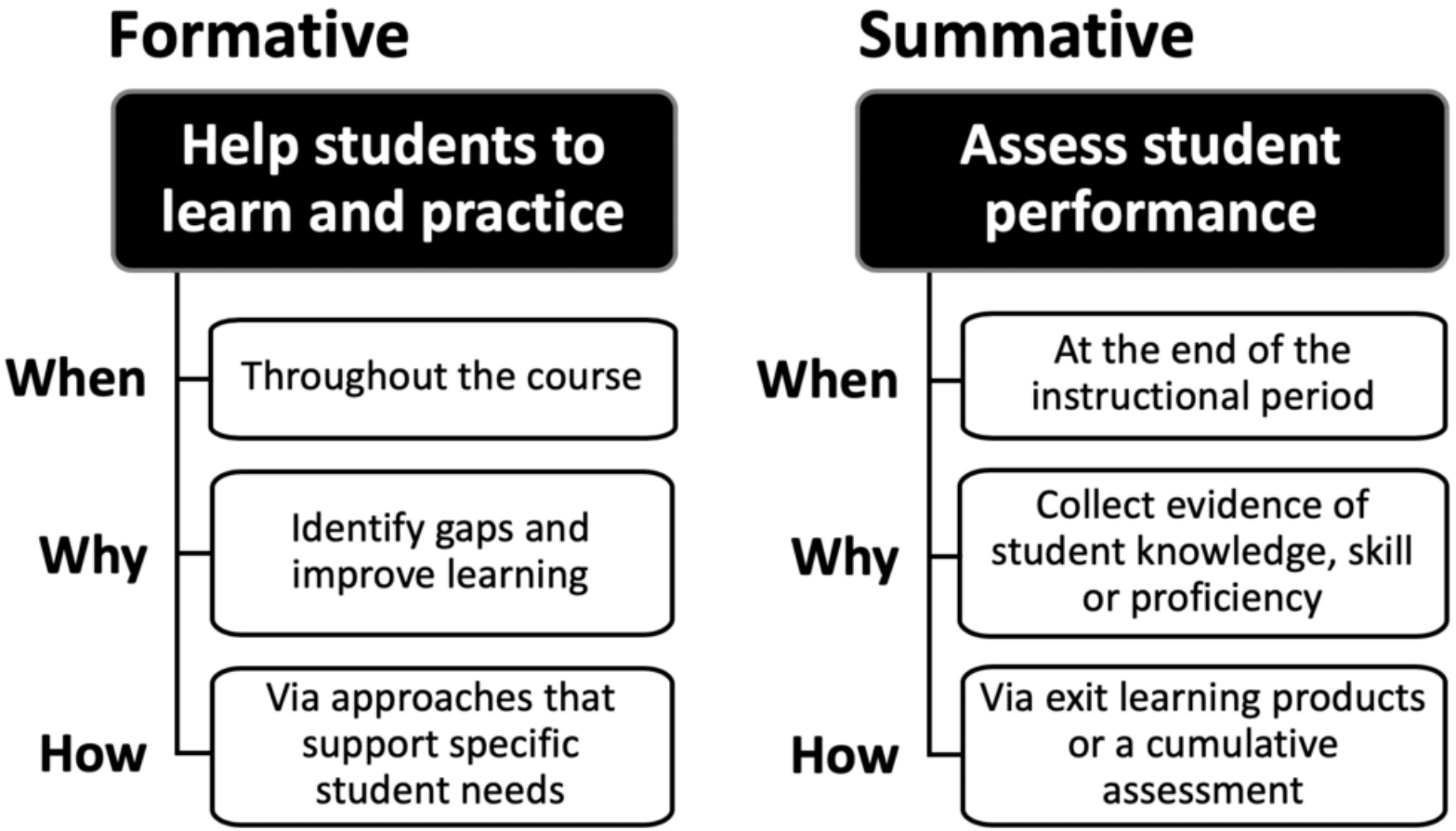

Source: Iowa State University, https://www.celt.iastate.edu/teaching/assessment-and-evaluation/assessment-overview/

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Learning-Oriented Assessment (LOA)

- An assessment strategy that is derived from already existing assessment strategies such as summative and formative, encompassing features of assessment *of*, *for*, and *as* learning and creating and equilibrium among them and their various distinctions (Carless, 2006, 2007, 2015; Keppell et al., 2006; Zeng et al., 2018, MECY, 2006).
- A shift from test-oriented to learning-oriented approach (Zeng et al., 2018).

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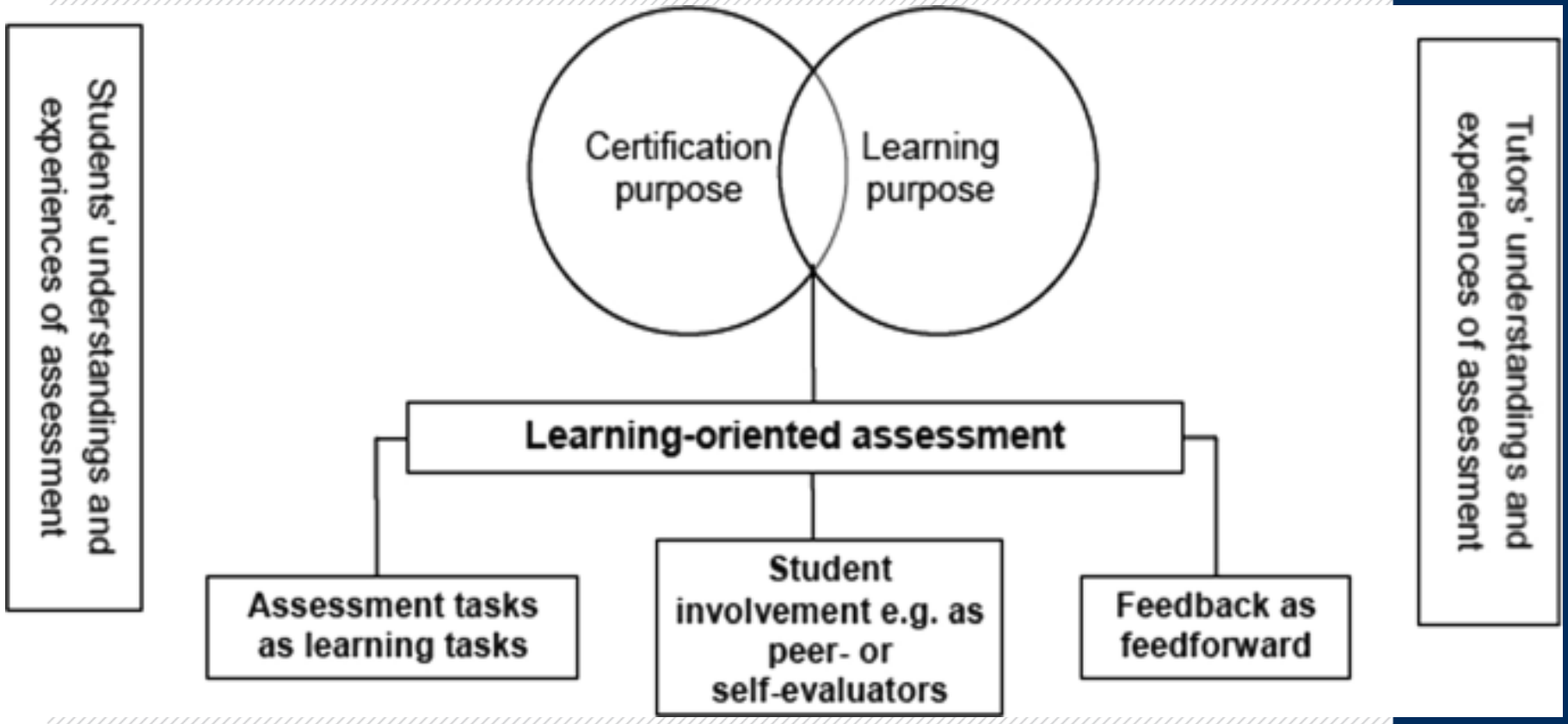
Learning-Oriented Assessment (LOA)



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Main Characteristics of LOA

- Learners engaged in a number of metacognitive processes (Flavell; 1979; 1985).
- The main focus on learning; assessment designed in order to support and enhance learning (Keppell and Carless, 2006).
- Assessment tasks are considered to be learning tasks.
- Strong emphasis on feedback provision. Specific way of student engagement with feedback (feed-forwarding).
- Development of skills and competences in students, e.g., metacognitive, collaborative skills, self-directed learning skills, and evaluative competences.
- The principle of transparency of the assessment.

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What do you aim to assess?

- Prior knowledge, recall, understanding
- Skill in synthesis and creative thinking
- Skill in application and performance
- Skill in analysis and critical thinking
- Skill in problem solving
- Awareness of students' attitudes and values
- Students' self-awareness as learners
- Reactions to class activities, assignments, and materials

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Examples of formative and summative assessment

Formative: Learn and practice

- In-class discussions
- Video quiz
- 1-minute reflection writing assignments
- Peer review
- Surveys
- 3-2-1

Summative: Assess performance

- Teacher-created exams
- Standartized tests
- Final projects
- Final essays
- Final presentations
- Final reports
- Final grades

Source: Iowa State University, https://www.celt.iastate.edu/teaching/assessment-and-evaluation/assessment-overview/

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FEEDBACK

- The provision of feedback is the most prevailing feature in learning process (Nicol and Macfarlane-Dick, 2006; Black and William, 1998).
- **Feedback** is as **important as** having a **teacher** in the classroom (Black and William, 1998).
- Feedback plays one of the key roles in maintaining students' engagement.
- Feedback as a cohesive, integral, and inseparable part of learning, teaching, and assessment (Merry et al, 2013; Carless, 2013).
- Some issues occur when the feedback is unclear and leave any gaps for students' interpretation (Sadler, 1989).

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FEEDBACK (II)

- **Sustainable Feedback**

Feedback as **dialog** between students and teachers or students and their peers (Askew and Lodge, 2000; Sambell, 2016).

- **Feedback as Feed-forward**

Feedback, provided on past or current assignments, has a potential to reflect in students' future work, to put it in other words, it can feed-forward (Carless, 2006; 2007).

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Peer Learning and Peer Assessment

- A procedure when students assess their classmates' work or skills and competencies (Falchikov, 1995).
- Learners do not engage in any power relationship (Keppell et al., 2006).
- The main goal is provision of feedback (Topping, 2009, p. 22).
- Formal and informal (Eisen, 1999; Keppell et al., 2006).

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Peer Learning and Peer Assessment

Before Introducing Peer Assessment:

- Let students know the rationale for doing peer review. Explain the expectations and benefits of engaging in a peer review process.
- Consider having students evaluate anonymous assignments for more objective feedback.
- Be prepared to give feedback on students' feedback to each other. Display some examples of feedback of varying quality and discuss which kind of feedback is useful and why.
- Give clear directions and time limits for in-class peer review sessions and set defined deadlines for out-of-class peer review assignments.
- Listen to group feedback discussions and provide guidance and input when necessary.
- Student familiarity and ownership of criteria tend to enhance peer assessment validity, so involve students in a discussion of the criteria used. Consider involving students in developing an assessment rubric.

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Peer Learning and Peer Assessment

Advantages:

- Develop certain skills and competencies (e.g., critical thinking, metacognitive skills, evaluative competencies, and writing skills) (Ballantyne, Hughes, and Mylonas, 2002; Topping et al., 2000)
- Positive effect on learner's learning process and motivation.
- Forces learners to constantly reflect about learning; thus, fosters a development of metacognitive skills (McMahon, 2010).
- Endorses lifelong learning (Tan, 2003).
- Helps learners to develop collaboration and communication skills (Tan, 2003).
- Promotes teamwork and interpersonal skills (Tan, 2003).

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Peer Learning and Peer Assessment

Disadvantages:

- Demanding on the teacher (Boud et al., 2001).
  - Teachers have to carefully think through curriculum and evaluate the potential benefits and foresee possible hazards of peer learning for the learners (Boud et al., 2001).
  - Teachers have to evaluate the background circumstances, learning objectives and outcomes, readiness of individual learners, and to establish connections between peer learning and assessment (Boud, et al., 2001; Prosser and Trigwell, 1999).

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Self-Assessment

- "The involvement of learners in making judgments about their achievements and the outcomes of their learning" (Boud and Falchikov, 1989, p. 529) as well as it is concerned with "identifying standards and/or criteria to apply to their work and making judgments about the extent to which they have met these criteria and standards" (Boud, 1995, p. 4).
- Self-assessment does NOT refer to assessment practices where students are supposed to assume teachers'/assessors' role.
- Self-assessment primarily is concerned with learners managing their *own* learning.

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Self-Assessment

Before Introducing Self- Assessment:

- The importance of learners familiarizing with the concept of self-assessment (Wride, 2017);
- Necessity to discuss the learning objectives, outcomes, and assessment criteria with students (Boud, 1995; Wride, 2017).
- Students often prefer to be passive recipients in teaching, learning, and assessment; therefore, students may find self-assessment much more pro-active approach. It can be dissatisfying, demotivating, and not fulfilling their needs and expectations (Wride, 2017) .

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Self-Assessment

Advantages:

- Contributes to lifelong learning.
- Focuses on developing capacities for self-regulated learning.
- Facilitates development of certain skills and competences such as critical thinking, metacognitive skills that are necessary to solve real-life problems.
- Promotes learner-centered approach and puts learners be in charge of their own learning and assessment.
- Allows autonomous learning.
- Increases levels of students' engagement.
- Self-assessment may help learners to identify themselves as learners and contribute to personal growth.

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Self-Assessment

Disadvantages:

- Learners often do not have capacity, competences, and skills needed to perform self-assessment; thus, self-assessment practices may seem rather demanding and complicated.
- Implementation of self-assessment practices may be complicated due to expectations of the learners. Learners often want to take a passive recipient role when it comes to assessment. They are expecting teachers to do all the assessment for them.
- Learners are lacking confidence to engage in self-assessment practices; thus, they try to avoid such obligation.
- Learners may resist to implementing self-assessment practices as they may not see the possible advantages.
- Learners may face moral and ethical issues as they may think that giving themselves a very positive evaluation can be treated to be inadequate.

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Digital Assessment

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What is Digital Assessment?

- Refers to all technology-enabled **assessment** tasks where the design, performance, and feedback must be mediated by technologies (Amante et al., 2019).
- A method used to evaluate students' cognitive ability and performance primarily by accessing personalized education, examination materials, and feedback anytime and anywhere, all of which are said to make it more efficient than the traditional **assessment** (Adeshola and Abubakar, 2020)
- **Digital assessment** is the presentation of **assessment**, for judging student achievement, managed through the medium of **digital** technologies such as computers and Internet (NZQA, 2015).

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How do Technologies Enhance Assessment?

- Make assessment procedures more transparent;
- Save teacher's time;
- Allow measuring complex competencies and skills in learners;
- Enable provision of personalized as well as timely feedback;
- Increase accessibility;
- Allow adapting to individual learner's abilities and knowledge.

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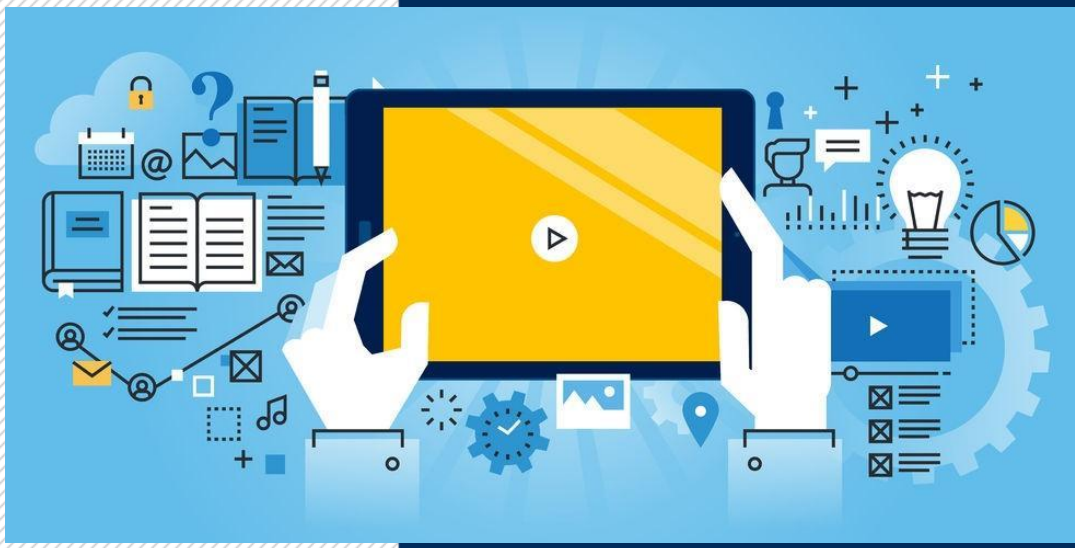
Digital Assessment: Challenges

- Face-to-face classroom assessment strategies may not translate to online or blended learning settings.
- A necessity to change mindsets towards technologies.
- A technical infrastructure is necessary for online learning/teaching and assessment.
- Heavy workload and time management
- Lack of student's responsibility and initiative (Kearns, 2012).
- Challenges in designing authentic assessment tasks in online learning environments (Kim, et al., 2008; Robles and Braathen, 2002).



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Digital Assessment Tools

- Assessment tools aid in assessing student learning and can provide different options to assess students.

Examples:

- Quizzes and surveys;
- Rubrics;
- Online tests;
- Reflective Journals;
- E-Portfolio;
- Forums;
- etc.

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Tips and recommendations

- If you ask student to watch the video or read an article at home, assign a discussion question that would go with the video or article (pre-class activity);

- At the beginning of the class, have a set of questions related to material they studied at home, that students could answer to in their notes.

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Thank you

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