Pattern descriptions

- Feedback from working in breakout groups at PBL Academy Event 11.08.20

| Pattern description | |
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| Description Short description of the pattern | "Supervision and presentation with an audience" |
| Goal What you want to achieve with this pattern | Allow learning and socializing by lurking: listening to what other groups and students are talking about during supervision. Train the discipline of group work. |
| Prerequisites Team size, study steps and/or other relevant prerequisites | none. |
| Format How the pattern is built in practice | - |
| Application What the pattern can be used for | Motivate and inspire students by hearing progress and problems of other students |
| Pedagogy Pedagogical advantages and limitations of the pattern | advantages - as above, shyness |
| Apps/technologies Apps/technology that can be used in connection with this pattern | online video / audio platform |
| Examples Concrete examples of use (if possible) | as listening to other students in physical group room |
| Persons Specific persons who have experience with the use of the pattern | none / all supervisors |
| Links Links to online resources that describe or support the pattern | - |

| | Pattern description |
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| Description Short description of the pattern | Hybrid exercises – facilitating group work exercises in a flexible way (independent of physical presence) |
| Goal What you want to achieve with this pattern | Facilitate working practice and competences in the group Making sure exercises can be done regardless of restrictions of physical presence (of teacher and/or students) |
| Prerequisites Team size, study steps and/or other relevant prerequisites | Platform to support communication, but 'in plenum' and teacher- group Students have to be allocated groups, but can either meet physically or online Note: Video 'on' for all participants is important for the experience of presence |
| Format How the pattern is built in practice | E.g. one large room for the course with sub rooms (MS Teams) can be built in advance |
| Application What the pattern can be used for | Group exercises – can also be used for individual exercises |
| Pedagogy <i>Pedagogical advantages and</i> <i>limitations of the pattern</i> | Advantages: - maintain or increase interaction with students (more access to teachers) - groups can hear other groups' questions and the teachers' answers (usually students will have to wait for the teachers to assist them) - doesn't require the students to be in the same room either (although this can be encouraged depending on the nature of the exercises) - other modalities can be added (chat, links) and the chat history is 'saved' on the platform for later use Limitations: - - it's difficult to 'sense the room' in a group (do they actually need help but don't ask for it) - some students might not feel comfortable asking questions in 'public' (although the chat might help with that) - it's harder to make sure all groups are active - It's harder to give one group your undivided attention (which is sometimes needed) with notifications and questions etc. popping up on the platform |
| Apps/technologies Apps/technology that can be used in connection with this pattern | MS Teams Discord (although a Data management agreement is required) |
| Examples Concrete examples of use (if possible) | We will use this approach on 1 st semester KMB (kemi, kemitek, miljøvidenskab, biologi, biotek) in several courses the fall 2020, including the PBL intro course |
| Persons Specific persons who have experience with the use of the pattern | Lykke Brogaard Bertel (lykke@plan.aau.dk) Jens Chr. Rauhe (jmr@mp.aau.dk) |
| Links Links to online resources that describe or support the pattern | |

| Pattern description | |
|--|---|
| Description Short description of the pattern | Online lectures with virtual break out rooms and in- person/analogue group work in "family groups" |
| Goal What you want to achieve with this pattern | To ensure that students have some degree of physical interaction during the semester |
| Prerequisites Team size, study steps and/or other relevant prerequisites | Students may interact with other members of their family, and not interact with other families. |
| Format <i>How the pattern is built in practice</i> | Creation of family groups of no more than 30 students. These family groups stay together throughout the semester, and do not interact with other families. |
| Application What the pattern can be used for | Teaching of students in an environment with physical presence at the university, in spite of larger number of students than covid-19 rules allow. |
| Pedagogy Pedagogical advantages and limitations of the pattern | The students may meet other students while still having online lectures via ZOOM/TEAMS |
| Apps/technologies Apps/technology that can be used in connection with this pattern | online lectures via ZOOM/TEAMS |
| Examples Concrete examples of use (if possible) | |
| Persons Specific persons who have experience with the use of the pattern | |
| Links Links to online resources that describe or support the pattern | |

| Pattern description | |
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| Description Short description of the pattern | Focus on meetings in group rooms (physically or online) to secure learning. |
| Goal What you want to achieve with this pattern | Secure interaction between students and allow for interaction between teacher and student groups. |
| Prerequisites Team size, study steps and/or other relevant prerequisites | IT help is needed to establish online meeting rooms for groups |
| Format How the pattern is built in practice | |
| Application What the pattern can be used for | Secures interaction between students on daily basis. Allows a space for teacher to meet students (in groups). |
| Pedagogy Pedagogical advantages and limitations of the pattern | Secures interaction between peers (students) and feedback from teacher to students. Only interactions among students in a single group (possible to extend by allowing several groups to interact) |
| Apps/technologies Apps/technology that can be used in connection with this pattern | ZOOM? Depends on what is supported by AAU. |
| Examples Concrete examples of use (if possible) | |
| Persons Specific persons who have experience with the use of the pattern | |
| Links Links to online resources that describe or support the pattern | |

| Pat | ttern description |
|---|--|
| Description Short description of the pattern | Project market (developing topics for the project) – forming the project groups |
| Goal What you want to achieve with this pattern | Interactivity and engagement by the students; getting to know each other; getting an overview of possible topics and possible groups |
| Prerequisites Team size, study steps and/or other relevant prerequisites | catalogue of project topics; group size of 8 |
| Format <i>How the pattern is built in practice</i> | Offline (normally): project topics from the catalogue are presented in the morning; the students have one day to form groups of 8. |
| Application What the pattern can be used for | creating project groups; workshops |
| Pedagogy Pedagogical advantages and limitations of the pattern | advantage: if fully online, it's a possibility to get to know other students (might even work in a hybrid setting; especially when groups normally have their own group room and thus, won't see other students during a semester) limitations: might be problematic with larger groups of students (like 100 and above) |
| Apps/technologies <i>Apps/technology that can be used in connection</i> <i>with this pattern</i> | Google docs (slides); Discord channels (text and voice) |
| Examples Concrete examples of use (if possible) | Each topic is presented on a google-slide; each student has 5 x's, they can place (ex. 3 x's at one topic, 2 x's at another topic, depending on their interest); slides without x's are discarded; the remaining topics are transferred to Discord. Discord: A new server is created (Group formation). Each remaining topic is given a text and a voice channel. The students can write in the text channel, while discussing in the voice channel. The students can see, who engages in the voice channel (participants are shown by names and whether their microphone is muted or not) and they can "jump" from channel to channel, keeping all channels open for interaction (not like breakout rooms in zoom). The same goes for the coordinator, who can follow the development of groups. |
| Persons Specific persons who have experience with the use of the pattern | Thessa Jensen (thessa@hum.aau.dk), Peter Vistisen (vistisen@hum.aau.dk) |
| Links Links to online resources that describe or support the pattern | https://www.youtube.com/watch?v=N5-aj4O6GoY (Danish – just basic) |
| | <u>https://www.youtube.com/watch?v=BW5Pssju6yk</u> (English - elaborated) |

| Patt | Pattern description | |
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| Description Short description of the pattern | Pub quiz. Traditional pub quiz. A number of rounds with 10 questions each. Each round has a topic, which could be either academic or social. | |
| Goal What you want to achieve with this pattern | Social cohesion. Collaboration. | |
| Prerequisites Team size, study steps and/or other relevant prerequisites | Zoom. The students will collaborate in groups of 3-4 students. The students will communicate through Zoom, or preferably Messenger or an alternative program. The answers are submitted in Google Forms. | |
| Format <i>How the pattern is built in practice</i> | See above | |
| Application What the pattern can be used for | Introduction to academic content. Introduction to degree program. Staff members. Beginning of a course. | |
| Pedagogy Pedagogical advantages and limitations of the pattern | Informal setting, where the students get to know each other and the new program. Technological challenges. | |
| Apps/technologies Apps/technology that can be used in connection with this pattern | Zoom, Google Forms, Messenger | |
| Examples Concrete examples of use (if possible) | No examples | |
| Persons Specific persons who have experience with the use of the pattern | No persons | |
| Links Links to online resources that describe or support the pattern | https://en.wikipedia.org/wiki/Pub_quiz | |

| Patt | ern description |
|---|---|
| Description Short description of the pattern | Students are (preferably) sitting in a physical room together. In the room, a screen is available with a Teams account active. All students are getting the intro to the lecture, and then to an upcoming task via the screen by the teacher. Tasks are based on pre-lecture preparation. Students commence a 30 mins exercise in their separate room. The teacher can access all students through the open Teams account and thereby briefly join the discussion, if needed (and then move on to another group). After 30 mins, the whole class joins the large shared room, and reflects for e.g. 15 mins together. Repeat for new task. Students can also join this setup while being fully online (all students participating fully e.g. through Teams). All sessions need to produce a small product of the exercise, which students can present, send, share, etc. |
| Goal What you want to achieve with this pattern | Get them to work actively with course material and practice the application and challenge the spectrum of the material. Invites for nice interaction between students (both groups and whole class), small and 'safe' space in the online group rooms, and interaction with teacher. |
| Prerequisites Team size, study steps and/or other relevant prerequisites | Max 10 students pr. group, steps described above, prerequisite is having read the preparation material. |
| Format How the pattern is built in practice | Explained above |
| Application What the pattern can be used for | Introduce students to owning their learning process, and make them familiar with an approach to develop their own learning process and skills. |
| Pedagogy Pedagogical advantages and limitations of the pattern | Teacher and TAs join discussions and facilitate discussions in the shared space. |
| Apps/technologies Apps/technology that can be used in connection with this pattern | Online communication (e.g. Teams) |
| Examples Concrete examples of use (if possible) | Only idea; not tried yet |
| Persons Specific persons who have experience with the use of the pattern | See above :) |
| Links Links to online resources that describe or support the pattern | None |