



# Simple ideas to inspire in the 'Classroom of the Future'

## Working in the Classroom of the Future.

### Introduction

In this aid some didactical methods are presented which can be used in the Classroom of the Future. The didactical methods described are intended to inspire and form a first step to create a student centered learning experience. It is not a ready-made description that can be copied to your own situation. With your specific (subject matter) knowledge, teaching experience and basic didactical principles you can construct a didactical method that fits your needs. Think of: learning goals, student characteristics, contextual elements, group processes and student centeredness.

### Help and support

For discussing creative didactical concepts, (online) tools and educational developments and getting contact the educational consultant of your faculty.

### The Classroom of the Future

The facilities in the Classroom of the Future differ from the standard classrooms on various aspects that make some creative didactical methods possible. Also the aim for the Classroom of the Future is supporting new developments in didactical concepts.

Aspects of the Classroom of the Future:

- Plenary space: Here you can seat a maximum of 25 to 30 students. Here is also the possibilities to present on the video wall or use multiple interactive boards (three to four).
- Group spaces: Here room for a maximum of six student. They can use the interactive boards (also only for presenting) and white boards.
- Video wall: For presenting in the plenary space the Video wall is used.
- Interactive boards. Interactive boards can be used as normal computers as wireless presentation screen (via the wepresent software)
- Lighting: In each section of the Classroom of the Future the lights can be regulated
- Software and applications: The software on the interactive boards is standard windows software. For wireless presenting the Wepresent software is needed to make a connection.

Main aspect for working in the Classroom of the Future is that students work in groups and your roll is that of coach / tutor.

The didactical methods described follow the basic phasing in educational teaching plan:

- Orientation (learning tasks and motivation)
- Refresher (initial situation, activating pre-existing knowledge)
- Acquisition (new knowledge and experience)
- Processing and transfer (practicing with new knowledge and experience))
- Evaluation and reflection

The described phases should not be taken to linear. Modifications can be made based upon the planned time in the Classroom of the Future. The phases as described can be completed multiple times, for example in the morning program and afternoon program.

Sources: Activerende werkvormen, Een praktische gids voor je onderwijs, Directie Onderwijs & Opleidingen, Universitair Medisch Centrum Utrecht.

*Hoogeveen, P. & Winkels, J. (2011), Het didactische werkvormenboek, Variatie en differentiatie in de praktijk. Assen: Van Gorcum, 10<sup>e</sup> druk.*

### **Orientation phase**

*In the orientation phase it is important to motivate students and to be clear about the learning tasks for that session. The teacher takes the role of motivator and 'contractor'.*

*Also be clear about the house rules (see sheet) concerning the use of the facilities in this phase.*

**Presenting:** When presenting in the Classroom of the Future group size plays a decisive role in choosing to start plenary or in groups.

For presenting with the *Video wall* there is room for approximately 25 students.

By using a *carrousel* you can serve more students (up to 100). Divide the group in four subgroups of 25 students each. When presenting to one group the other groups look at an inspiring movie or do a brainstorm.

**Actual practice examples:** Introducing the 'big picture' through an expert from the actual work field can motivate and exemplify on the theoretical aspects and strengthen transfer of learning.

Available means: online video.

**Inspiring short movie:** For example Vimeo, YouTube or Tedx.com. Think of underlying aspects that touch the subjects of the session in the group spaces.

**Brainstorm:** In a brainstorm a small group of students (maximum of 6) can explore the various aspects of subjects of the session.

*Average time for this phase: 5 to 10 minutes.*

### **Refresher phase**

*The aim of the refresher phase is to refresh someone's memory. Also prior knowledge can be determined and possibly be used to form groups. Make a decision whether you want the same level of prior knowledge or mixed groups.*

**Buzz-group:** Provide the different groups with exemplary questions/cases to be solved individually. Set a fixed short time (for example 10 minutes) before sharing the different solutions in the different groups.

Available means: Blackboard blog/wiki.

**Mindmap:** Let each group make a mindmap of prior knowledge.

Available means: Online tools

**Quiz:** With a quiz you can introduce a level of competition between groups. The questions should contain multiple parts of the prior knowledge.

Available means: Online tools.

### **Acquisition phase**

*In this phase new knowledge, skills and attitudes are obtained. By delivering actual and authentic problems students work actively and constructive. As tutor you are guiding the learning process and act as a subject matter expert.*

### **Actual dilemma's:**

Subject domains where you have multiple and possible conflicting interests or hypotheses are worth exploring. Let different groups of students analyse differences, facts and arguments and be able to substantiate their point of view.

Vary in the way the groups are formed or the articles/information that is given. As a teacher you bring the different views of the different groups together and lead the discussion on differences and similarities.

### **Discussion:**

Based upon a statement students are divided in groups, those who are in favor of the statement and those who oppose the statement. Student gather arguments based upon literature and other materials.

Then the discussion is started, the teacher moderates the discussion. If possible the groups will come to a joint statement. You can also let a third group make a decision based upon the discussion.

### **Ghostwriting:**

Students are divided into multiple writing teams. Each team gets the assignment to write a speech about a topic for someone else.

The assignment contains the audience for the speech, the context of the speech and who will present the speech.

When all the speeches are ready, the strong sides and downsides of the speeches are discussed in the groups.

### **Newspaper article:**

The different groups write an article for a newspaper. Student have to take into account the audience they are writing for and the content matter. All articles can be combined as a digital magazine.

### **Disaster plan**

The lecturer introduces a problem or goal that needs to be solved. Students discuss this problem in groups by creating a disaster plan. The disaster plan contains as much disastrous, contra-productive measurements or other 'dons' as possible. All the disaster plans are presented in the plenary space. The lecturer provides feedback on the plans and the college concludes with a course of action which contains the 'do's' for the problem.

### **Processing and transfer phase**

*The main purpose of the processing and transfer phase is to apply newly acquired knowledge and skills in relation to the learning goals set in the orientation phase. As a teacher in this phase is important to direct students to anchor the newly acquired knowledge and skills to the prior knowledge and skills.*

#### **Discussion:**

Based upon a statement students are divided in groups, those who are in favor of the statement and those who oppose the statement. Student gather arguments based upon literature and other materials.

Then the discussion is started, a moderator is recommended. If possible the groups will come to a joint statement. You can also let a third group make a decision based upon the discussion.

#### **Elevator pitch:**

Groups present their product, research, project, college in the form of an elevator pitch in the plenary space. Student can prepare their speech in the group space. The speech should be very short (max 30-60 seconds) and should be a sales pitch. The pitch can be seen as a test or as a short presentation.

#### **Jig-saw method:**

All content for this college is divided among the students in (+- eight) logical equal parts. Each part should be a subject that can be studied individually. Students who studied the same parts share their experiences.

Afterwards all students discuss the essence of their specific content to their group members. At last all parts should be assembled in one group summary.

#### **Article review:**

Select papers to be reviewed by different groups of students. When necessary provide an example review. Also provide the students with review criteria. De assignment for the students is to write a short review and share this with the other groups. Each group will comment on one group.

## **Evaluation and reflection**

*To finalize the previous phases the last phase is to reflect on the learning process and learning product in relation to the learning goals set in the orientation phase. As a teacher you can summarize the main aspects learned, give a wider view on the subject matter and connect to other subject domains. Also a looking into the future or relevant upcoming courses can be part of this phase.*

### One-minute paper:

Give students the assignment to write the essence of the learned subject within a fixed timeslot of fixed amount of text and share it online.

### Press/news conference:

Organize the presentation of a paper at the end of the session where represents from each group can ask critical questions. The press conference consists of the following aspects: the topical current interest of the question/topic; the importance, the difference with common solutions, authenticity.

### Poster presentation:

Let each group present (1 or 2 persons) there project/assignment outcome at their own workspace. The other group members can visit the other workspaces. Each group should give minimal one tip and one top.