Project M // Redesign P52

Designing digital cooperation work spaces for students, for group collaboration and virtual collaboration

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PROJECT COMMISSIONED BY:
Oslo and Akershus University College (HiOA)

ABSTRACT:
The ground floor of P52 needs to be redesigned in order to make it more visible and attractive. This report explains the process that a group of international students has gone through during the realization of this task. Finally the report explains the final design proposal and the reasons to led to each decision that was made.

INDEX TERMS
Redesign
University
Pilestredet 52
Flexibility and chill
Student Workspaces
Abstract

The ground floor of P52 needs to be redesigned in order to make it more visible and attractive for new students. This report explains the process an international group of students has gone through in the task of redesigning this ground floor. The way the team has managed to work, the project planning and the group dynamics are explained followed by the different tools that were used in order to get a qualitative and optimal design such as a questionnaire or a workshop. After explaining the reader the different stages of creation, ideas that emerged and the reasons that led the team to choose between those ideas a final design proposal is shown.

Keywords

Redesign, University, P52, HiOA, Flexible & Chill, Student Workspaces, Student Hub, Stage, Artzone
Acknowledgements

The team would like to express its special thanks to the project supervisor Petter Øylan for all the help that has given and the time, effort and patience that has invested in order to make this project better. The team also wants to thank the teachers from the supporting courses Nina Hagerup and Tore Wiik for the lectures that helped to make the project easier for the team. Everyone that participated in the workshop is really appreciated too specially mentioning Andreas who set up everything and also explained the project to us. The team is also grateful to all the students that answered the questionnaire giving a valuable input.

Finally, the team would like to thank the EPS classmates who have been helping and giving positive feedback during the whole semester.

Comments Lay Out

The team has decided to use the tool InDesign in order to make the layout in which the report has been developed. The reasons that have led to this decision are the consequent:

Being this a creative project, to have the appropriate graphic support is essential. This program allows much more options to introduce this graphics and work with them. Besides, some pictures needed to be combined in two pages; taking two pages that were next to each other and combining them getting an A3 out from two A4 pages.

For these reasons and after checking with our supervisor, Petter Øylan and getting a green light to go with this format, this report was developed in the program InDesign despite not matching some requirements that were specified. We thought the benefits were much higher than the costs.
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This chapter will explain the reader more about our group dynamic, the background of the project and the management part. It includes an insight in each team members education and group roles, all the relevant stakeholders and multiple graphics related to the project planning including a “milestone chart” and the “scope of deliverables”. 
Team, Project & Management

Alexander Nieuwborg (BE)
Industrial Product Development

Alexander is an Industrial Product Development at the University of Antwerp, Belgium. This project will a part of his first master semester. Alexander has come to Oslo to learn more about multidisciplinary and international teamwork. He is an experienced and patient group worker with a coordinating and focused view.

Alicia Alcázar (ES)
Industrial Design

Alicia is a student of Industrial Design Engineering and Product Development at the Polytechnic University of Madrid and has come to Oslo to make her last project in order to complete her bachelor’s degree. She is determined, perceptive and good listener. Her capacity to cooperate and experience in working in teams is a good point to start.
Aitzol Salaberri (ES)
Electronical Engineering

Aitzol is a student of Industrial Electronics and Automatics engineering at the Polytechnic University of Catalonia (UPC) and has come to Oslo to finish his bachelor degree and learn about teamwork with different nationalities and background people. He is open and talkative and this skills could help the group in order to improve the communication.

Thibault Pouppeville (FR)
Mechanical Engineering

Thibault is a student of Mechanical and Industrial engineering at the ENIT in Tarbes, France. He has come to Oslo in the middle of his university curriculum he had the opportunity to go to the EPS instead of an internship. This project is his first experience in a big, real project and he can help with his capacity to have new ideas and afterwards implement them.

Hugo Herpin (FR)
IT Engineering

Hugo is a student IT & IoT engineering at ISEP, an engineering school in Paris, France. This project is his last project as a student, he is in Oslo in order to obtain his master’s degree and then find a job.
The European Project Semester consists of a converged process. In a process of this kind, tools are given to us and the team has to use them in order to create a project. However, the converged process is not only about the tools it is also about the different ways of thinking of each member. One of the most interesting things you can learn from a project like this is understanding other points of view and different ways of working. Each member is capable of bringing a completely new point of view. The challenges come when you have to put all the ideas together and keep everyone satisfied with the results.

Everything mentioned above happens at the meetings. They have been essential in order to make the project possible. It is necessary to differentiate two types of meetings: the ones with the supervisor, Petter Øylan, and the ones without him (team meetings). At the supervisor meetings, all the progress was explained and assessed by Petter. Some hints and comments were given and they have been decisive to keep a good track of the project, follow the “good path”. At the team meetings, the tasks were defined and divided between all the members. Then everyone worked on his or her part and after all, a session of feedback happened in order to make decisions and go one step higher on the stairs. The team was aware of how important it is to maintain a record, so the group has met an average of two or three times per week. In the next alineas we are going to explain the tools that have been used.

Tools

The literal definition of tool is “Something that helps you to do a particular activity” according Cambridge Dictionary. Then, when we talk about “tools” here, we are referring to all those classes, workshops and assignments that we have been completing and attending during these months. These tools have been the key to hand in a good project, without them the team would have had too much freedom and only one deadline four months later in a completely new environment. However, the group has used them and here are the most important ones.

Teambuilding Workshop

The team building workshop was included in our schedule because it is really important to have a good feeling in a project group and it is the best way to discover each other and themself and to create an affinity. During the first workshop each member of the group could pass the Belbin test to know his personality and after discover his qualities and roles in the group. The group is uniform; with all the members all the different needs are fulfilled.

- Hugo is the coordinator: Needed to focus on the team’s objectives, draw out team members and delegate work appropriately
- Alicia is the team worker: Help the team to gel, using their versatility to identify the work required and complete it on behalf of the team
- Aitzol is the shaper: Provide the necessary drive to ensure that the team keeps moving and does not lose focus or momentum
Assignments mean deadlines and, deadlines mean pressure, this is the perfect combination to make a student start working. The assignments from both, English and Main Project, have been essential to keep track of the process and also to keep the team’s motivation up. All of the members enjoy the feeling of being useful. By completing tasks, a good work environment will be created and will be easily maintained.

For example, the “milestone chart” was one of the Main Project assignments and it helped us creating a schedule and defining the most important tasks that needed to be done. Another Main Project assignment was the “scope of the deliverables”; it shows the project’s work including the objectives, challenges, structures and deliverables. In general, the Main Project subject has helped the team with organization and creating a structure.

About the English assignments, they mainly helped the group improving their English in a professional way. It is important to highlight the group rules assignment. It provided restrictions and limits that should be respected and this is good for creating a good teamwork dynamic.

Thibault is the implementer: Needed to plan a workable strategy and carry it out as efficiently as possible.

Alexander is the finisher: Most effectively used at the end of tasks to polish and scrutinise the work for errors, subjecting it to the highest standards of quality control. (Belbin.com)
Team, Project & Management

Project Background

The main objective of project M is designing digital cooperation workspaces for students, for group collaboration and virtual collaboration. This project will take place on the first floor of building P52 of the Oslo and Akershus University College of Applied Sciences (HiOA) campus at Pilestredet. The participating students have to develop a design proposal for a modern learning and recreational environment. During the project, the students can build on the result of previous EPS semesters research.

Stakeholders

After a brief insight in the project background the team will give a summary of all relevant stakeholders. According to Wiik (2016), these stakeholders are divided in three different groups regarding to the overall importance. Concretely, we have the key stakeholders, the important stakeholders and the secondary stakeholders.

Key Stakeholders

We can describe the key stakeholders as the individuals who are most related to the project itself. They are directly influenced by the work process or results. First of all, we consider ourselves, group M, as key stakeholders. Then, we have the Oslo and Akershus University College of Applied Sciences in general, followed by local and international students and teachers. Finally, the supporting staff plays an important role too. With this last group we refer to cleaners, security guards and maintenance workers.

Important Stakeholders

According to Wiik (2016), every member of the project organization is considered an important stakeholder. Our EPS supervisors with a special focus on Petter Øylan, previous EPS groups that will be used as reference and all the members that take part in our workshop will be considered important.

Secondary Stakeholders

Finally, we have the secondary stakeholders. These individuals are not directly linked with the project but they are present in the same environment. Therefore, we should take them into account. For this project we consider the Norwegian Authorities as our main secondary stakeholder.

Deliverables

After creating a clear view of the project and the relevant players the team made a clear list of deliverables. Since project M is a design project, we will be using a lot of visual material. The medium itself will vary from basic sketches to 3D renders. Underneath, you can find a list of all final deliverables that will be supporting the final design proposal.

Renders, Blueprints & Photos
Succes Criteria

Finally, the team created a list of success criteria, which had to determine the success of the project. This way the group was able to create relevant and real feedback over the final design proposal and the results. First off, the team focused on creating a real impact on P52 and HiOA in general. The aim is to create a popular and frequently used student environment. To finish off, reaching a high level of cooperation between all the team members which come from different nations and have different study backgrounds is desired.
Understanding the project

In the beginning of the project, the team had a high level of uncertainty because there were a lot of questions and doubts about the objectives. The group did not know what to do and even less how to do it. In order to successfully complete the project the first thing that had to be done was to reduce the level of uncertainty. The objective is to go from “walking in the fog” to “painting by the numbers”. As it can be seen on the graphic 2.

In order to reduce the uncertainty the team followed these steps: first of all, what the project was about had to be understood. Secondly, what the group was expected to do in order to achieve the goals and project’s objectives and. Finally, the deliverables had to be defined. The process is called “what”, because it was about understanding the main purpose of the project. With this step advances were made from “walking in the fog” to “quest”.

Once the “what” was cleared, the team had to figure out how to achieve that situation of having completed the project. In other words, what specific tasks were needed in order to handle the deliverables that were expected from the team. This process of learning the way to achieve the final goal can be called as the “how”. After achieving this goal, the phase of “painting by the numbers” was reached.

It may seem that once the team was in the phase of “painting by the numbers” everything would have been easy, but unfortunately the reality is not as simple as plain theory. During the realization of the project new challenges emerged and they had to be faced. Nevertheless, this first two steps that moved the team from “walking in the fog” to “painting by the numbers” were essential to the success of the project and made the subsequent work much easier.

Graphic 2 Project map (Working in Projects, 2016)
Process

The working process has been changing during the realization of the project. The main reasons for this changes have been that the tasks to realize were different in each stage of the project and that the team found more effective ways of working. This resulted in a great evolution of our working process.

The first stages of the project were mostly about researching. Each group member did his research individually and then group meetings were held in order to show results and set new tasks and goals. In this stage most of the work was complimentary so it was done individually. The conjunctive tasks were left for the meetings.

Once the research, was done the team entered in a more conjunctive phase of the project since everyone’s contribution was needed in order to evaluate the research results. This was done in several group meetings and once it was ready the development of the concepts could start.

Once again, concepts could be developed individually so each member could use the full potential of his creativity and create useful and innovative ideas. After there was a meeting to present all the concepts and chose the best ones or those that should be developed. It was also decided to mix some concepts because together they achieved a bigger impact.

During this stage, the team had to simultaneously plan a workshop. The structure of this workshop was agreed in a meeting and then the different activities were split so each member could develop them individually in order to optimize the work process.

After the workshop, the main tasks were to develop a final concept and to prepare and manufacture all the deliverables in order to be able to hand them out before the deadline. The team decided which concept were wanted to design conjunctively in a meeting and then split the several tasks in order to cover everything that needed to be done.

![Graphic 3](image_url) Specification structure
Milestones

The “milestone chart” is a main project tool which permits to plan the most important events of the project and how many hours each milestone needs.

We defined 6 milestones in order to control our progress in the project. Each milestone is represented by a dot in graphic 4.

- When the research is done
- When we analyse the research
- When we have concepts
- When the workshop is finished
- When we have the final concept
- When we have a final design proposal

On graphic 4 there are three different lines: the milestones line (black), the relative work (dark grey) and the relative time plan (light grey). To analyse this graph, the relative work line means that the group worked more hours than were planned. Meanwhile, the relative time plan shows the group was late since the beginning of the project. However, the team got back on schedule when the workshop deadline was achieved (between week 12 and 14).

In order to calculate the workload for each milestone the triple estimate method (Wiik, 2016) was used.
Budget

Every project needs a budget in time. Real projects have to estimate their costs in order to show the viability of the project. But this project is not going to have a monetary budget since this is made by students and it is not necessary to buy any materials or rent tools. That is the reason why our project needed a budget expressed in time. The team has defined this budget by taking into account all the activities that they had planned and meanwhile using the triple estimation method that was shown to the group in the main project course.

Scope Of Deliverables

For creating a better insight in the project, a “scope of deliverables” was created. This structure tries to explain four essential factors of our project: objectives, challenges, solutions and deliverables. The main objectives of this project are related with the high housing prices in Oslo and the attraction of new students. Since HiOA is an expanding university, more room for students is needed. Instead of buying new buildings they decided to use the existing sites more efficiently by renovating them. Meanwhile, they want to attract more students with a more modern and functional campus.
Research

The second part the project, after understanding what the main aim is, is the desk research. The desk research is split into two parts: working areas and recreational areas. Some students have also been asked about what they want in the building P52 with a questionnaire and interviews.
Research

Working Areas

The whole Pilestredet campus is full of spaces for students in which they can work alone or in groups. In P52 we can find these different workspaces, there are tables and chairs in the first corridor where students can work alone or in groups in an open environment. Meanwhile, in the second corridor, there are more private and intimate spaces with high sofas where students can work in small groups.

After desk research on the internet and visiting different HiOA buildings, the first ideas started to assemble in the team’s minds. The notion of flexibility became really important, creating a space to suit different needs. After visiting Kjeller Campus (Fig 2) the first ideas appeared.

Big tables with isolating barriers could be a really interesting and good idea. It is simple, cheap and students are in a comfortable point of isolation where they can focus without feeling claustrophobic. One of the best points of this barriers is that they can be removed in case of more group and open workspaces are needed, so the previously explained concept of flexibility is met. Wheels could also be added to the tables in order to increase even more the flexibility of this workspace.

Recreational Areas

For the recreational part, the group thought that the most important part of this space was to correctly choose the furniture. In P52, the furniture is quite old and needs to be replaced. Moreover, there is not a space where students can talk or just have some informal spontaneous meetings. Thinking about these issues, the team came out with the idea of the “chilling stairs”.

This kind of “chilling stairs” can be found in P46 (Fig 3). These ideas can be evolved by putting sofas or chairs and tables at each step, for example. Another idea is to put plugs in the stairs so students can plug all the electronic devices that are becoming necessary in modern education.

Although, the fact that P52 hosts the canteen and many students use it to have their lunch when they cannot have it at home should not be forgotten. In order to support this function, the group thought that implementing a small kitchen could fit the needs quite well. Not a complete kitchen, just some microwaves and water boilers for coffees and teas in strategical points of the building. Last but not least, the team thought that games (table games, pool, etc.) could fit perfectly with the concept of chilling as in the recreational space in Kjeller Campus.

To conclude the section about the desk research our team wants P52 to become the heart of the campus. In order to achieve this, P52 needs to be more attractive and open than it currently is. For this reason, the three auditoriums will be removed and a huge student hub will take their place. Another idea to increase the attraction of this building could be to implement large windows or glass walls in order to make it more visible from the outside and getting more natural light.

Questionnaire

Previous Questionnaire

The group that realized a similar project last year already asked multiple students about what they wanted in a student area. Indeed, they created an online questionnaire and sent it to many students. The team had access to the results of this questionnaire and decided to select the most important data.
Fig 2  Kjeller campus

Fig 3  Stairs at P46
Last year, the group asked for six different topics:

- Facilities
- Equipment
- Furniture
- Personal space
- Habits
- Disturbance

Over hundred students responded the questionnaire, what is impressive. The team choose to use this valuable data for the realization of this project.

The survey of last year (Student iWorkspace, 2016) was set up in a specific order, starting with general questions (age, gender, study and nationality), followed by ‘easy-to-answer’ multiple-choice questions. These questions involved figures and drawings to make them clear and easier to understand. This was a low threshold way of motivating students to fantasizing, placing themselves in certain situations and thinking about certain personal considerations in these situations. Then they followed with a short open question, simply asking them what “other” considerations they could think of. This worked out well, as the students entered valuable information in the open questions apart from their input in the multiple-choice entries.

We have selected only the most relevant results that affect directly our project. 74% of the respondents were Norwegian students and the others were students in exchange. The graphs of some responses are below:

![Graph: Distribution of individual work and team work](Student iWorkspace, 2016, p52)
Which facilities do you need to work?

- Recreational area: 16.5%
- Separate eating: 30.9%
- Adjustable temperature: 25.8%
- Window with outside view: 59.8%
- Water fountain: 59.8%
- Clock: 28.9%
- Trash can: 74.2%
- Bean coffee vending machine: 22.7%
- Vending machine: 15.5%
- Personal locker: 34%
- Coat rack: 18.6%

Fig 5 Facilities required (Student iWorkspace, 2016, p46)

Which equipment do you need to work?

- Desk chairs (on wheels): 45.9%
- Movable furniture: 28.6%
- Movable separate walls: 7.1%
- Dimmable ambient illumination: 10.2%
- High ambient illumination: 34.7%
- Personal / adjustable light: 13.3%
- USB charging socket: 7.1%
- At least two power socket: 56.1%
- At least one power socket: 41.8%
- Printers: 59.2%
- Audio speakers: 12.2%
- Camera (video call): 3.1%
- Presentation screen: 18.4%
- Whiteboard: 36.7%

Fig 6 Equipment required (Student iWorkspace, 2016, p48)
All those information had been really useful for the beginning of our project. However, we felt the need for more information by the students, especially their fillings about the building P52.

Fig 7 Composition of team (Student iWorkspace, 2016, p52)

The qualitative data shows many thoughts and concerns of the students. Some relevant points are below.

The space

There are twenty-eight requests or complaints about space. According to the students, there is too little available space (being used) at HiOA. “The way it is now is not acceptable and is hindering a lot of students from learning”.

Power Outlet

Although it is already clearly shown in the results of the quantitative part of the survey, there were nineteen additional requests or complaints about the available sockets, concretely about the number of them. This is one of the biggest problems and one of the easiest to fix. Especially in a digital learning environment this is a key requirement for making the result successful.

Equipment and facilities

In general, students request very basic equipment, as we could see in the quantitative results of these two questions about equipment and facilities respectively. Trash cans, printers, lockers and toilets for instance. Toilets are a logical requisite for a good working environment, but it doesn’t seem to be a problem at all at HiOA. Whiteboards are requested by many students, and sometimes just the whiteboard markers (they seem to be missing sometimes). Whiteboards are highly requested by above 25% of the interviewees. There are also some other recommendations such as: wireless external screen connectivity, the right software (relating to the studies) installed on the computers, office supplies. (Student iWorkspace, 2016, p55-57)

All those information had been really useful for the beginning of our project. However, we felt the need for more information by the students, especially their fillings about the building P52.
Current Questionnaire

The team chose to ask fewer students than the previous year, but really wanted to talk with them in order to get their feelings more than just ask them to answer to another questionnaire.

The questionnaire was made on “Typeform”, a good tool for collecting the data directly on “Excel”. No mail with the link of the questionnaire was sent or shared, the team just let the students answer directly on each members smartphones, this was a good method to talk with them and ask open questions such as “In which area do you want to spend your free time? Why?” and “Which things do you miss in the working areas? Why?”

The questions were more specific than in the previous year’s questionnaire. For example, the students were told to choose between three pictures that showed different existing places. Twenty one students responded to our questions and completed the questionnaire. The team chose to mostly talk to students in P52.

The first question was about what they needed most in a place like P52. The students had to choose between:

- Furniture
- Kitchen
- Games (or recreation)

The large majority of the students (70%) felt that they needed more furniture. This fact is something predictable according to the questionnaire of last year. What the team did not expect was the extremely low interest of the students in recreational areas.

Then the students were told to choose between three different pictures which showed different individual workspaces.

The first picture was took in Kjeller, it is this kind of facilities that students chose most for individual work which is really good for the team’s interests because it is a system that already exists in HiOA. It is a place with simple tables on which there are movable separations. It is easy to use and students feel comfortable working in this environment.

Conclusion

The questionnaire and the talks with the students were a good help for the team in order to develop a relevant concept. A lot about the behavior and feelings of HiOA students was learnt. Norwegian students like to stay in close and cozy spaces. They appreciate the places where they can read and work without been disturbed.

Finally, in P52, there is a need for more quiet places to work and putting games or recreational spaces is not relevant anymore. This could not have been discovered in other way.
Fig 12 What would you prefer to have in a “chill area”? (Questionnaire)

Fig 13 What aesthetic do you prefer? (Questionnaire)

Fig 14 Which individual work area do you prefer? (Questionnaire)
Workshop

In order to get inspiration and show the team’s first ideas to the architects with the aim of influencing their project, the 25th of October a creative workshop took place. This workshop was completely planned and directed by the team members. Although it took a good load of work to make the workshop, everything worked better than the team’s best expectations. The collected results were valuable so the team could focus on the real important things and realize a better design for the ground floor of P52.
Workshop

Planning

The task of planning and directing a workshop was completely new to every member of the team; this is the reason why the planning of this started more than one month before the day in which the workshop was scheduled to take place.

The first group meeting to start preparing the workshop was held the 27th of September. Each member had to research about different workshops and bring some ideas that could be developed by the group. This meeting lasted for more than 4 hours but some important decisions were made:

First off, the workshop would have a theme to make it more dynamic and fun. The chosen theme was a “creative restaurant”. The different activities would be called as dishes and a “menu” would be given to each participant explaining the different activities (dishes) of the workshop.

Secondly, the workshop would start with some games in order to break the ice and stimulate the participants’ creativity, followed by a creative brainstorming exercise called “disruptive images” (Eggink, 2011) that would be explained in detail later. After that, the workshop participants would have to face the “treasure hunt” in P52. The aim of this exercise was to get familiar with the building and be able to realize the next exercise: “ideation”, this “dish” was related to give ideas for the student hub. To finish, the group will be having a talk with the participants in order to get feedback.

The time for each activity was needed to be set in order to fit every essential activity in the 3 hours that were planned for the workshop. Some optional activities were discussed too. These activities would only be done if the others were running too fast and the workshop was going to last for less than three hours.

Once the activities were set, each member took the task of planning in depth one or more of this activities before presenting them to our supervisor. After doing that, the team had another meeting the 11th of October in order to check that everything was working as planned and give some mutual feedback and improvement tips to the planned activities. This meeting also went longer than expected because each activity had a lot of different ways of getting done and several points that needed to be discussed and decided. Four hours later, every activity was clear and all the team knew exactly what was going on in the whole workshop and not only in his activities.

The meeting with the team’s supervisor took place the 13th of October and lasted for 2 hours. During this time, the team presented the ideas and discussed about them with the supervisor Petter Øylan. In this meeting, some aspects were cleared: the need of doing a presentation in the beginning of the workshop, how to perform some activities and the timing of each activity which was once again adjusted. After this meeting the team had a final plan for the workshop and it had 12 days to get everything ready so the workshop could work as good as possible.

Presentation

The 25th of October the workshop took place. The team was quite nervous before it started because important members of the university where going to attend. However, knowing that everything had been properly prepared and that a lot of time was invested on the planning, the feeling of confidence was strong in each member of the team.

The team went to the room in which the workshop was going to take place one hour and a half before the starting time in order to set everything up and make a small simulation as a rehearsal to make it easier for the real workshop.
When every participant arrived, the team started to carry out the workshop. As soon as the performance started the nerves went away and everything started to work out perfectly. The participants were involved, showing attention and interest in every activity. That gave the team more confidence to continue with the workshop.

After doing the presentation or the welcome cocktail, a couple of attendants showed their first questions and the team were glad to answer them. After that, Alicia and Hugo made the group go through the “bottle game”, which consisted on passing a ball and saying each ones name and occupation in order to get the attendants know each other. Simultaneously, Aitzol and Alexander were planning the way to divide the attendants in different teams depending on their occupation.

Once the bottle game ended, the teams were created and the drawing game was carried out. This game consisted of drawing the person in each ones left side in only 1 minute. This way, the creativity was stimulated and making the moment a bit embarrassing for everyone, the attendants got more confident and open to share ideas.

When the starters finished, the “first dish” was served. Disruptive images is a way to brainstorm in which a statement or sentence is turned into images in a creative way (Eggink, 2011). In order to get the images, the teams had some magazines and IKEA catalogues. They could draw and write everything they came up with and they even had the chance to look for images on the internet and send them to print. Alexander explained the game and a different statement was given to each group.

The statements where these:
How would you mix technology, flexibility, chilling and working?

To work in Team we need…

How to focus in a crowded space

The teams had 50 minutes to work in their respective statements. After, they had to explain what they wanted to show with the different collages. Some really interesting things came out from here but they will be explained in the results part.

Following the “first dish”, the “second dish” was served. The treasure hunt was explained by Hugo and while he was doing that, the other team members hid an object in different parts of P52. There were two main reasons to do the treasure hunt: to show the building to those that were unfamiliar with it and to give the attendants a rest after the hour they had spent working and explaining the disruptive images. During the game, the different teams had to visit three zones of the building in different order so they did not meet each other in the same point. Please note that the Unicorn and Lego zones were finally unified because the room could not be locked and someone had to stay there. Once they had found the characteristic object of each zone, some things about that zone were explained to them. This way the group was prepared for the “dessert”.

And the “dessert” came, during the “ideation” the previous teams were dissolved and the group was divided into two parts. The participants that were working on the ongoing project of redesigning P52 had to talk with group M to exchange some ideas and also, answer to some of the doubts that appeared in the time the team had spent working in the project.

The ones that had “fresh minds” about the building were told to give some basic designs about the main student hub of P52. After half an hour they had to explain these ideas and the possible reasons behind these. The results that came out from the “ideation” were useful and interesting too but will be discussed in the next chapter.

In order to end the workshop the “digestive” came. The team asked the participants to give some feedback about the workshop, things that they liked, things that they would have preferred in another way or just any comment they had about the workshop in general.

Conclusion

The results that the team got during this workshop went out from the two activities that were prepared to create some valuable input for this project. These two activities were: the disruptive images and the ideation. The results were the following:

As it previously has been explained in this document, in the disruptive images activity, each team had a statement or sentence to work with. The three Statements offered really interesting ideas.
Fig 17 Example disruptive images for getting from floor A to floor B (Disruptive Images: Stimulating Creative Solutions By Visualizing The Design Vision, 2011, p2)

Graphic 6 Treasure hunt blueprint

Fig 18 Workshop explanation
How would you mix technology, flexibility, chilling and working?

One of the most important ideas that came out from this question, which heavily influenced the team’s way to focus this problem, was that in a student environment it is not necessary to provide technology. Most of the students bring what they need with them. Only the infrastructure to enable the use of this technology is necessary, for example plugs for laptops. Other idea that was really interesting was that you can create flexibility with technology, for example using an oculus rift you can create a virtual space customized to your own needs without the need of any specific and fixed physical space.
To work in Team we need...

This statement turned to be too open for the pursued interests because the topics of team spirit or constructive conflicts came out but still some interesting ideas were exposed. In order to work in team, usual desks and tables are needed but also some spaces that enable doing different things than sitting with a laptop and write. The idea of making a workshop space in the “weird zone” was actually inspired on the input the team got from this statement.
How to focus in a crowded space

This was quite a tricky statement since it may seem a contradiction itself. However the team that had to work with it suggested that making an environment that helps focus can be really helpful in order to avoid the sensation of being surrounded by people. The use of headphones or the previously mentioned oculus rift could be useful too.
The other activity, the “ideation”, was interesting too because in both sections of the activity the team was able to gather useful information.

On one hand, during the talk to the architects, a lot of technical questions about the design were answered. Moreover, the architects also shared what they thought would be important and the main points and ideas that they had about the redesigning of the building. They did not share anything specific but they shared concepts: they were trying to make the campus more visible from the outside and they wanted to give the building a different appearance in order to make the first floor more open and looking like a single unit instead of many different zones and corridors.

On the other hand, during the ideation process, two teams were working on ideas for the student hub. Some interesting concepts were exposed but one group came with the idea about making the design modular. This idea consisted of creating blocks that could be moved, arranged or combined in multiple different ways in order to gain flexibility. The idea of making our art cubicles is inspired in this thought.
Finally, the team asked the participants for some feedback or additional ideas they had to offer about the workshop or about the project. The general feedback was really positive. The team was congratulated for the workshop planning and execution and was told to keep that path of working because it was the right one.

This positive feedback was a morale boost for the team because it meant that all the invested hours on the planning of the workshop led to a good result so the same could be done with the project in order to get a good report.
This chapter will give the reader an insight in the design process. It contains multiple concepts and their respective explanations and graphic material. The process was a constant iteration on previous ideas. Eventually, the concepts kept on being streamlined which in the end led to the final design which will be presented in the chapter “final design”.

Fig 23 Render of actual P52
A part of a building needs to be redesigned, more concretely, a part of one of the oldest buildings of HiOA: P52, which was a brewery. The university considers necessary to make a change, the principal aim is to make it more visible, accessible and attractive to people, not only students but also professionals and other citizens.

In first place, Petter Øylan, the project’s supervisor, informed the team how the project should be like. There are some concepts such as transparency, technology, communication, art, flexibility, working and chilling areas that have to be mixed and combined as a “milkshake”. However, this “milkshake” has to be functional, make sense, solve the actual problems (traffic, noise, old fashioned facilities, etc.) and at the same time, design a valuable proposition.

Secondly, before going further with other information, we should explain how P52’s ground floor is, which is the building’s part where the change will occur. There are around 1000 square meters divided in different areas.
Concepts

Auditoriums
The walls are going to be removed so the new design will have, instead of three auditoriums, a big auditorium. This space should become the main point of the building so it has to be an attractive space for the rest of the world.

First corridor
A lot of traffic and too much noise.

Canteen
The building that contains the canteen is historical and there is no option to change anything but the inside.
Main entrance
It is not set in the best place, furthermore, the reception and the stairs are not well visible.

Weird zone
The name of this part has a reason to be. It seems to be hidden; there is no easy access so you cannot explore the different areas.

Second corridor
Calm area but there are some problems with the acoustics because of the ground and the inappropriate materials.
First Concept

Now that the team has a better picture of the area and know what is supposed to happen in it, it is time to explain the first concepts. After having taken into account the results of the questionnaire, a meeting with Andreas and the explanations Petter gave to the team, the following concepts appeared.

First corridor

It will be a “chill-food” area with fluent traffic. Some of the first ideas were: high tables, panels and a flat floor made of absorbing materials in order to reduce noise and keep the heat. This area should create a connection between the auditorium and the canteen.
Fig 31 Inspiration workspaces from Steelcase

Fig 32 Inspiration high tables from Steelcase

Fig 33 Inspiration recreational and work area from Steelcase
Second corridor

Based on the previous research the team realized that the students want more work spaces and decided to use this area. This corridor is perfect for this purpose. With the correct furniture and a few changes (related with materials and configuration) a perfect study or working environment could be created.

Graphic 10 Blueprint of second corridor

Graphic 11 Illustration of the second corridor
Fig 34 Inspiration group workspaces

Fig 35 Inspiration absorbing panels
Auditoriums

One of the main goals is to be more visible and transparent to the outside world. In order to achieve this goal, the existing windows will be larger and the window in the middle will be the new main entrance. With this change, not only P52 will be more accessible but also the inside traffic will become more fluent.

Another idea consists on creating a main spot in this room, a representative item or structure that catches everyone’s eye and makes the room attractive, valuable and also functional. This is how the “technological tree 1.0” was born.

As you can see in the picture above, there is a stage and “the tree”. About the stage, in normal use it will be the recreational area, with pillows on the stairs and furniture on the top. About “the tree” it is set in the middle and its features would be:

- Screens: to show the hour, weather and the main news, etc.
- Projectors: thanks to the circular shape you can point the projectors all around the room, on any wall.
- Interactive panels: to give students the option to check really fast the way to class or the hour of an exam, etc.
- Heating and lighting system: it will be set on the top and the maintenance won’t be a problem because there will be easy access to it, like in a windmill.

All of this sounded interesting but we forgot about something: flexibility. At the moment that an important event is happening on the stage, this tree is in the middle and there is no option to move it. A simple solution came to our minds: cut the tree.
The following picture shows how “technological tree 2.0” could be. The features are the same as the first one but now the panels have wheels. This way, at the moment you need the space underneath the tree, moving the panels to the wall would create a more open and accessible area.
Main entrance

After the first meeting with Andreas, the architect of HiOA, some restrictions were given:

The main entrance should stay where it is now but some changes could happen to it: bigger size or replace it with a rotative one, for example.

The walls that surround the stairs could not be removed because they play a structural role.

Then, as one of the first aims was being more visible, the reception’s and stairs’ concrete walls will be replaced by glass walls which are transparent.

![Graphic 13 Blueprint of main entrance](image)

Canteen

Some changes will happen in this area, for example: the furniture’s configuration; opening bigger windows and entrances in the first corridor but closing the ones on the second corridor and changing the colours to make it lighter.

Weird zone

This isolated area is perfect to create group-rooms, which is what Norwegian students want.

![Graphic 14 Blueprint of canteen](image)

![Graphic 15 Blueprint of weird zone](image)
However, we knew that these concepts were going to change, especially the ones from the auditorium part. In fact, we wanted to assess them in order to develop new and better ideas, that is the reason why we made the workshop.

Fig 39 Inspiration glass on stairs

Fig 40 Inspiration of group rooms
Second Concepts

Therefore, after the workshop a lot of new ideas came but also the necessity to organize them somehow. There is a tool called “mind map” which is useful in these situations.

After analyzing the mind map, here some conclusions:

Transparency, a continuous feeling, every space has to be connected somehow.

The corridors and the canteen stayed as we planned but there were a lot of changes on the weird zone and at the auditorium.

Auditorium

An enormous clarifying process happened during the workshop. This room’s configuration should be mainly for exhibitions and speeches but in normal use, a working space. Again, a dual concept appears but now one concept is above the other and this change implies a big step in the process. After this priority process, the main goal is to solve this problem: “how to integrate students in normal use (at this speeches-art gallery space)?” A lot of suggestions about student work spaces were given during the workshop, here some of the most interesting ones:

Modular furniture

It seems to be the best option to create flexibility inside the room. However, flexibility, sometimes, involves untidiness. The team is conscious about this point and will try to create a structured and flexible space.
Lockers for the future

The society is changing so education as well and this is something you can notice in student’s habits. At this point, a private locker is useless and a waste of time. The reason of this is that the students are constantly moving from one spot to another and lockers are not always located in the best spots. Furthermore, using a lock is not efficient, there should be an option to use your student card and change the concept of private locker to “lockers of the future”. This will be like a normal locker but instead of paying for one locker, you will pay the fee for the service. The service would allow the user to use any locker with the help of his student card. This way you can storage your things wherever is the best for you.

Students bring technology

As we said, society is changing and this fact is essential for the project. It is worthless if the redesign focused on putting screens everywhere, is smarter to go a step further and create the infrastructure to fit the future technology: instead of screens, phone's projectors; real solutions for charging devices, etc.

The idea of opening a new entrance in the auditorium disappeared and now we have big windows but they will be opened by HiOA when necessary.
Weird zone.

An enormous change in this room happened: from isolated group-rooms to an open space and a new entrance and several big windows will be open. The university’s main purpose is to be transparent and be closer to citizens to show what is happening in HiOA. Now, there is literally, an open window to the world. The team proposes a combination of individual and team work spaces, group-rooms and workshop material.
Main entrance.

The idea of changing the wall’s materials is still happening, thus the reception will be set in another position in order to make it more accessible (as you can see on graphic 17). About the door, now that we have a second entrance, a new issue comes up: how to create a good flow between the two doors. Here we have the entrances’ options:

![Main entrance options diagram](image)

**Graphic 17** Entrances options and reception change

With a simple table and assigning different percentages to the concepts, a coherent and objective decision could be made.

<table>
<thead>
<tr>
<th>CONCEPTS</th>
<th>Original Entrance</th>
<th>Middle Entrance</th>
<th>Tree Entrance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature (45%)</td>
<td>8</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Traffic (45%)</td>
<td>7</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Practical (10%)</td>
<td>10</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

**Graphic 18** Table of comparison

Then, the result is leaving the original entrance but make it bigger (this way it is more visible) and change the system to a rotative one.
Third Concept

During this session we made use of the lotus blossom creative technique. This tool helps create valuable output for early ideation and brainstorm sessions. The works as follows: first we defined a central theme, in this case redesigning P52. Then we define relevant different critical design topics related to the central theme. Afterwards we divided those topics in three groups: the student hub, the corridors and the weird zone. Finally we specified each topic in multiple subtopics respectively. Eventually we got the following subjects.

Weird zone: workspaces, group rooms and reception and panels

Corridors: workspaces, fast food area

Student hub: stage, art zone and workspaces

A wildcard topic was also added for all out of the box and random suggestions.

After defining all the relevant subjects we started a quick design process. During this phase we tried to create as much creative solutions as possible for all topics in a timespan of a half an hour. Then we held a short feedback time over all created ideas. This was followed by a second quick design phase of 20 minutes. We held this feedback moment to keep our creativity and inspiration high. When the quick design phase was finished we discussed all solutions and quoted them. This way we could more clearly define what direction the project in general should go.

Results

The use of the lotus blossom tool delivered multiple valuable ideas and possible solutions. First off, we created a better insight in the weird zone.

We decided to open up the connection between this zone and the bordering street (Pilestredet) by replacing the brick walls with multiple windows. This way the weird zone gets more public attention, which creates an added value for HiOA in the form of publicity. The weird zone will be divided in an open workshop and multiple group rooms. Finally it is now possible to access the reception via the weird zone.

Solutions for both corridors were quickly generated. We decided to equip the second corridor with multiple cubicles, which will be put against the canteen walls. The first corridor will contain a kitchen area and multiple different shaped cubicles. These will be placed in the middle of the first corridor.

The student hub will be divided in three zones: the stage, an art zone and workspaces. Although we developed multiple valuable solutions for the stage, there was no final consensus. We decided to take distance from this zone so we would not lose ourselves in the details. Instead we focused ourselves on the art zone and workspaces. This lotus blossom delivered a valuable solution for both elements. First off, the student hub will be equipped an art cubical which can easily be converted in group workspaces. The remaining space will be used as conventional work areas.

For the wildcard we suggested of using a cable system that is able to put all art cubicles to the wall. This idea got a very positive reception and we decided to research the feasibility.
Conclusion

After using the lotus blossom we generated multiple good solutions. This gave us a sense of direction for the final concept. Only the stage created difficulties, which had to be resolved in a later stage of the development process. After finishing this tool we decided to do a second lotus blossom session with a specific focus on the stage and the student hub in general.
After the concepts were developed, the final design emerged. Although multiple elements were fixed, the big picture was not ready yet. This chapter will give the reader an insight in the final design decisions which eventually lead to the definitive design. To visualize those concepts CAD software by “AutoCAD” and the “KeyShot” render engine was used.
Fig 45 Render 1 of final concept
The student hub will be divided in four zones: the stage, the art zone, the working areas and the recreational area. On this page the reader can find more information about the stage. The stage is separated in four different zones: the stairs, the stage itself, the recreational areas and finally two group workspaces.

The stairs will play a crucial part in the design of the student hub in general. On the one hand this object will serve as a connection between the stage and its surrounding. On the other hand it will function as a main seating area for the students.

The stage will be multifunctional. It will provide space for working areas during a normal day but it can quickly turn into a fully functioning podium for theater plays, speeches, etc.

The stage will be surrounded by two group-rooms. These group-rooms will be available for all students via an online booking with the current HiOA platform.

The recreational areas are situated on top of both group rooms. Those will function as a zone which the students can access freely for relaxing, informal conversations and even a short nap.
Fig 47 Render of the stage

Stage
Group workspace
Stairs
Student Hub

Apart from the stage and the recreational area there will be two different zones: the art zone and the open workspaces. Both are easily accessible for the public.

The art zone will consist of multiple yellow cubes. Inside there is enough space provided for artists to exhibit their work ranging from paintings, clothing or other installations. The inspiration for this art zone came from an exhibition from Nike.

The open workspace contains different types of furniture which can be used freely by all students. Two seating units will have panels surrounding them. These panels will create a visual and sound isolation.
Fig 49 Render of yellow art cubes

Fig 50 Art cubes by Nike
Fig 51 Render of recreation area

Fig 52 Render of the student hub
Fig 53 Render of group rooms at the student hub

Fig 54 Inspiration for recreation area
First Corridor

The first corridor will consist of multiple work areas and a kitchen area. The working areas will be accessible for all students. Two different types of cubicles will be used: the yellow high table cubicles and the seating units with panels. Please note that the art cubicles of the student hub and the high tables of the first corridor are the same. The only difference is a vertical transformation of the bottom element to desk height.

In the end of the first corridor, there will be a small kitchen and food area which will be open for all students. This space will contain vending machines, microwaves, water boilers, etc.
Seating unit with panels

Fig 55 Render 1 of the first corridor
Fig 56 Render of sitting unit with panels in first corridor

Fig 57 Render of kitchen area in first corridor
Fig 58 Render 2 of the first corridor
Weird Zone

The weird zone is divided in three zones: the open workspaces, group-rooms and a supporting area including printers and vending machines. Since the weird zone is situated near the street side the goal of this room is to offer pedestrians an insight in HiOA’s live and offer free publicity. The aim of this zone is to create a creative, accessible and functional working area for all students from all fields. The weird zone wants to obtain a soft practical workshop vibe combined with basic theoretical workspaces. Finally, the room is equipped with multiple white boards and a possible tool bay at the U-shaped table. Here students can obtain different equipment for more practical work.
Fig 59 Render 1 of the weird zone
Fig 60 Render of open workspaces in weird zone

Fig 61 Inspiration open workspaces from Steelcase
Fig 62 Render of group workspaces in the weird zone

Fig 63 Render 2 of the weird zone
Fig 64 Render of supporting area in weird zone

Fig 65 Render of vending machines in weird zone
Fig 66 Render 3 of weird zone

Fig 67 Inspiration of tool bay
Second Corridor

In the second corridor, three different zones can be identified: group work spaces, recreational areas and individual work spaces. This corridor focuses on more quiet group work for two reasons: first off, the second corridor is a low traffic area which is optimal for this type of work and secondly; this area is equipped with multiple visual and sound isolation panels. This creates an isolated atmosphere for all working students.
Fig 68 Render 1 of the second corridor
Fig 69 Render of group workspaces in second corridor

Fig 70 Render of individual workspaces in second corridor
Fig 71 Render 1 of recreation area in second corridor

Fig 72 Render 2 of recreation area in second corrido

Fig 73 Render 2 of the second corridor
In this chapter each member of the group explains his or her own personal experience after the EPS semester.
Reflexions

Aitzol Salaberri

During the realization of the EPS a lot of different challenges appeared. These challenges were personal academic and cultural. On one hand I was in a totally new country where I knew no one, I have never had problems to meet new people and make new friends but still being in a completely new place and alone felt a bit scary. Luckily the first two weeks full of activities helped a lot in meeting new people and making new friends and the EPS class was always full of kind and friendly faces.

On the other hand, regarding the project, two main challenges had to be faced. First of all the project was about designing a new student workspace. I had never worked in a project like this before and was not sure about how to carry it out. The second challenge that I had to face regarding the project was that I had only worked in teams with other engineers and in this project had to work with two industrial designers. The challenge was bigger than expected because the ways of working are really different and sometimes they even crush really hard. Sometimes the way we wanted to do the things was even opposite but we have learnt to give in sometimes for the best of the project and I personally think that the final result is good although it maybe took more work than expected.

Hugo Herpin

I was very lucky to work on this specific project, it is a very concrete one with real issues. The fact that this project will become real makes me realize how of a great opportunity it is. I am glad of all the responsibilities I have had and I enjoyed working on it with a great team. Especially because I have always been attracted by design and conception jobs. Furthermore, dealing with designers and engineers from different countries and with different backgrounds was exciting and challenging.

The results of this project couldn’t be the same with another team, because we completed each other perfectly. This project was the first I realized in English, with an international team that was completely different to those I am used to. We all have different ways to work and to handle issues. So I learnt a lot on the way to work in other countries and with a total different approach. And, of course, Petter, our supervisor, helped us a lot and gave us the time and attention that we needed. I really think this semester will influence me on my future career. I have another vision of working, and a new level of open-mindedness.

Thibault Pouppeville

During this EPS semester I have learned lots of things such as managing a project and my English speaking. I’m really happy to have met the teachers, the Norwegian people and all the other international students. We had a really nice time, we discovered the culture of this country and the country itself during some trips together. Especially with my project group the complicity was really good. We worked really well during the whole semester.

This project about the design of a student area doesn’t change my ambitions to begin a mechanical engineering career. I have learned lots of things about design but I admit I don’t want to work in this field. It allowed me to discover some tools I had never used any 3D software or some creative techniques such as the ‘Lotus Blossom’ which can really help me in my studies and my professional life. All my relations told me: ‘go aboard’, and now I understand that it is really important and a big source of knowledge. In one year I will have the opportunity to go aboard another time during my studies and I’m pretty sure I will leave France again to explore another country.
Alexander Nieuwborg

This EPS semester was a live changing experience for me both on a work and social level. Let’s start with the work and school related experiences. I believe EPS taught me an immense amount about working in multidisciplinary and international teams. We exchanged work methodologies, ways of creative working, etc. The unique composition of our group, group M, also created a very interesting and previously unknown dynamic. This consisted of three engineers of different fields and two designers. Although there were some difficulties along the way it still resulted in a very valuable experience and working with engineers helped me to broaden my worldview in a professional context. This program also helped me to improve my English.

On a social level the EPS program was even more valuable. Meeting all the different people from all the different cultures gave me an enriched worldview. Learning about their cultures, languages and general habits fed my hunger to discover more of the world. During this semester abroad I also felt a connection with Norway in general. Certainly the immensely beautiful nature kept on amazing and surprising me. After this semester I am planning to continue discovering the world with the help of all my new Erasmus friends.

Alicia Alcázar

The European Project Semester has been, by far, one of the best experiences in my life.

Professionally, I have improved my team leader role and got a lot of experience in teamwork. Working with my group has been a great challenge from the beginning, my main goal was to make everyone involved and happy with the final solution and this has been really hard to achieve. Why? Because when you mix people from completely different backgrounds (mainly, different culture and studies) and make them work in something that is out of the comfort zone maybe, if you don’t know how to handle it, it doesn’t work. Here is where I found my place: try to communicate the ideas and making them attractive to everyone, never mind who they are or where they come from. This skill is really important for a real scenario because me, as a designer, will have to deal with engineers and make them believe and understand “my idea”. Another important skill that I have developed is how to introduce their ideas in my brain and make the perfect mix. Listening and interpreting is something I can say I have improved by making this project. In addition, the fact that this project is something that is going to happen in real life has made everyone to be more involved and motivated.

Personally, meeting people from so different cultures and travelling has made me really happy and fulfilled because trying to understand others and learn how to behave in different situations makes you somehow more experienced and more valuable.
References

Text references

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Figure references

Figure 1 : First group meeting

Figure 2 : Kjeller campus

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Figure 5: Facilities require. Last year project: Student iWorkspace compact.

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Figure 7: Composition of team. Last year project: Student iWorkspace compact.

Figure 8: Overview P35. http://www.forskerforum.no/wp-content/uploads/2015/11/742449.jpg

Figure 9: Power outlets. http://www.vqvgroup.com/v/vspfiles/assets/images/eca_interact-iv_black.jpg


Figure 11: Whiteboard. http://mooreco360.com/images/index/track-system.jpg

Figure 12: What would you prefer to have in a “chill area”? (Questionnaire) http://lj.libraryjournal.com/2012/10/buildings/lbd/the-best-of-interior-design-public-and-academic-library-winners-library-by-design-fall-2012/#_

Figure 13: What aesthetic do you prefer? (Questionnaire) http://www.archdaily.com/639726/georgetown-university-ikon-5-architects
Figure 14: Which individual work area do you prefer? (Questionnaire)

Figure 15: Final menu

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Figure 31: Inspiration workspaces from Steelcase. https://www.steelcase.com/spaces-inspiration/inspiring-office-workspaces/#social-spaces

Figure 32: Inspiration high tables from Steelcase. https://www.steelcase.com/

Figure 33: Inspiration recreational and work area from Steelcase. https://www.steelcase.com/eu-es/donde-estamos/showrooms/americas/san-francisco-california/

Figure 34: Inspiration group workspaces. http://blogs.ucl.ac.uk/digital-education/2013/02/04/amsterdam-university-library-learning-spaces-visit-28th-january-2013/

Figure 35: Inspiration absorbing panels. http://www.zenithinteriors.com/au/product/haven-pod-solo

Figure 36: Render 1 of technological tree 2.0

Figure 37: Render 2 of technological tree 2.0

Figure 38: Render 3 of technological tree 2.0
Figure 39: Inspiration glass on stairs. http://www.allied.ie/commercial/glass-glazed-stairs-stairwell-enclosure/


Figure 41: Inspiration windows and doors. http://www.plataformaarquitectura.cl/cl/769247/casa-de-pueblo-en-antwerp-sculp-it/55842768e58e09c2000117-town-house-in-antwerp-sculp-it-photo

Figure 42: Inspiration of group rooms. https://www.steelcase.com/products/walls-work-walls/via/

Figure 43: Inspiration of work tables. https://www.steelcase.com/products/benching/bivi/

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Figure 51: Render of recreation area

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Figure 54: Inspiration for recreation area. https://www.fastcodesign.com/1662178/wanna-improve-education-demolish-the-classrooms

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Figure 57: Render of kitchen area in first corridor

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Figure 61: Inspiration open workspaces from Steelcase.

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Figure 67: Inspiration of tool bay. https://s-media-cache-ak0.pinimg.com/originals/9a/92/25/9a922590827f0971e8cc528f859f3300.jpg

Figure 68: Render 1 of the second corridor

Figure 69: Render of group workspaces in second corridor

Figure 70: Render of individual workspaces in second corridor

Figure 71: Render 1 of recreation area in second corridor

Figure 72: Render 2 of recreation area in second corridor

Figure 73: Render 2 of the second corridor

**Graphic references**

Every picture, graphic or render in the report that is not referenced in the “references” chapter has been either taken or created by the Group M.
Appendices

Appendix 1: Questionnaire

To make the questionnaire, we used TYPEFORM

List of questions:

Part 1 : Personale data

- Gender
- Age
- Nationality (Norwegian/European/Non-european)
- Study program (Full time/Part time)

Part 2: Activities in a typical day in HiOA

- What are you doing in the campus in a typical day?
  Opinion scale from 0 to 10 with 0 for “more chill” and 10 for “more work”

Part 3: Chill Area

- What would you prefer to have in a chill area?
  Choice between 3 pictures, one for “Games”, one for “Kitchen” and one for “Furniture”
  Which one do you prefer?
  Choice between 3 pictures of “Chill areas”

Part 4 : Individual “work area”

- Which one do you prefer?
  Choice between 3 pictures of individual “work area”

Part 5: Group “work area”

- Which one do you prefer?
  Choice between 3 pictures of group “work area”

Part 6: Aesthetic

- Which one do you prefer?
  Choice between 3 pictures of different “aesthetics”

Part 7 : Open questions

- Would you like to add something?
- In which area do you want to spend your free time? Why?
- Which things do you miss in the working areas? why?
1. Personal data

a. Gender

A Female  B Male

c. You are...

A Norwegian  B European

C Non-European

d. Study program

A Full time  B Part time
3. Chill Area

a. What would you prefer to have in a "Chill area"?

- Furnitures
- Games
- Kitchen

b. Which one do you prefer?

- Chill 1
- Chill 2
- Chill 3
4. Individual "work area"

a. Which one do you prefer?

5. Work area group

a. Which one do you prefer?
6. Aesthetics

a. which one do you prefer?

- Aesthetic 1
- Aesthetic 2

Would you like to add something?
In which area do you want to spent your free time? Why?
Which things do you miss in the working areas? why?

Continue press ENTER

unique visits: 32
responses: 22
completion: 69%
avg. time to complete: 03:50

PCs & Laptops: 13 unique visits, 5 responses, 38% completion
Tablets: 0 unique visits, 0 responses, 0% completion
Smartphones: 19 unique visits, 17 responses, 89% completion
Others: 0 unique visits, 0 responses, 0% completion
Transcription of open questions

Interview number 1

Number of interviewed: 1  
Place of interview: P52  
Q: Would you like to add something?  
A: No.  
Q: In which area do you want to spend your free time? Why?  
A: In places where I can work, quiet if possible or in a canteen  
Q: Which things do you miss in the working areas? why?  
A: More place for working in group, because it is difficult for us, students, to book a room.

Interview number 2

Number of interviewed: 2  
Place of interview: P52  
Q: Would you like to add something?  
A: Yes, we want better sits to eat!  
Q: In which area do you want to spend your free time? Why?  
A: We want to spend our free time in cool places to talk and chill with our friends or in working areas.  
Q: Which things do you miss in the working areas? Why?  
A: Nothing.

Interview number 3

Number of interviewed: 1  
Place of interview: P52  
Q: Would you like to add something?  
A: No.  
Q: In which area do you want to spend your free time? Why?  
A: I go back home when I am free.  
Q: Which things do you miss in the working areas? why?  
A: Device for connecting my laptop.

Interview number 4

Number of interviewed: 3  
Place of interview: P52  
Q: Would you like to add something?  
A: There is a real lack of place to work in the campus. Every time we have to look for room or table, sometime we have to work in very noisy spots.  
Q: In which area do you want to spend your free time? Why?  
A: In places where we can work!  
Q: Which things do you miss in the working areas? why?  
A: We explained it before.