

My Study Group (facilitator)

My Study Group is a tool in Absalon for matching students in study groups prior to their study start. The division is done via an algorithm that matches the students based on their answers to 3 basic questions. This is a guide for you as a facilitator.

The process is overall as follows (everything takes place directly in the tool)

- > You send a message to the students to start the group formation process
- The students answer the questions
- > You can send reminders to students who have not yet responded
- You start the group formation process
- > The algorithm places the students in groups based on the similarity in their answers
- > You approve the algorithm's suggestions for groups (alternatively edit the groups manually)
- > Students are automatically notified of their groups and the other group members

My Study Group in Absalon

If My Study Group is not already shown in the menu, you can click on Settings and drag the tool and place it in the navigation menu. Remember to click *Save*.

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			Zoom		:		



OBS: If you want to set up group formation on a course with several sections and where the individual groups must not consist of students from different sections, you can use mass setup. Read more about this at the end of the instructions - however, it is recommended that you read through the instructions for the general setup first.

The role as a facilitator

- Click on My Study Group. The first teacher to click on the element now becomes the facilitator
- (If you are not a facilitator to start with, you can choose to take the role afterwards)
- The page briefly describes the purpose of the My Study Group tool and shows the 3 questions
- Your tasks as a facilitator are listed in the right corner (you have the option to edit some important settings, look under the screenshot)

Wy study group This module can be used for group formation. Group formation is done by students answering a number of questions. When the students have responded, you will be able to activate automatic group formation, where the students will be grouped with other students that have responded most like themselves. It is recommend that study groups are formed in the beginning of your course.	You are the facilitator Step 1: Send question Step 2: Students ansy. Step 3: Send reminde Step 4: Start and app Edit settings	ver the questions r if few have answered
teaching Read the instructions for the module		
As a facilitator, you can write a text for the students about the process and attach any relevant files. Write your own introductory text and upload any attachments		
Questions		^
By default, students will be shown the following questions:		
 I prefer to meet on campus I can meet with the study group some evening and/or weekends I would prioritize to also socialize with the study group 		
Students respond to each question with Agree, Partially agree, Neither, Partially disagree or Disagree		
It is also possible to add questions regarding education and topic to achieve better study groups.		
No extra questions have been added yet		
Add extra question about education and/or topic		
Before you send out the questions, you can adjust the notification that will be sent to the students.		
Adjust notification for students		
		Send questions to students
Edit settings		
Activate 'Contact facilitator'		
If activated, students can write directly to the facilitator in the module		
Automatic synchronisation of groups If activated, groups are automatically synchroised to Absalon		
Lock groups		
If activated, students cannot join or leave groups		
Cancel group formation process		
Synchronise groups now		
K Back Save		

- You can switch off "write to facilitator" so that the students cannot contact the facilitator
- You can opt out of automatic synchronization of groups. When synchronization is switched on, My Study Groups creates and maintains the study groups as groups in Absalon that can be used for e.g. assignments. If changes are made to the groups directly in Absalon, the changes will be overwritten by My Study Groups and therefore it may be relevant to switch off synchronization.



- You can lock groups if, for example, there are mandatory groups.
- You can cancel/reset group formation processes that have already been started, if they have been started, for example by mistake (be aware that any formed groups are lost).

Writing your own introductory text

You can also choose to write an introduction of your own choice, which will be shown to the students, when they click on the tool.

• If you want to write a different text than the generic one (below) then click on *Write your own introductory text...*

Edit introduction Standard introduction text Your teacher or study advisor (facilitator) can use this module to form groups. You will be asked to answer three questions. The questions are of a practical nature, as research shows that the more diversity there is in the group, the better it works. On the other hand, practical considerations and logistics can be a challenge. Once you have answered the questions, your teacher/study advisor will start the group formation. An algorithm will then divide you into groups based on the similarities in the your answeres.	
You can write another introduction text for your students below Danish Kære alle	A
English	
Save	

Adding extra questions

- You can add 2 additional questions (subjects and ecucation) by clicking on Add extra questions about education and/or subject
- If you want to add eg. "Question on subjects", you need to fill in the alternatives, which the students can choose between. If you forget to fill out alternatives, the students will be met by 2 "blank" options.

Before filling out the options:

Ques	tions 1
Choose	e the subject you will be working with
0	
Next	

After filling out the options:

Questions 1	
Choose the subject you will be working with	
O Physics Nanotech Math	



• Adding subject as a question will look like this on the facilitators page

It is also possible to add questions regarding education and topic to achieve better study groups.

Students must choose a subject

Add extra question about education and/or topic

My own notification to the students

- If you want the change the generic notification that students receive in their inbox in Absalon then click on *Adjust notification for students*
- Remember to hit Save when you have finished

Edit notification
Danish
Svar venligst på spørgsmål under My Study Group i kurset: c20475c6-89c9-4a33-95ca-bbfde1021f28
English
Please answer the questions provided under My StudyGroup in the course: c20475c6-89c9-4a33-95ca-bbfde1021f28
K Back Save

Send out the questions to the students

- When you are finished writing your own notification hit Send questions to the students
- After clicking, you will see a summary of the introductory text and the message that the students see. If it can be approved, click on

Send questions to students

Waiting for the students' answers

- You can follow the progress of the students' answers
- You can send reminders to those who have not yet responded
- You can adjust the *group creation message* (that the students receive when the groups have been formed)
- You can adjust the group size, if necessary

Responses	^
2 students have not yet responded <u>Send reminder</u> 0 students have responded	
Group formation	^
You can adjust the group size that the algorithm will try to reach	
Edit group creation message	
4	Create studygroups

Create study groups

When the students (or most of the students) have responded the group formation process can begin. The algorithm will form groups based on the similarity in the students' answers (appendix 1 gives a more detailed and technical explanation of how algorithm works)

The overview below gives a preliminary status showing the number of replies, the group size and the number of groups/members

• You can now choose to either *publish groups* as they are or *edit groups* if necessary (this is explained on the next page)

Some students have yet to respond. If you start the group formation now, these students will then later have to be placed into groups by you or have to ask to join the groups that have already been created			
Group size is set at 3.			
Number of students who have responded 6.			
Number of groups to be made 2.			
Groups			
Group 1 - Lars, Andreas og Morten			
Group 2 - Søren, Morten og Lars			
	< Cancel	Publish groups	Edit groups

Publish the study groups

When you have published the groups, you get an overview of the formed groups and the members

- You can also send reminders to students who have not yet responded
- You can choose to directly *assign students* without a group to a group (if they have not yet responded to the questions), *suggest the student to a group* or *create a new group*
- You also have the option of automatically distributing students who have not answered randomly into newly created groups



Groups			^
2 groups have been formed			
Ownload groups as Excel spreadsheet (Group, First name, Surname, UCPH username, KUmail)			
Group	Requests mem	bers	
<u>Gruppe 1 - Lars, Andreas og Morten</u>	NO		
Gruppe 2 - Søren, Morten og Lars	NO		
Students not in a group			^
Right now, 1 students are not in a group			
Anne Bjergø (annbje)	<u>Assign to group</u>	<u>Suggest for a group</u>	Create a new group and add
Responses			^
1 students have not yet responded <u>Send reminder</u> 6 students have responded			
Tools			^
Students will also get access to tools that support good group work. This happens at the same time for all groups according can adjust this rollout plan, see the status of the rollout and, if relevant, deselect individual tools. Adjust tools and rollout	to a fixed rollout plan, wh	ich begins when groups	are formed. As a facilitator, you

Editing groups

You can edit the groups if you are not happy with the composition of the groups or if you for any other reason need to change them by *dragging/dropping students, removing* entire groups and *creating* new ones.

- Make the necessary changes
- Click on *Publish groups* afterwards (be aware that this cannot be undone)

You have chosen to edit the groups before publishing them to the students.	
You can drag and drop students between groups, create new groups and remove ex	isting groups.
Group 1 <u>Remove</u>	
René Grønbjerg	
Andreas Gregersen	
Berit Glue	
Group 2 Remove	
René Zilmer	
Christian Toft	
Add group	
Students not in a group	
Tobias Larsen	
René Larsen	Cancel Publish groups

• If you wish to remove students from formed groups, click on the group, and then remove.

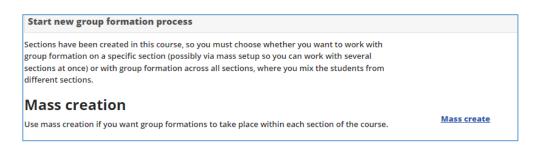
Groups	Gruppe 1 - Andreas, Berit og Arvid
5 groups have been formed	Participants
Download groups to Excel spreadsheet (Group, First name, Surname, UCPH username, KUmail)	Andreas Klein (andkle) <u>Remove</u> Berit Gregersen (bergre) <u>Remove</u>
Group	Arvid Zilmer (arvzil) <u>Remove</u>
Gruppe 1 - Andreas, Berit og Arvid	Send notification to the group
Gruppe 2 - Thomas og Andreas	

• You can then assign the removed person to another group.

Setup via Mass creation

If sections have been created in a course and you do not want to mix students from the different sections, you can via the mass setup function form groups on the entire course but without grouping students from different sections. Mass creation allows you to edit and adjust the setup for all sections at once, so you do not need to access each section separately and adjust the setup.

• Click on mass creation



Now you can work with the different default texts, in the same manner as when setting up a single section

Mass create Adjustment/setup of default texts for all sections My study group already contains a number of default texts, but if you want to adjust these you can do so below. You can write your own introductory text if you don't want to use the default text (which you can also see if you click on the link below). The text is shown to the students when they click on My Study Group on the course. Write your own introductory text and upload any attachments If you want to select questions about the subject/education in addition to the 3 questions that the students already have to answer, you can add them via the link below. Select questions about topic and/or programme If you want to you can adjust the message that the students receive in their Absalon inbox, you can do this via the link below Edit invitation to answer poll Customize receipt text for when groups are formed If you want to you can adjust the message that the students receive in their Absalon inbox when they have been assigned to a group, you can do this via the link below. Edit notification about group formation Send out to multiple sections Click on the link below to get an overview of sections and any already initiated group formation processes and send questions. Send questions to students



Sending questions out to the students via mass creation

When you have clicked on "Send questions to the students" you will be given the opportunity to "check" the correct sections. (If group formation processes have already been initiated on selected teams, they are displayed under Group formation processes).

• Click on Send

Send ques	tions to students
Send questions for ma where you can send q	any processes at once. Only sections without a process and processes uestions are shown
Sections	
✓ a105dda9-ce6d-41d ✓ 6ead3e4e-c702-45a	
Group formation	processes
	88e5-76e5ea7ad2c4 I-9e8e-ad9618c74d54

Send questions to students	
Processes have been created for the selected sections and questions sent to them and the selected processes	
< Bac	c.

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Appendix 1 – Group formation algorithm

The algorithm identifies the "worst" group by finding the students that differ the most in their answers. The members in that group each create their own group. The groups are then being formed iteratively by each group getting assigned a student with answers closest to the average answer of the group. The algorithm only uses the answers provided by the students in the My Studygroup app.

```
public sealed class ArcanicGroupingGenerator : IGroupingGenerator
    {
        public IReadOnlyList<Group> Group(IReadOnlyList<Data> data, int groupSize)
            var consumable = data.ToList();
            var someData = data.Last();
            var seed = new List<Group>()
            {
                new(someData)
            }:
            consumable.Remove(someData);
            var seeds = this.WorstGroups(seed, consumable, (int)Math.Ceiling(data.Count / (double)groupSize)).SelectMany(e =>
e.Data).Select(e => new Group(e)).ToList();
            foreach (var d in seeds.SelectMany(e => e.Data))
                consumable.Remove(d);
            }
            var result = this.BestGroups(seeds, consumable, groupSize);
            return result;
        }
        public double Compare(Data data, IReadOnlyList<Data> dataSet) => this.Compare(data, new Group(dataSet));
        public double Compare(Data data, Group group) => Euclid.Distance(data.Vector, group.Average());
        private IReadOnlyList<Group> WorstGroups(IReadOnlyList<Group> groups, IReadOnlyList<Data> data, int groupSize) =>
this.FillGroups(groups, data, groupSize,
            (ds, g) => ds.OrderByDescending(e => this.Compare(e, g)).First());
        private IReadOnlyList<Group> BestGroups(IReadOnlyList<Group> groups, IReadOnlyList<Data> data, int groupSize) =>
this.FillGroups(groups, data, groupSize,
            (ds, g) => ds.OrderBy(e => this.Compare(e, g)).First());
        private IReadOnlyList<Group> FillGroups(IReadOnlyList<Group> groups, IReadOnlyList<Data> data, int groupSize,
Func<IReadOnlyList<Data>, Group, Data> dataSelector)
        {
            var consumable = data.ToList();
            var gs = groups.ToList();
            for (var i = 0; i < groupSize - 1; i++)</pre>
            {
                foreach (var g in gs)
                {
                    if (!consumable.Any()) break;
                    var x = dataSelector(consumable, g);
                    consumable.Remove(x);
                    g.Append(x);
                }
            }
            return gs;
        }
```