

Mental Health Services for International Students

A Service and System-oriented Design Project

Xiang Li
The Oslo School of Architecture and Design

Mental Health Services for International Students

Xiang Li

A Service Design and System Oriented Design Project

The Oslo School of Architecture and Design(AHO)
Diploma Project
Spring, 2021

Supervisors:
Josina Vink
Simon Clatworthy

SUMMARY

When international students move to a new country and a different educational environment, they can meet mental health challenges easily. Especially in the pandemic, they can be faced with negative information and serious social isolation, which is harmful to mental health.

This diploma project is a Service Design and System Oriented Design project on mental health services for international students in Oslo, to explore how design can contribute to international students' mental health from service and system aspects.

The main outcomes of this project are service concepts with touchpoints like the brochure, activities and tools, the app and website. Besides, the proposals which include findings and potential interventions at the system level are drafted to deliver to the main stakeholders. The goal of the concepts is to improve international students' awareness of mental health and help them know more about mental health and services, as well as to provide peer support, information and low-threshold services on mental health, by intervening the system from three levels: international students, peer students and the environments.

INDEX

8	Introduction
10	Background
18	Approach and Methods
22	Process
72	Outcome
112	Discussion and Reflection
116	Acknowledgment
118	Reference
120	Appendix

INTRODUCTION

Context

Mental health is related to emotional, psychological and social well-being. It can affect our daily life, work and study, relationships and physical health. In the context of COVID-19 pandemic, when people are faced with the unknown and new realities, many people are experiencing negative feelings like fear, worry and stress, which affect people's mental health.

Challenge and motivation

When young adults move to a new country and start their study in a new environment as international students, they may meet different challenges in study and life. They can meet mental health challenges easily because of the cultural difference, language barrier, lack of awareness and knowledge of mental health, lack of social contact, unfamiliarity of mental health services, etcetera. Besides, the pandemic situation can cause negative feelings and serious social isolation for the international students.

As an international student who is studying Design, I would like to explore how Service Design and System Oriented Design can contribute to international students' mental health.

Methods and approach

This is a Service Design and System Oriented Design project, in which the Design Thinking and Design Process are applied. Service Design and System Oriented Design are combined to explore the current service experience and the challenges of different stakeholders in the system, in order to design service concepts and interventions in the systems to help international students with their mental health condition.

Process

The project process mainly consists of research, synthesis and analysis, ideation and co-creation, evaluation, prototype and test, as well as iteration.

In the research phase, I conducted desk research, interviews with international students, experts and stakeholders, student journey mapping tool of mental health conditions with international students, and self-ethnography of SiO mental health services. Then, through synthesis and analysis, the insights and problems were gathered. With these insights and problems, I did ideation individually and co-creation with SiO counsellors, psychologists and students. After ideation, I did evaluations based on threshold and impact of the ideas and feedback from SiO. To test the service concepts, I built a story of the service journey and prototyped the touchpoints to show the services and get feedback from students, SiO and school. Last but not least, the service concepts were iterated on this feedback. Because of the coronavirus pandemic, most of the process is done digitally.

Outcomes and Contributions

The main outcomes of this project are services concepts which includes

- Emails, websites and the brochure, to educate students and provide services information
- Improved application and website to provide information and low-threshold services
- Activities and programmes to help students learn more about mental health and build peer support and social contact
- Proposals of findings and potential interventions in the system, to be shared with main stakeholders. This report is also a part of outcomes, which is shared with stakeholders and contributors of this project.

My contributions are not only the final design concepts and proposals, but also the process of design. During the process, I shared my findings, insights, methods, concepts with experts and stakeholders, like SiO and school, which also helps bring forward the problems, international students' perspectives and promote Service Design and System Oriented Design.

Reflection

My main reflections are the value and methods of Service Design and System Oriented Design, as well as the role of service designer in the process. Service designers can not only design new concepts and service processes, but also can be a connector and promoter. SD and SOD can be combined together to research, analyze and design from different levels, from the details of the touchpoint to the whole system picture, which are all important to create the value and make the impact.

BACKGROUND

Mental health is related to emotional, psychological and social well-being. It can affect our daily life, work and study, relationships and physical health. In the context of COVID-19 pandemic, when people are faced with the unknown and new realities, many people are experiencing negative feelings like fear, worry and stress, which affect people's mental health.

Mental health and Well-being

Target group

Statistics

Recent events

Stakeholders

Reflection

Mental Health

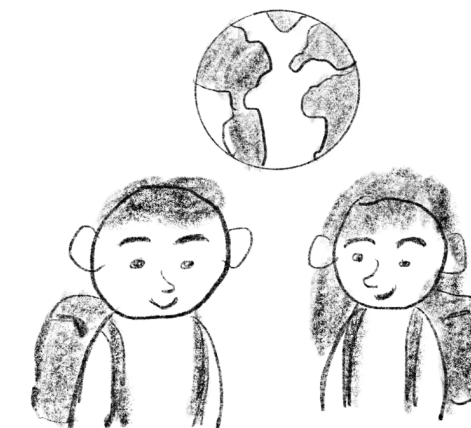
Mental health is an essential component of health and life. According to the [World Health Organization \(WHO\)](#), "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." It is related to emotional, psychological and social well-being. Mental health affects how we feel, think and behave, and then it determines stress management, physical health, study and work, relationships with others, etcetera.

Mental health is determined by multiple social, environmental, psychological and biological factors, which are interconnected in a complicated way, such as education, employment, social support and ability to manage feelings and thoughts. Everyone may meet some challenges in life. Especially in the pandemic, many people are experiencing mental health challenges for the uncertainty, social isolation and new realities.

Target group

Every year, many students from all over the world move to Norway to study. In this project, the term "international students" means the students with foreign citizenship who come to Norway for studying as the main purpose. I select international students in Oslo as the target group, with the special focus on those at AHO, because:

- As an international student, I have **strong empathy** on this group
- International students are mostly young adults, who usually have **limited experience** in dealing with life and mental health challenges, especially when they move to a new country and a new environment, which means that they may have a hard transition period
- When international students move to a new country, they usually **lose contact** to some extent with their family and friends. They often haven't built enough social contact in the early stage of move-in. Especially in the pandemic, the social isolation may be more serious for them.
- As foreigners, international students can be more **vulnerable in the healthcare system**, because of unfamiliarity with the system, language barrier, lack of information, etcetera.



International students in Oslo

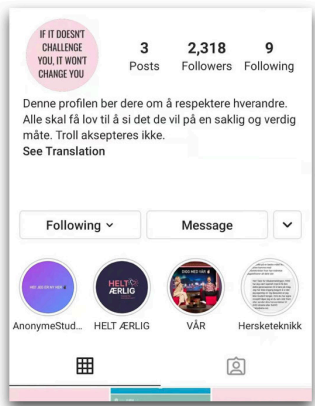
Statistics

There are many surveys on the mental health of students. Here are some key findings from my desk research:

- Many students are experiencing mental health challenges in Norway
In Norway, around 40% of students report mental illness (SHoT, 2018)
- The pandemic makes the social isolation serious
In the corona, 27% of students feel isolated and 32% state that they miss social life, their study environment and contact with other students (Grafill third corona survey, 2020)
- International students in Norway is a large group
In 2020, the number of foreign students registered at Norwegian HEIs was 18 040 (DBH, 2021)
- Many international students in Norway meet mental health issues
13 % of international students consider their health as bad, 48 % of them think it is due to mental issues (HoT-Int, 2018)

Recent events

In the process of my diploma project, there are also some recent events related to mental health emerging at AHO, which makes students and staff pay more attention to mental health and triggers discussion. Fortunately, AHO initiated discussion and a working group on the psychological environment and well-being of students at school. I bring forward my project and findings to the open discussion and working group and try to make the international students' voices and perspectives more visible.



Instagram



khrono.no

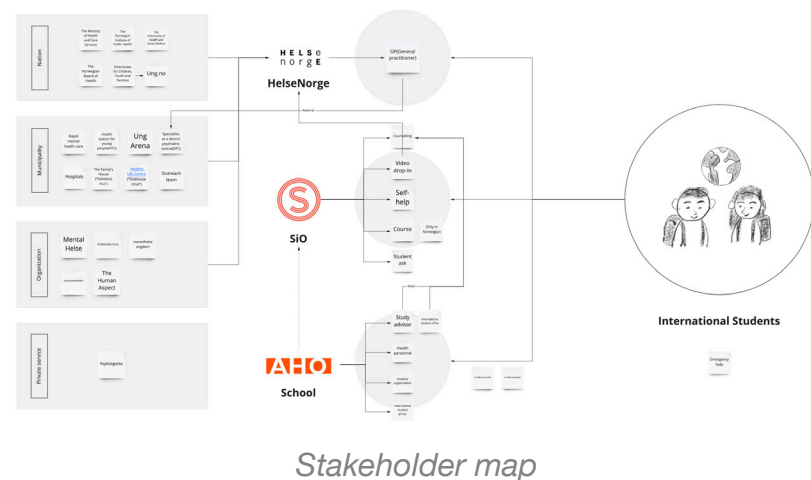


nrk.no

Stakeholders

To understand the picture of the whole system and what mental health services are offered, I mapped out the stakeholders of mental health services for young international students from different levels, nation, municipality, organization, private service, SiO and school.

To narrow down the scope of this project, among these stakeholders, I select SiO and school as main stakeholders to focus on because these two stakeholders have closer relationship with international students and international students keep in touch with these stakeholders more frequently. For the school part, this project targets at AHO as an example.



[SiO](#) is the welfare organization for students in Oslo and Akershus. For now, it provides different mental health service offerings for students in Oslo and Akershus, like counselling, video drop-in, online courses, student ask, self-help, etcetera.

There are also some staff and groups related to international students' mental health at [AHO](#). For example, when international students need someone to talk to, they can turn to the international office or study advisor, who can also refer international students to the SiO specialists. [SAHO](#) (The student council at AHO) and [International Task Force](#) initiates social activities for international students at AHO.



Strength of SiO and AHO

As the two main stakeholders, SiO and AHO have their own responsibilities and roles in the mental health field. They also have their own strengths.

For SiO:

- Can provide professional help by counselors and psychologists
- Have a large scale of student users

For AHO:

- Have close contact with the international students
- Provide information and education easily
- Build trustworthy relationships among the students

Reflection

Broad topic

Mental health is a very broad topic and it covers various aspects of students' life, which requires systematic research, analysis and design.

Me as a part of the target group

As an international student, I am also a member of this project's target group. This helps me have strong empathy for the users and enables me to experience the service by myself. However, at the same time, I have my personal bias and perspectives on the experience, service, and stakeholders, which can affect the insights, analysis, evaluation and design concepts.

Follow up recent events

In the process, I tried to follow up on some recent events related to mental health at school, in order to bring forward international students' voices and perspectives, share findings and concepts of this project, and optimize the value of this project.

APPROACH

This is a Service Design and System Oriented Design project, in which the Design Thinking and Design Process are applied. Service Design and System Oriented Design are combined to explore the current service experience and the challenges of different stakeholders in the system, in order to design service concepts and interventions in the systems to help international students with their mental health condition.

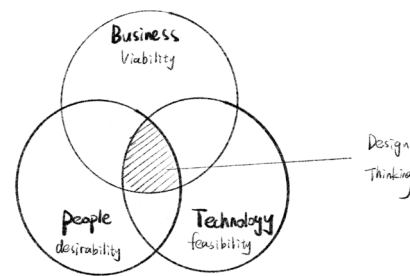
Design Thinking and Process
Service Design
System Oriented Design
Combination of Service Design
and System Oriented Design
Reflection

Design Thinking and Process

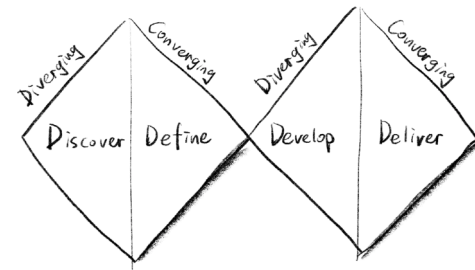
In this project, Design thinking, a human-centered approach, and Design Process are applied, with the reference to “[Double Diamond](#)” (British Design Council, 2005), which includes 4 phases:

- **Discover:** Understand the problem
- **Define:** Gather insight to define the challenge
- **Develop:** Design and co-design solutions to the defined challenge
- **Deliver:** Test out the solutions and improve the concepts

More details about the methods applied in this project, please see in the next chapter “Process”.



Design Thinking
(Reference: [IDEO](#))



Double Diamond Process
(Reference: [British Design Council](#))

Service Design

Service Design is to improve the experience of the service process for users, within the consideration of the service provider and stakeholders. There are some principles for Service Design (Stickdorn, Marc, et al., 2018):

- **Human-centred:** Consider people’s needs and experience.
- **Collaborative:** Engage different stakeholder in the service design process.
- **Iterative:** Iterate service concepts for improvement and implementation.
- **Sequential:** Orchestrate service as a sequence of interrelated interactions and actions.
- **Real:** Understand the real needs and prototype ideas in reality.
- **Holistic:** Address the needs of different stakeholders through the entire service.

In this project, Service Design approach is used to explore the users and stakeholders’ challenges, needs and current service experience, as well as to design improved mental health service experience for the international students.

System Oriented Design

[System Oriented Design](#) (SOD) is to design interventions with systems thinking in a big picture to design interventions for systemic impact. System Oriented Design can help embrace and explore the complexity and the connection between different stakeholders and disciplines in the system.

In this project, the System Oriented Design approach is used to help understand the complicated context and rich picture of international students’ mental health, as well as to help think and design interventions on the system level with systemic mapping and analysis methods.

Combination of Service Design and Sytem Oriented Design

The combination of Service Design and SOD helps understand the situation and challenges in a richer picture, from not only user journey and service process, but also from the different stakeholders’ perspectives and aspects in the system, in order to design touchpoints, experience, service concepts, and also interventions from different levels in the system.

Reflection

This is a good practice for me to combine SD and SOD. In the process, I need to zoom in to the details of the service, like the website interface, and zoom out to the system level, like the relationships between stakeholders, which is beneficial for me to think from different perspectives and levels, but also sometimes feel lost and overwhelmed. May lose some details of the experience or a big picture.

PROCESS

The project process mainly consists of research, synthesis and analysis, ideation and co-creation, evaluation, prototype and test, as well as iteration.

In the research phase, I conducted desk research, interviews with international students, experts and stakeholders, student journey mapping tool of mental health conditions with international students, and self-ethnography of SiO mental health services. Then, through synthesis and analysis, the insights and problems were gathered. With these insights and problems, I did ideation individually and co-creation with SiO counsellors, psychologists and students. After ideation, I did evaluations based on threshold and impact of the ideas and feedback from SiO. To test the service concepts, I built a story of the service journey and prototyped the touchpoints to show the services and get feedback from students, SiO and school. Last but not least, the service concepts were iterated on this feedback. Because of the coronavirus pandemic, most of the process is done digitally.

Overview or the process

Research

Synthesis and Analysis

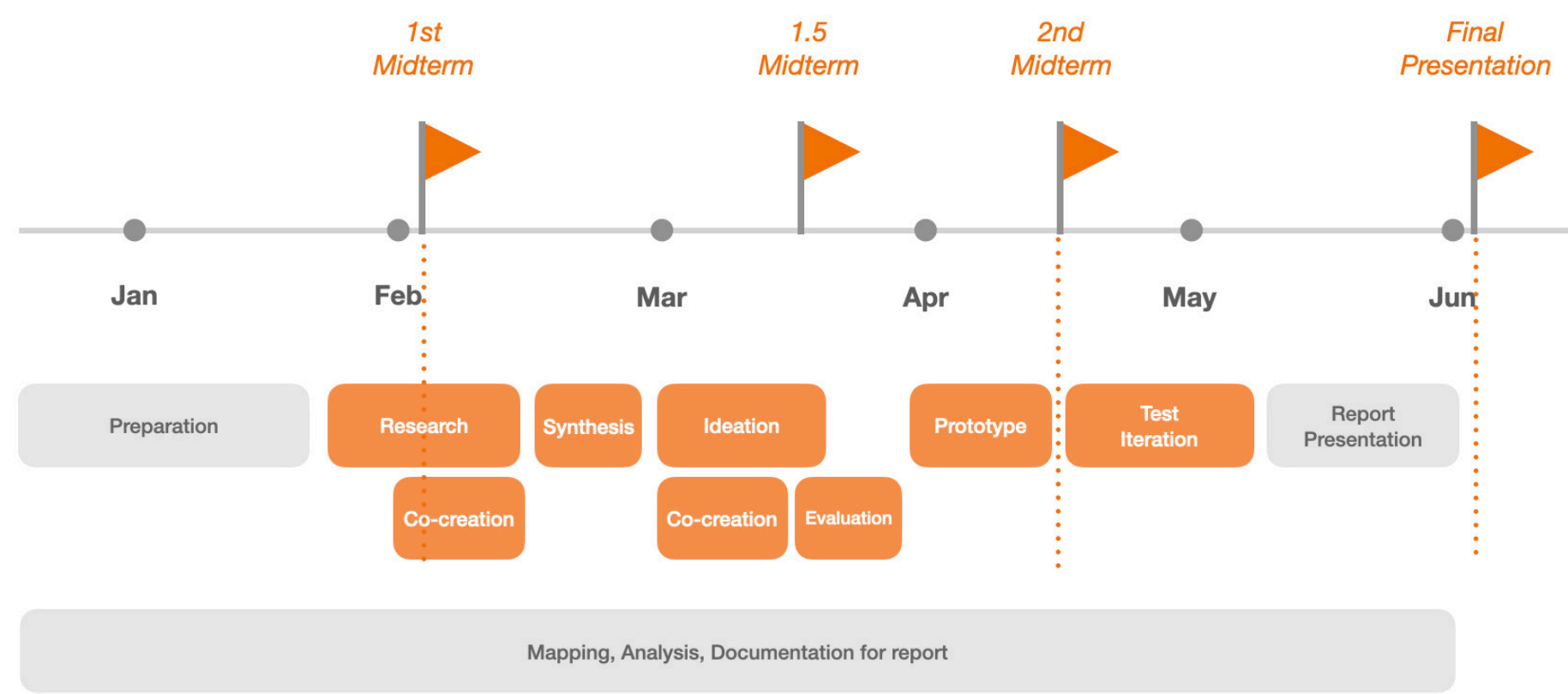
Ideation

Evaluation

Prototype and Test

Reflection

Overview of the process

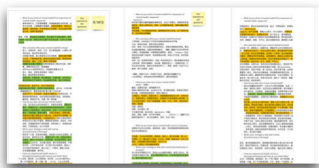


This picture show you the general design process of this project along the timeline.

Research

Research methods

In the research phase, I mainly used desk research, Interview, student journey mapping and auto-ethnography.



Interview

9 international students in Norway
2 counsellors and 1 psychologist
1 professor
1 staff at international office at school



Student journey map

4 international students in Oslo



Auto-ethnography

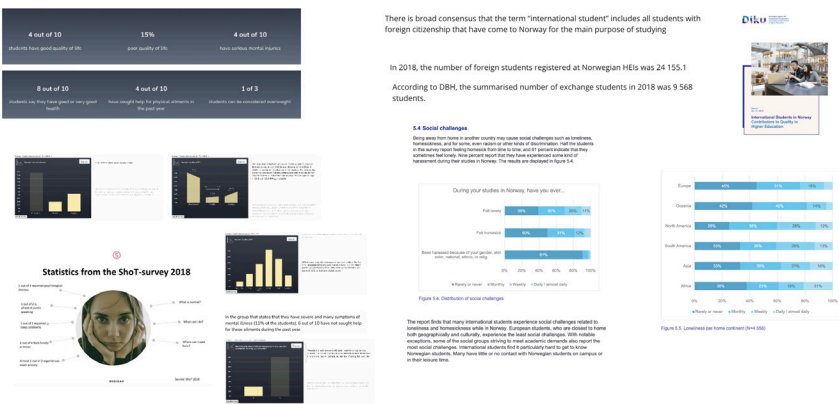
Online course
Phone call
Video drop-in
Online counselling

Research methods

Desk research

To investigate the healthcare system and mental health services for international students, I searched the reports, surveys, and service provider websites on the Internet. See the system map and statistics in the previous chapter.

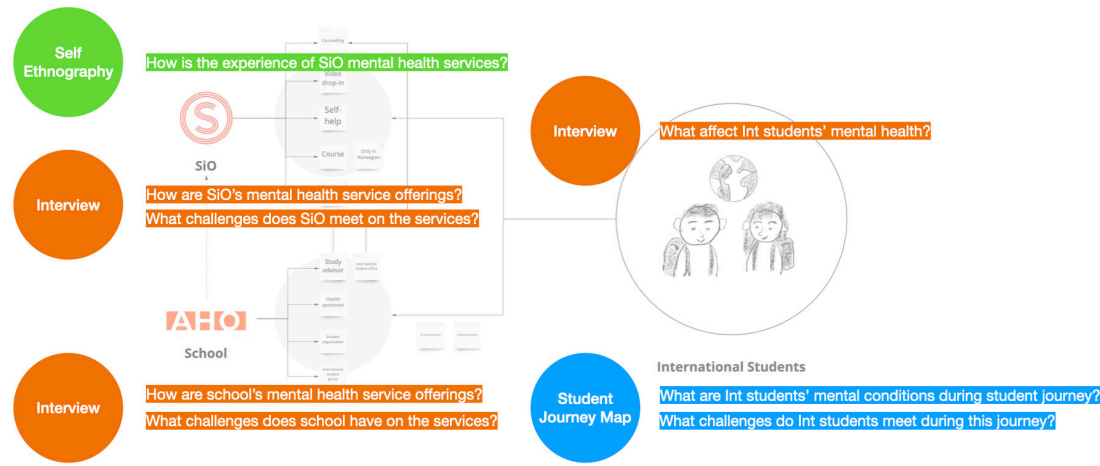
To learn more about mental health and well-being, I participated in and completed a 10-week online course on Coursera, [The Science of Well-Being](#).



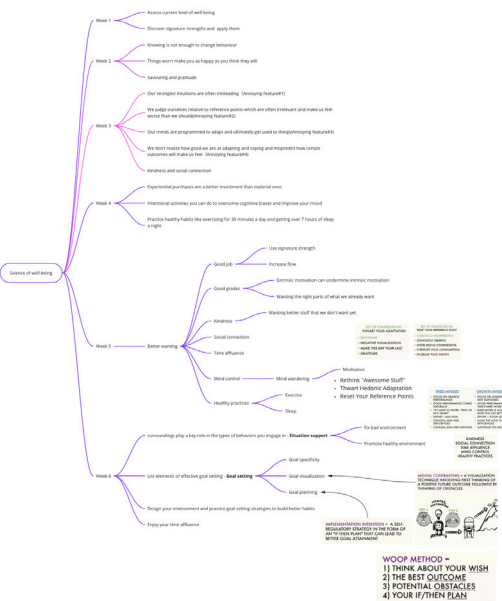
Research on surveys

How does research work in the system?

This picture shows you how these different research methods work in the system map, to gather information from different stakeholders and aspects.



Research methods in the system frame



Notes and takeaways from the online course

Interview

To get a more detailed picture of the situation and challenges of the target group, I reached out to 9 international students in Oslo from 7 countries for the diversity of the users. From these interviews, I gathered information about what affects their mental health, what challenges and mental health challenges they meet in their student journey, the ways they deal with mental health challenges, their experiences and expectations on mental health services, etcetera.

Besides, I spoke with 2 counselors and 1 psychologist from SiO to learn more about SiO mental health services and challenges, as well as their experience on how to help students’ mental health challenges. I also had a conversation with 1 psychologist at University of Bergen to learn more about students’ mental health and advice on taking care of themselves.

To learn more about the school's mental health offering for international students, I conducted an interview with the staff who work in AHO International Office.

Cultural difference

Like, for example, you come from a different culture. Even so, for example, taking to people in different cultures and then, like, in a way, you have to be familiar with new culture. And if you don't know a person who like tell you something about it, it will be a bit challenging because just guessing and when you just arrived, everyone knew just guessing and there things it's not easy and another part was language.

Study challenge for new education

And for me, when they were teaching something, it was full of repetition and what does it mean, because I can't understand the words, but what it really is. So, I needed. Like, more time for that. Ah, to learn this as well.

Work challenge

And as they were Norwegian and they were working in kind of a Norwegian environment that they know it a way, it was much easier for them to work in this corner time.

Like the highest point was experiencing something new so I prepared myself to have to start a new life, which kind of being challenging and also exciting at the same time.

Arrival in Norway

I think that was like really overwhelming and the just a bit to take it so I was excited but also nervous like. And I felt very insecure.

Partner relationship

so beginning of second semester, I had **breakup**, so around that was my lowest point.

Education difference - not good enough

I think because in my bachelor's education was very different from what we used to know. Like, it's not just that I don't know enough, and that the other students are just that already know a lot. And because I think maybe I'm not good enough to do with the assignments and the school stuff.

Low-threshold network

Yeah, I think that in the beginning so this is the arrival stage right so this is before I met anyone at school and I made friends, yeah, so no anyone. **So I think it's like to have some people that you meet and you arrive in Oslo, so that you know that okay these people are there, just to know you don't make friends at school or you don't live with people, certainly a student village but it's just like these people who are like like the kind and that should like a support group.** Oh, yeah, and just think it's also nice to have some people that you can make friends and you don't feel alone.

Support from friends

I think most of my friends are really nice and very supportive. And I think now I have like **friends that I can open up to and share and they always received the good support from them.**

Don't know what mental health offering

If I got there is that I do, okay talk to international matters. **I don't know about like a thing like a person would be like like.**

So that makes me feel lonely. But on the other hand **just a bit kind of adjustment to this to make some time for myself and like enjoy life.** But not very and not at the time.

For me maybe some parts is language, because, experiencing yourself in a different language that has kind of different structure.

So maybe that's all about like how you can find them and for students, maybe, I don't know if it's their or not, but if it has some experience so for students, how to find them that no student has none.

And like, they were using kind of a web page that you could ask questions you could the right answer, some of the questions that that had like how they discussed and continued that conversation according to what others.

Bureaucracy

I felt really happy I felt it's quite open minded and international. And when I started to settle down, **it was getting a bit confusing because like all the bureaucracy and things it was confusing like.** And I felt very insecure.

I didn't feel that it helped to talk with anyone.

And like within University when you arrive you, I don't think you didn't have any help. So that was really annoying. What opportunities, **didn't feel good that I couldn't ask them some help services to poor students to deal better when they arrive with all the paperwork, and could know it's very stressful.** I think it can really affect some people's mental health.

The first lockdown it was important to stay in touch with people and friends. More or less locked down. **Oh, I was missing home, parents and friends.**

If like to present a step just getting a bit worried how quickly **it felt like to find work, so that could help me to be more involved and engaged.**

I'm kind of like fine with that in a way but what worries me more is like global warming and all this kind of things. What will happen in next decades, and I find it quite scary to think about that.

If something worries me, but I have a very different cultural background like back home, **it's thing that you would never go, and to the specialists to take about your problems or something.** It's something you don't do that in other countries, it's normal to talk about your problems and get help if you feel that something is getting out of hand but I wouldn't **like that in my culture. To talk to a stranger even, if I feel something is not well with the social issues.**

I guess I would like the doctors to be able to help me, and to evaluate the situation what have brought to these problems and help me.

Oh, you know what would be interesting to actually know what is **good mental health to do like maybe some kind of tool or pack or something that people to actually use if you are in a bad situation.** Because if you don't like where it is this balance when something when you actually might experience like heavy depression and stuff. **How can I know how can you know that you don't have experience with mental health? Well, yes, and that other like depression problems. And when it's something you can do on your own,** really don't know that. Yeah. That could be interesting to know and to see if there actually are some problems or could develop because of something.

The one that we also really talk about mental health issues, like it goes really bad, if it does, and then they are kind of. Then you just need to look for professional help.

Analyze interview transcripts

28

Student journey map tool

I designed a student journey map tool to map with 4 international students in Oslo on their student journey. I tried to use think-alouds during the mapping process, to capture their thoughts. This tool helps me uncover the challenges, triggers of challenges, mental health conditions, the way they deal with challenges, barriers and opportunities to help them in their student journey in Oslo.

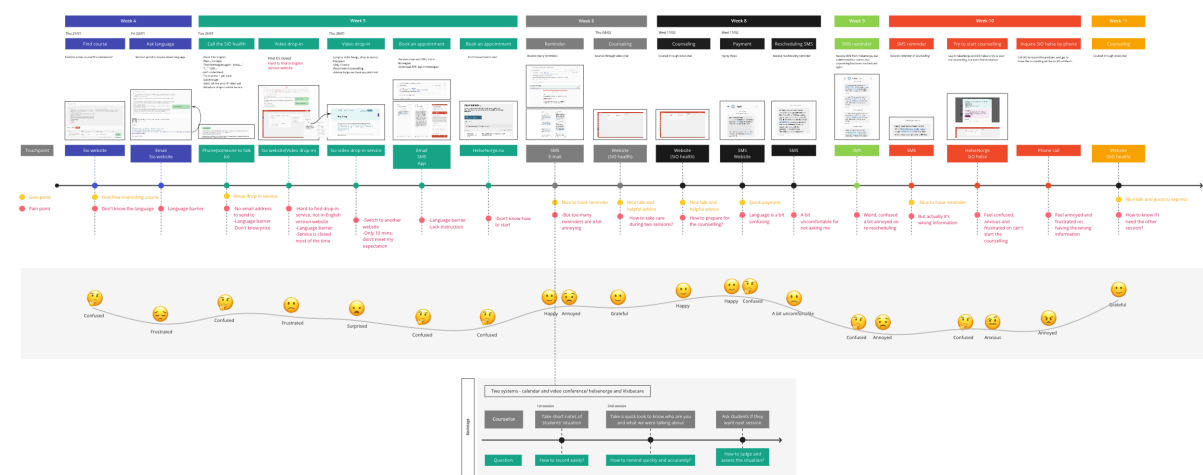
Phase of journey	Arrival in Norway	First semester	Exchange and Coronavirus	Third semester	Present
Challenges What mental health challenges do you meet?	Too many things to remember Not used to food and life	Feel lonely Non used to study here	Coronavirus Miss again and again Quarantine Part are disrupted	Can't find a place to learn Coronavirus Messy course	Syptoms Coronavirus Job seeking
Why Who and what affect your mental health?	Loneliness Language barrier to talk Food New environment	Weather Get sick so early Lack social contact Night is dark No friends No one to talk to No one to study with	Coronavirus Quarantine Hard to sit at home for long time Sit in front of computer Teamwork	Housing offer Coronavirus Course	Challenges in options Can't go to school Coronavirus
Feeling What is your feeling?	Fresh Excited Scared	Lonely Depressed Stressed	Scared Anxious Uncertain Homeless Stressed	Homeless Worried Stressed	Anxious Stressed Open-minded
Mental health line How is your mental health condition?	😊😊😊	😞	😞😞😞😞😞😞😞	😞😞😞😞😞😞😞	😞😞😞😞😞😞😞
How How do you deal with it?	Learn about the situation Contact family and friends	Go to gym Chat with family Have a plan and emergency number	Chat with family Chat with friends Try to change my mindset Adjust my plan	Look for room Work more Chat with friends	Outdoor time Social activity Learn more about mental health Counseling
Barriers What barriers do you have to solve it?	Know few people Don't know how to use the system	Not used to the weather Cultural difference	Coronavirus Time difference Culture Mindset	Low social contact Can't work at school	Mindset Coronavirus Procrastination
Opportunities What is potential to help you?	Guidance from school	Introduction of a person who can help you Weather preparation Student social activity	Have a plan and emergency number Social support from friends Student social activity	More organized course Outdoor social activities	Mental health lessons Help from mental health

Student journey map tool

29

Self-ethnography

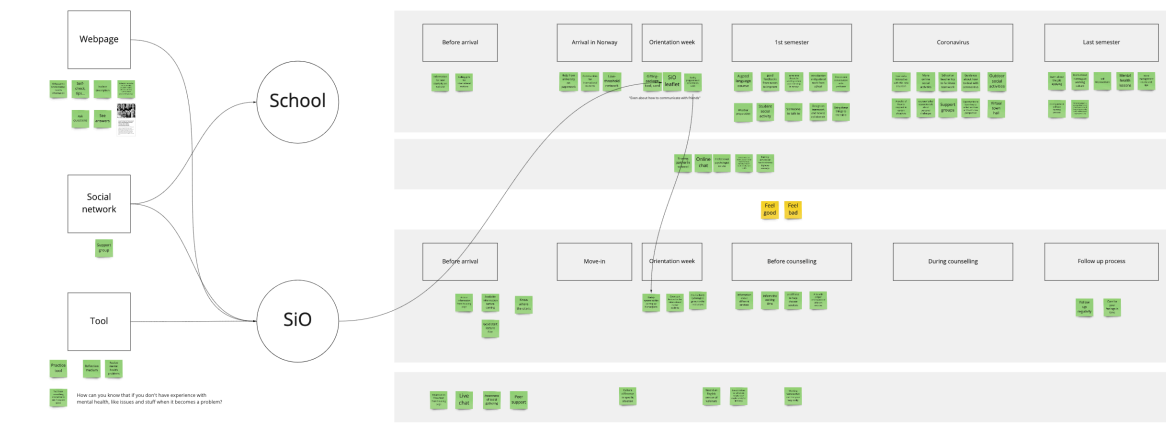
I tried to experience SiO’s mental health services by myself, like the online course, phone call, video drop-in, and online counseling, to learn more details about the experience and service process and to find out pain points and opportunities. I recorded my experience, the touchpoints, pain points, and emotions along the timeline on the user journey map.



User journey map of my experience on SiO mental health services

Co-creation in the resesarch

In the research phase, there were some ideas and opportunities proposed by the interviewees. I recorded and mapped the ideas out.



Ideas from the research

Reflection

Diversity of interviewees

International students are a huge group, I could reach out to more international students from different countries and cultural backgrounds and more experts if I have more time and resources.

Mapping tool in the research

The student journey map tool worked well in my research, which helped me capture the challenges and thoughts of international students along their study journey. This tool is also potential to help the users to identify their challenges and source of mental health challenges in their student journey.

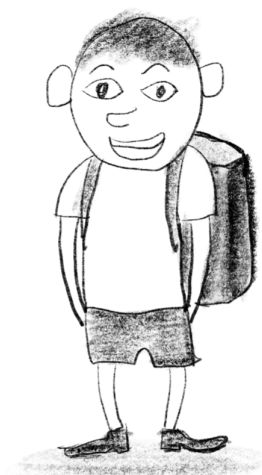
Self-ethnography

This method helps me know the SiO’s mental health services, but it is only from my own perspective and experience with my own bias.

Synthesis and Analysis

Visualization style

To present my findings and insights, I tried to define the visualization style of my project. After some research and sketch explorations, I decided to use this pencil sketch style with a big face, which shows the emotions and expressions easily for the mental health topic.



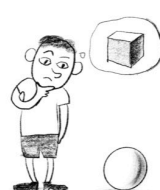
Insights

Interview with international students

Here are 5 main insights from my interviews with international students



Lack awareness and knowledge



Cultural barrier and difference



Lack social contact



Hard to explain and express



Don't know services and hard to step out

Overview of insights

Insights

Interview with international students

Lack awareness and knowledge of mental health

- Don't think mental health relevant

*"How could I be depressed?
I used to think that mental health is **not related to me**."*

- More invisible and unconscious

*"You don't know them, because they **unconsciously bother** you.
So when others talk about it then you say, **Oh, I have this problem as well**."*

- Care and know less

*"I'm **not familiar** with mental health, feel it more **abstract**."*



Insights

Interview with international students

Cultural barrier on mental health

- Not common to turn to the professionals

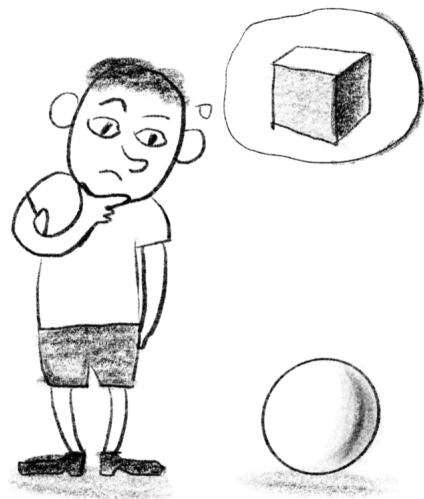
*"I have a very **different cultural background** like back home. It's a thing that you would **never go to like specialists** to talk about your problems or something."*

- Hard to accept mental health issues

*"Mental health issues are really **stigmatised** and **evil** like **not very open minded**, or maybe think that you are feared."*

- Cultural difference can be a barrier

*"You **have to be familiar with new culture**. If you don't know a person who tells you something about it. It will be a bit challenging."*



Insights

Interview with international students

Social contact and peer support are important

- Close peers are important

*"**Close network** is super, super critical for keeping maintaining mental health."*

- Mostly contact international students

*"Being with an international community makes me feel **a safe space**. **Talk about them openly**. We have kind of the same problems."*

- Hard to make Norwegian friends

*"I was really excited and **really wanted** to have **Norwegian friends**. it's important because you **learn about a lot of things and differences**."*

"Maybe for Norwegian students, it's not easy to understand your situation."

- Social isolation caused by COVID-19

*"**Hard to start a friendship**. With this corona time, there isn't really kind of gatherings and things."*



Insights

Interview with international students

Hard to express and explain mental health problems

- Don't want to talk about it

*"I don't ever want to **burden people with my problems.**"*

*"Like a lot of mental health issues like come with some sort of like **shame** or you want some **privacy**, or you're **not comfortable opening up** that much."*

- Not good at expressing myself when I am down

*"I'm not great at expressing myself. if I'm down I'm **not good at like letting people know I'm down.**"*

- Hard to explain mental health issues

*"It's **hard to explain**, because if you have a headache, you can say that my head is spinning, you can show. **What if it's like mental health.**"*

- When you express, the other will be open

*"When I spoke out my mental health problems, **the others also opened up** about their mental problems."*



Insights

Interview with international students

Hard to seek help, especially the first step

- Don't know health services

*"**Know nothing** about **mental health service** in Norway."*

*"I don't know **how to get started**. It's **hard to find resources** when you don't know where to look."*

- Feel no support from school

*"There is **no support and guide** in this field."*

*"I **don't know** about like, if you can talk to someone from mental."*

- Worried about seeking help

*"Worried about **language** and **expenses**. Feel **embarrassed** to talk to strangers."*

- Big step to take action

*"I feel like some **hesitation** in asking for help."*

*"Stepping out and seeking help is **high-threshold** to me."*



Insights

Interview with stakeholders and experts

Besides, here are some key findings from the interviews with the SiO counselors, psychologist, the school international staff, and the psychology professor.

- Financial pressure of international students

“But I met some that have lost their jobs, and when you're an international student you have to take care of your economic situation.” - a SiO counselor

“And some students who, when they come to Norway, will have financial challenges because everything is expensive.” -a psychology professor

- Limited psychologists and a long waiting list of counseling

“It's always a little bit of a problem that more people want to talk to psychologists than we are able to provide like it's always a struggle with the waiting list.” - a SiO psychologist

“We don't have more money to just hire more psychologists all the time.” - a SiO psychologist

“Health services don't make any money at all. We just cost a lot of money. Okay, but the housing part of SiO makes a lot of money. And also they make money there and then they spend it there.” -a SiO psychologist

- Good to know mental health problems are common

“Students say it was really good for them to realize that other students have similar similar problems that's like very common feedback. And that people feel more alone than they feel weirder than they are a very common thing with students they think they are.” -a SiO psychologist

Insights

Interview with stakeholders and experts

- Useful to learn about mental health

“I think it's actually useful to try to learn a little bit about mental health to be in mental health literate so that you recognize that this is just tiredness, or this is just normal stress.” - a psychology professor

- The school has the responsibility

“Apart from that is that it seems that as schools universities, we should consider whether we could do more to say to be at the key points where you, as you say, but also to make it more available in English or in other languages, and also to find ways to promote social support, because I think we need to help people to get taught to get into that first step, because that big first step is difficult doesn't serve you.” - a psychology professor

- The school doesn't have a specific person or service on mental health

“The school does not have a person or a position and specialty, specially designated to mental health issues. We do not have a mental health service.” -an international office staff

Insights

Student journey map

I synthesized the mapping tools with 4 international students and then made one summary version of the key findings I gathered.

Phase of journey	Arrival in Norway	First semester	Coronavirus	Last semester
Challenges What mental health challenges do students meet?	<div>Can't meet expectation</div> <div>New life and environment</div> <div>Long registering process</div> <div>Confusion about rules</div> <div>Doubts on study</div> <div>Culture difference</div> <div>Language barrier</div> <div>Food</div> <div>Lack of friendship</div> <div>Not having part of the class due to language barrier</div>	<div>Different education system</div> <div>New environment</div> <div>Language barrier</div> <div>Language efficiency</div> <div>Students with different age and maturity level to study together</div> <div>As a foreign student hard to find many international people</div> <div>Not familiar with working culture and working system</div> <div>Weather: get dark so early</div> <div>Lack social contact</div> <div>Being overwhelmed by new situation from no knowledge from previous</div> <div>Teamwork</div> <div>Work culture: work-life balance</div>	<div>Move again and again</div> <div>Miss home, family and friends</div> <div>Quarantine time</div> <div>Sudden change in the way you are trying to deal with new life</div> <div>Teamwork</div> <div>Social isolation</div> <div>Plan are disrupted</div> <div>Can't find a place to live in</div>	<div>Job hunting</div> <div>Worried about finding a job and staying in Norway and being stressed</div> <div>Overwhelmed the pressure job opportunities and interviews</div> <div>Hard to connect a project in Norwegian system</div> <div>Time management</div> <div>Being at home and work make my perspective less</div> <div>Language</div> <div>Confusing being things at the same time and too of time</div> <div>Not enough resources to find a job</div> <div>Feeling not good enough</div> <div>Diploma</div> <div>Social isolation</div> <div>Not having enough time to reflect</div> <div>Not enough work experience to get a job due to corona</div>
Feelings What are students' feelings?	<div>Insecure</div> <div>Fear</div> <div>Confused</div> <div>Happy</div> <div>Fresh</div> <div>Scared</div> <div>excited for new experience</div>	<div>happy to meet other people and make friends</div> <div>stressed</div> <div>separated from others</div> <div>loneliness</div> <div>excited to learn</div> <div>depressed</div> <div>disappointed</div> <div>sad</div> <div>nervous about the school</div> <div>Happy and grateful to be here</div>	<div>Scared</div> <div>Uncertainty</div> <div>Worried</div> <div>Anxious</div> <div>Disappointed</div> <div>Stressed</div> <div>feeling to be the only one have problems</div> <div>loneliness</div> <div>depression</div> <div>confusion</div>	<div>Scared</div> <div>Worried</div> <div>Uncertain</div> <div>Excited</div> <div>disappointed</div> <div>motivated</div> <div>helpless</div>
Opportunities How might we help students?	<div>Help from university</div> <div>More support and resources for international students</div> <div>More resources for international students to find a place to live</div> <div>Having a good network that is local and global</div> <div>A good language course</div>	<div>good feedbacks from tutors to improve</div> <div>some time about the working culture and working system</div> <div>Introduction and guide of work from school</div> <div>Weather preparation</div> <div>Student social activity</div> <div>Someone to talk to</div>	<div>Learned a little bit more with the new situation</div> <div>More online social activities</div> <div>School or teacher try to facilitate teamwork</div> <div>Guidance about how to deal with coronavirus</div> <div>A kind of how to manage in such situation</div> <div>Someone who speaks to talk about personal changes</div> <div>Support groups</div> <div>Opportunities from time to time to deal with coronavirus</div> <div>More organized course</div> <div>Outdoor social activities</div>	<div>Learn about the job applying</div> <div>Learn about Norwegian working culture</div> <div>Self improvement</div> <div>Mental health lessons</div> <div>More guidance with job hunting process</div> <div>More resources for international students to find a place to live</div> <div>Work management course and tips</div>

Summary of findings from the map tools

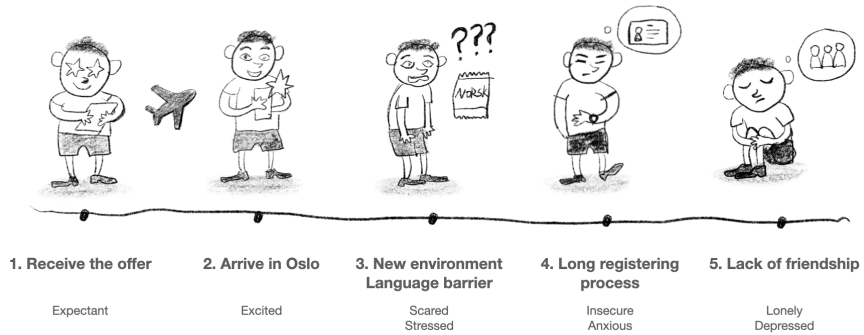
Insights

Student journey map

I built a story with an example person based on the key challenges along with the student journey I gathered from the mapping tool, to present the findings more lively.

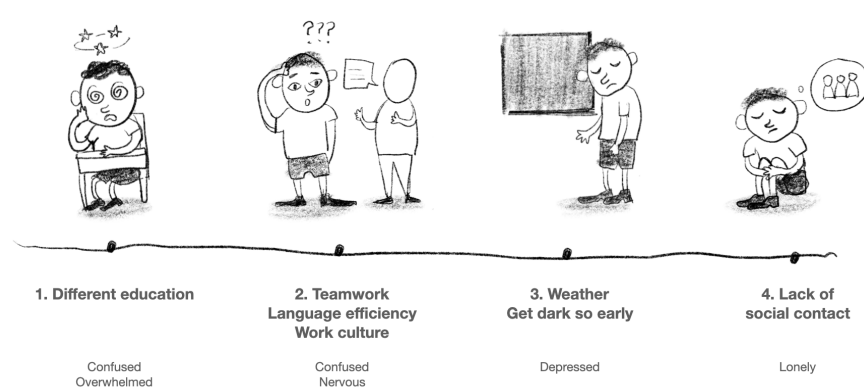
- Arrival in Norway

Alex feels excited for receiving the offer and moving a new country. But new environment and language barrier also stress him to make him feel scared and stressed. The long registering process of bank card and residence permit makes him feel insecure and anxious. Alex moves away from his family and friends, so he feels lonely and depressed from time to time.



- The first semester

In the first semester, because of different education background and system, Alex feels confused and overwhelmed on the new course. In the team work, he feels confused and nervous because language efficiency and different work culture. In the winter, it gets dark so early and he is not used to the weather. He feels lonely and depressed without many social contact.

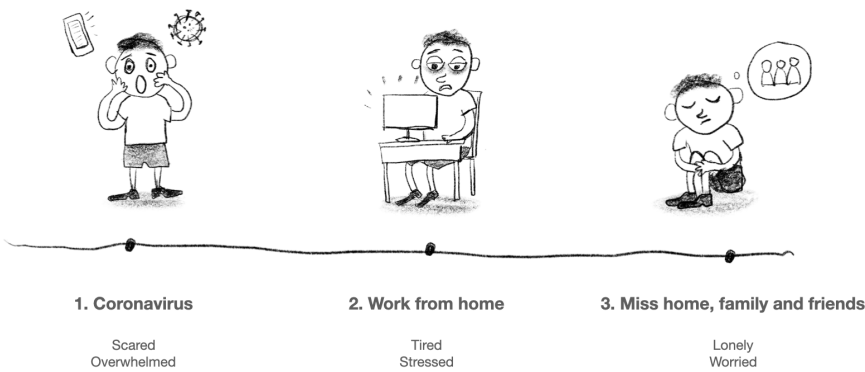


Insights

Student journey map

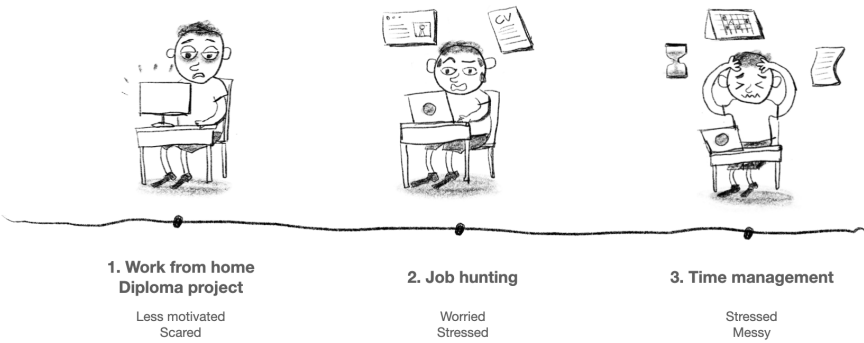
- Coronavirus

Then, the coronavirus hits his life. Alex receives much negative information and feels scared and overwhelmed. He has to work from home for a long time, which makes him tired and stressed. At the same time, he misses home, family and friends. He is also worried about his family and friends in his home country.



- The last semester

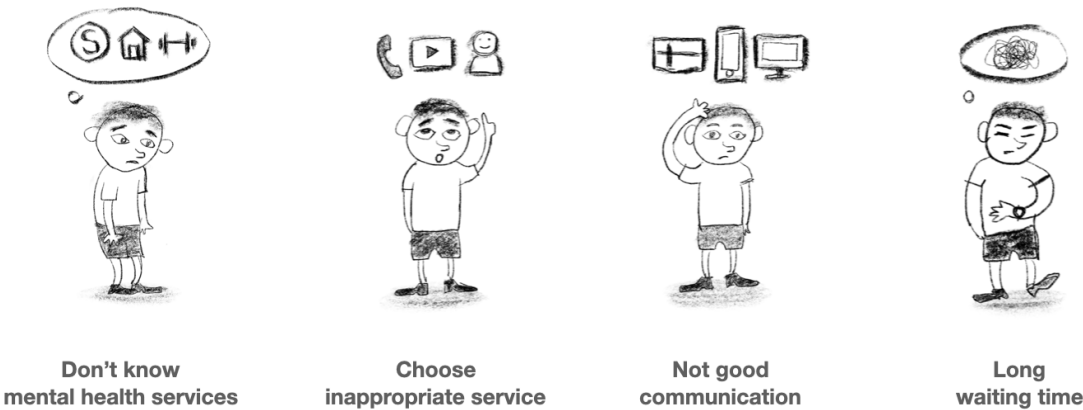
In the last semester, Alex has to do his diploma project from home. He feels less motivated and scared on the overwhelming workload. He is also worried about and stressed on job hunting. Alex has to deal with different things at the same time. He find it hard to manage the time and feels stressed and messy.



Insights

Self-ethnography

Here are some insights from my own experience of SiO mental health services.



Insights

Self-ethnography

- Don't know mental health services

Before my experience, I didn't know SiO provides many mental health service offerings. When I checked the online course list, I found many topics are relevant to mental health which I didn't realize before.

Book an appointment - advisor

Video drop-in - advisor

Video drop-in - health nurse

Intake assessment Mental Health

Check out Students ask

Course	Next Start Date	Days	Price	Duration	Instructor	Notes
Mindful Thought Work	Mon 15th Sep 18	1	15	1h	Adrian in SiO Health	Book now
Selfies for life	Tue 16th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Emotion course	Wed 17th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Resilience course	Thu 18th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 19th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 20th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 21st Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 22nd Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 23rd Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 24th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 25th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 26th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 27th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 28th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 29th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 30th Sep 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 1st Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 2nd Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 3rd Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 4th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 5th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 6th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 7th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 8th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 9th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 10th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 11th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 12th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 13th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 14th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 15th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 16th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 17th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 18th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 19th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 20th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 21st Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 22nd Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 23rd Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 24th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 25th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 26th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 27th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 28th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 29th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 30th Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 31st Oct 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 1st Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 2nd Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 3rd Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 4th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 5th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 6th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 7th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 8th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 9th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 10th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 11th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 12th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 13th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 14th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 15th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 16th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 17th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 18th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 19th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 20th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 21st Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 22nd Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 23rd Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 24th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 25th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 26th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 27th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 28th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 29th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 30th Nov 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 1st Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 2nd Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 3rd Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 4th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 5th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 6th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 7th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 8th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 9th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 10th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 11th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 12th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 13th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 14th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 15th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 16th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 17th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 18th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 19th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 20th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 21st Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 22nd Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 23rd Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 24th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 25th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 26th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 27th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 28th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 29th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 30th Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 31st Dec 18	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 1st Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 2nd Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 3rd Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 4th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 5th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 6th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 7th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 8th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 9th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 10th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 11th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 12th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 13th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 14th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 15th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 16th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 17th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 18th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 19th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 20th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 21st Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 22nd Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 23rd Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 24th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sun 25th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Mon 26th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Tue 27th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Wed 28th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Thu 29th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Fri 30th Jan 19	1	15	1h	Psychologist in SiO Health	Book now
Selfies for life	Sat 31st Jan 19	1	15	1h	Psychologist in SiO Health	Book now

- Don't know mental health services
- Don't know what is relevant to mental health services



- Choose inappropriate service

Even though there are various service offerings, I don't know which one to choose so I switched between different services, which is a waste of time and resources for me and SiO.

Book appointment

Online course

Book an appointment

Video drop-in

Our telephone hours are Monday through Friday between 08:00-12:00 and 12:30-14:30. We offer counselling by video conference, which has shorter wait times. Check back for future appointments.

Information about opening hours at Christmas.

- Don't know choose which service
- Switch between services



Insights

Self-ethnography

- Not good communication

There is a lot of confusing information during the service process. For example, it's hard to find various offerings on the SiO English version website; When I tried to start the counseling, it switched to the other website and platform, which is confusing; The SiO Health app is only in Norwegian, so I didn't know how to start my counseling from this app; I was told that my counseling had been rescheduled, but I received messages from two different systems with two different time information.

Language barrier

Confusing information

Hard to find various offerings on English version

Switch to the other platform

Don't know how to start

Confusing reschedule message



- Long waiting time

It took me around 2 weeks before I started my counseling, and then it took another 2 weeks between the counseling sessions.

2 weeks

2 weeks

2 weeks

Our telephone hours are Monday through Friday between 08:00-12:00 and 12:30-14:30. We offer counselling by video conference, which has shorter wait times. Check back for future appointments.

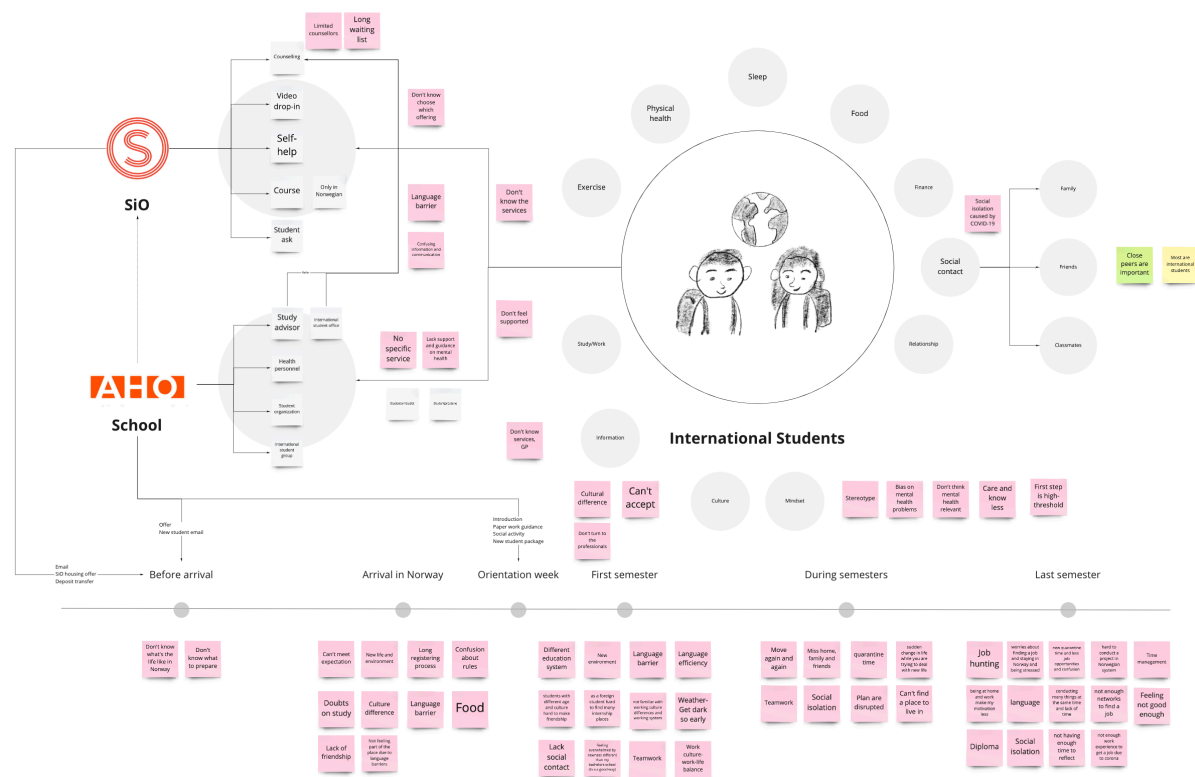
Information about opening hours at Christmas.



System map

Findings and connections in the system frame

To help me look at broader levels and get the whole picture of what's the problems and gaps in the system, I mapped out what I have gathered from my research in the system, from different perspectives and aspects.



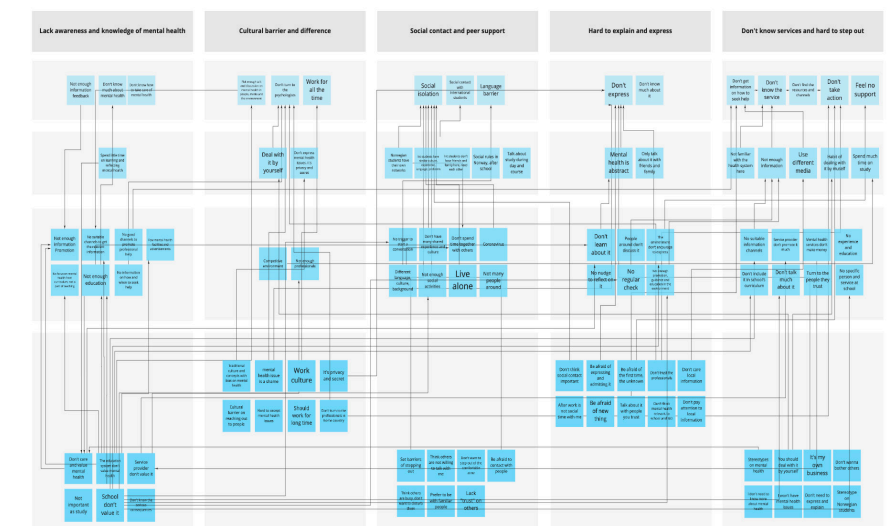
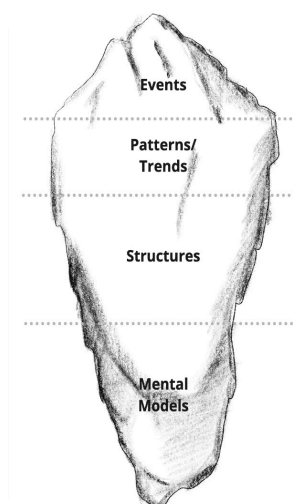
Iceberg model

Analyze what's behind the challenges in the system

To help me look at deeper levels, I tried to analyze what's behind these insights and problems with this iceberg model(M.Goodman, 2002). From which, the underlying reasons of the problems are complicated and interconnected. From this analysis, I find:

In the structure level, there is lack of supportive environment:

- Not enough information promotion on mental health and services
- Not enough education on mental health and not a part of the curriculum
- Not enough open discussion on mental health
- No regular check and feedback on mental health
- No specific person and service on mental health at school



Iceberg model

Analyze what's behind the challenges in the system

In the mental models level, there are cultural barriers:

- Bias and shame on mental health
- Hard to accept mental health problems
- Should work for long time

Social contact barriers:

- Be afraid of stepping out of the comfortable zone
- Think others are busy or not willing to talk with me
- Lack trust on others
- Cultural difference

Mindset and thinking patterns:

- Don't pay attention to local information
- Be afraid of the first time experience and the unknown
- Don't think mental health relevant to school and SiO
- It's my own business and I should deal with it by myself
- I won't have mental health issues and I don't need to know more about it

Don't value mental health:

- Don't think mental health important from students and stakeholders' perspectives

Design goals

From my research and analysis, I set a few goals for my design to make changes in the system.

I would like to help international students:

- Know mental health issue is normal and common
- Learn more about mental health
- Do reflection and take care of their mental health
- Know the channels and service resources
- Break through the barriers of seeking help
- Build a supportive structure and context for mental health

Besides, I would like to shift school and SiO's mindset, For school:

- value students' mental health
- Nudge students to pay attention to mental health

For SiO:

- Not only treatment, but also prevention
- Let students know the services

Design principles

From my research and analysis, I defined some design principles to help meet the target group's needs and make the services friendly.



Visibility

Know mental health and the services



Accessibility

Low-threshold to access and use, reach broad groups of students



Availability

Use the service quickly, service time, capacity of psychologists, financially justifiable



Early awareness and prevention

Value and pay attention to mental health



Manage yourself

Learn about mental, reflect on mental health, take care of yourself

Reflection

Example person's journey

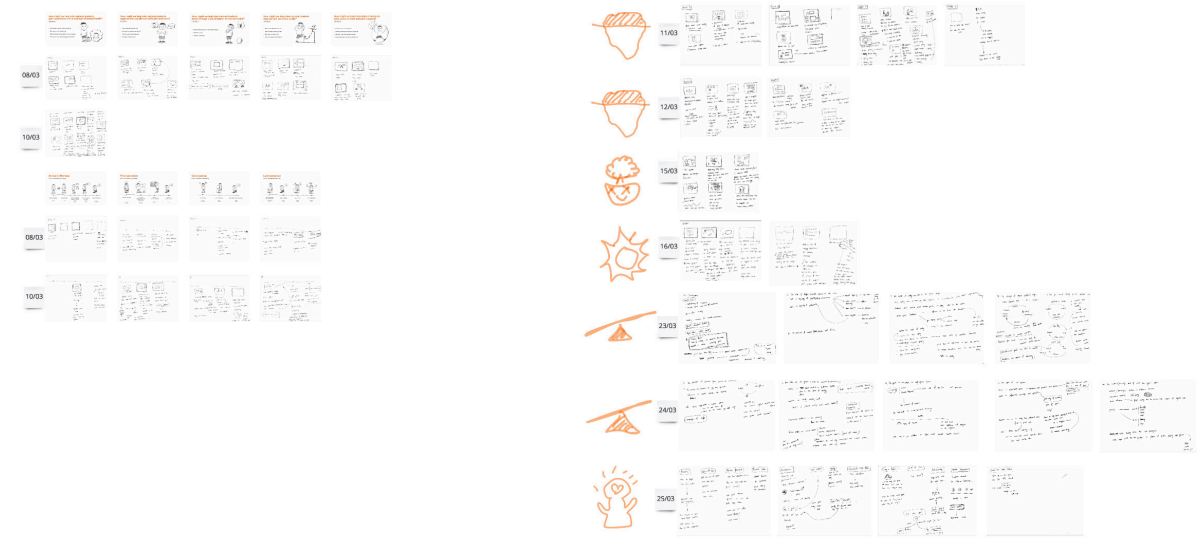
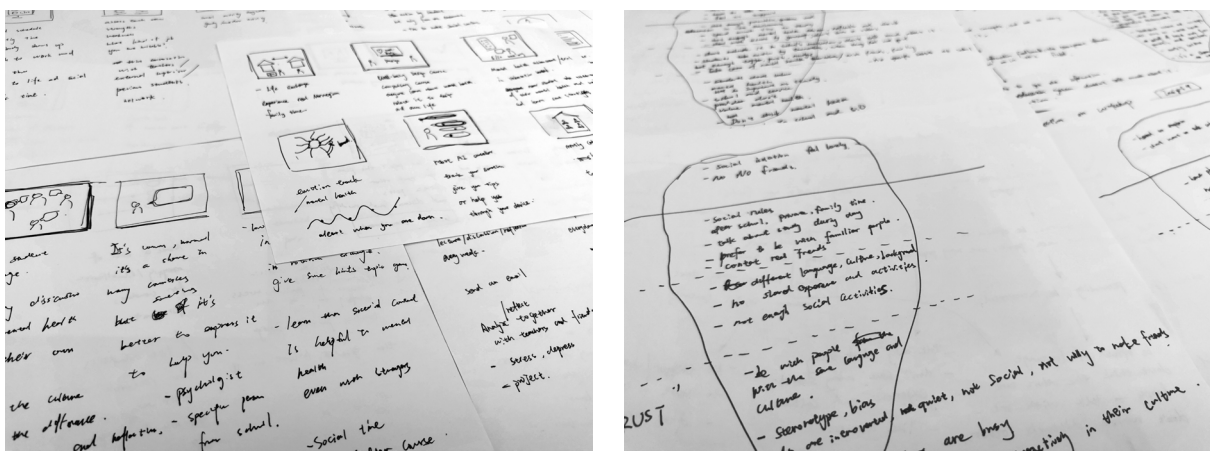
To make the journey more real and alive, it could not only include challenges, but also some positive experiences.

System frame and shift

The research and analysis uncover the complexity of the system. In the process, I need to refer to the system frame and think about how my design and interventions could make the changes and positive impact on the system.

Individual ideation challenge

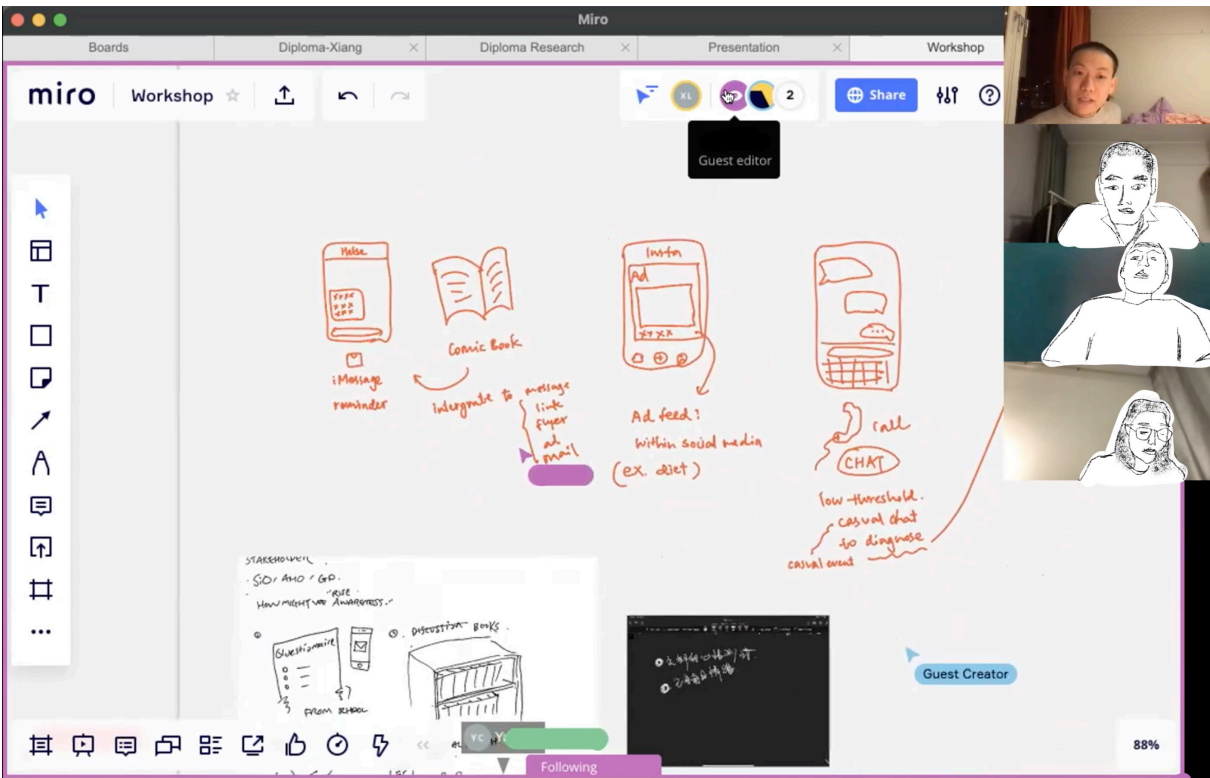
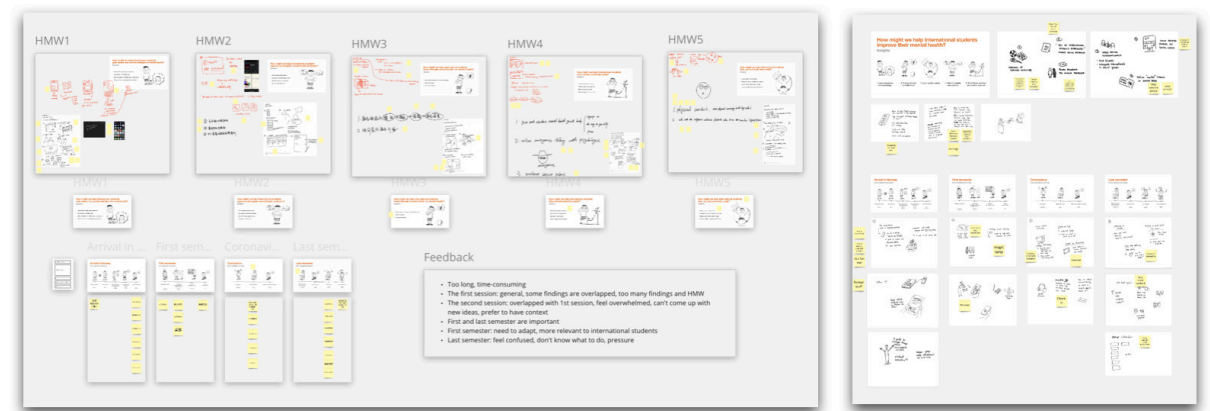
To generate as many ideas as possible, I set an everyday ideation challenge in two weeks to think from different topics, like the iceberg model, leverage points, behavioral economics, and crazy ideas in a specific time slot. In the beginning, this challenge only helped me come up with ideas. Then, it evolved to not only ideation but also analysis, thinking, and reflection, which also triggered ideas in the process. I recorded my thinking flow in my mind from the different topics.



Co-creation

Co-creation workshop with international students

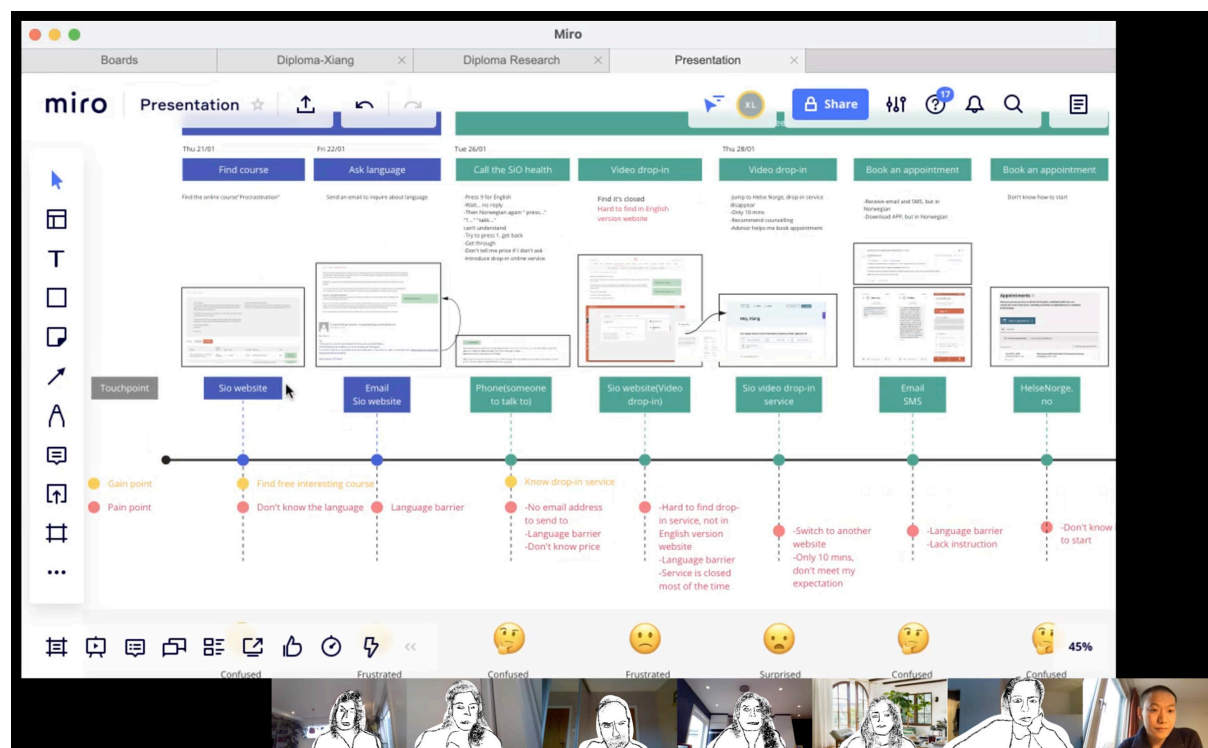
To ideate from different perspectives and gather more ideas, I did 2 co-creation ideas with 3 international students and 2 Norwegian students separately. In the workshop, I presented my insights and got feedback from the students. Then, the students ideated according to the insights I gathered.



Co-creation

Co-creation workshop with stakeholders

In the ideation phase, I was invited to give a presentation to the SiO mental health prevention and innovation team. During the presentation, I set some ideation sessions with the SiO counselors and psychologists after presenting my project findings and insights, to gather ideas from the service provider and experts' perspectives.



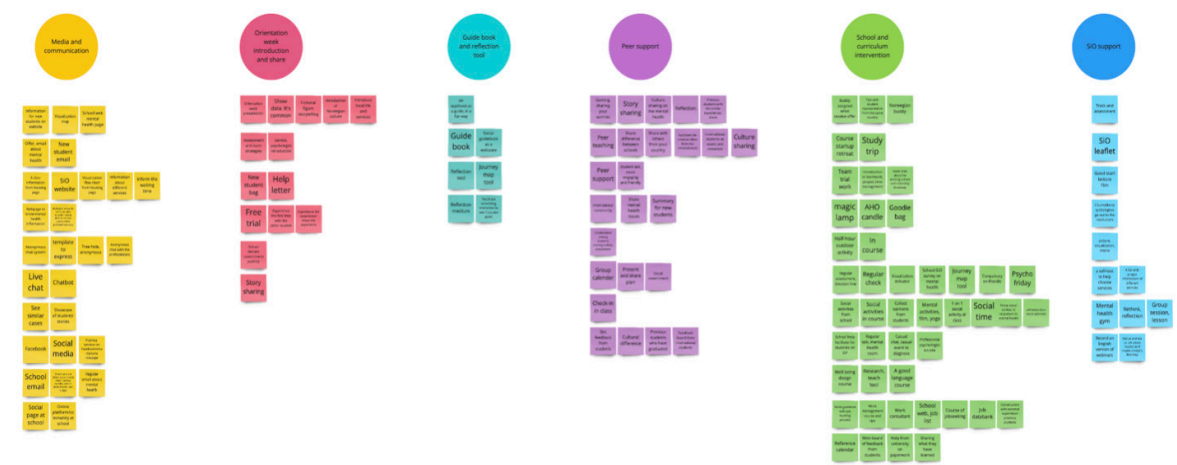
Reflection

I reached out to the school and SiO, the two main stakeholders in my project, to gather ideas from their perspectives, but the opportunities to collaborate with them were limited. I would like to co-create more with them if I have more resources and collaborations.

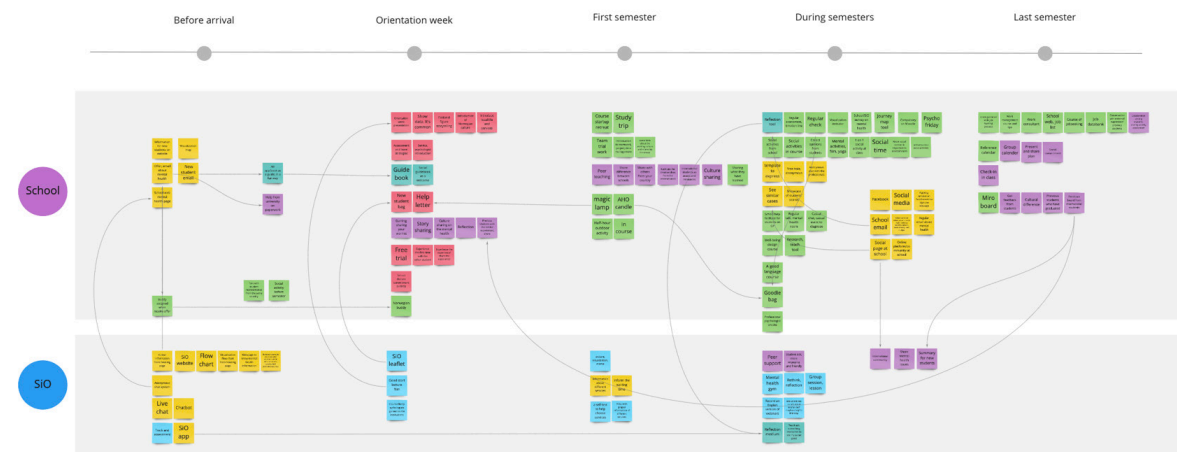
Evaluation

Group and map out ideas

In the ideation and co-creation phase, I gathered a lot of ideas. I selected the potential ideas and then group these ideas into 6 directions: Media and communication, orientation week introduction and share, guide book and reflection tool, peer support, school and curriculum intervention, as well as SiO support.



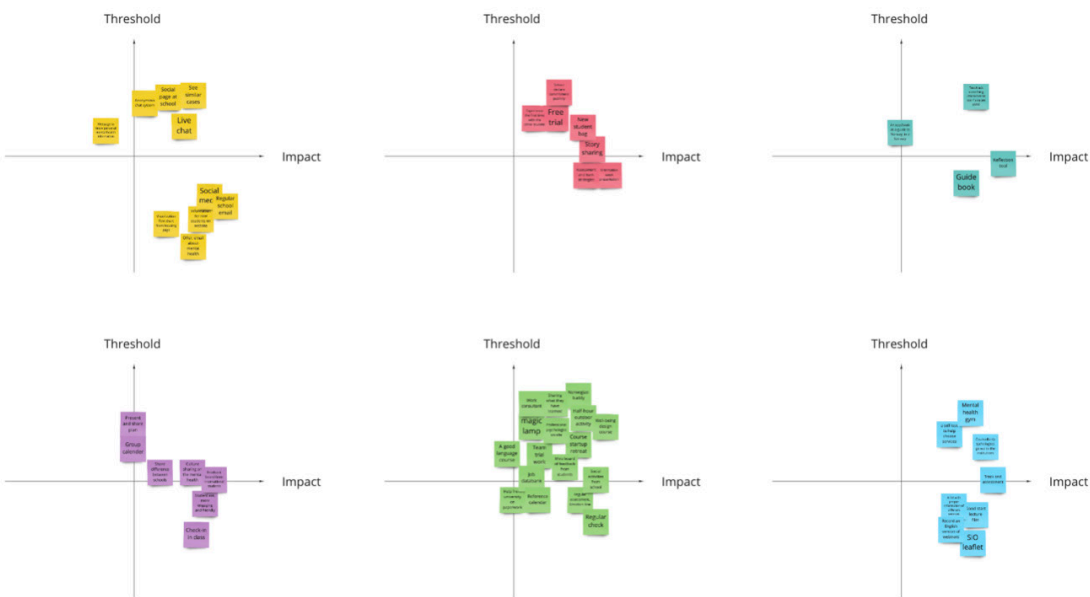
Then, I categorized and mapped out the generated ideas along the general student journey from the two key stakeholders, the school and SiO. Many ideas are interconnected and need to be facilitated by both school and SiO.



Evaluation

In this project, I would like to design some example interventions, which can be implemented easily with a big impact to support international students as soon as possible. Because of this, I positioned these collected ideas according to threshold and impact, to evaluate and select low-threshold and high-impact ideas.

From the evaluation, these high-impact and low-threshold ideas are mainly about mental health information and services promoted through the websites, emails, and activities; guide and reflection tools for international students and peer support activities.



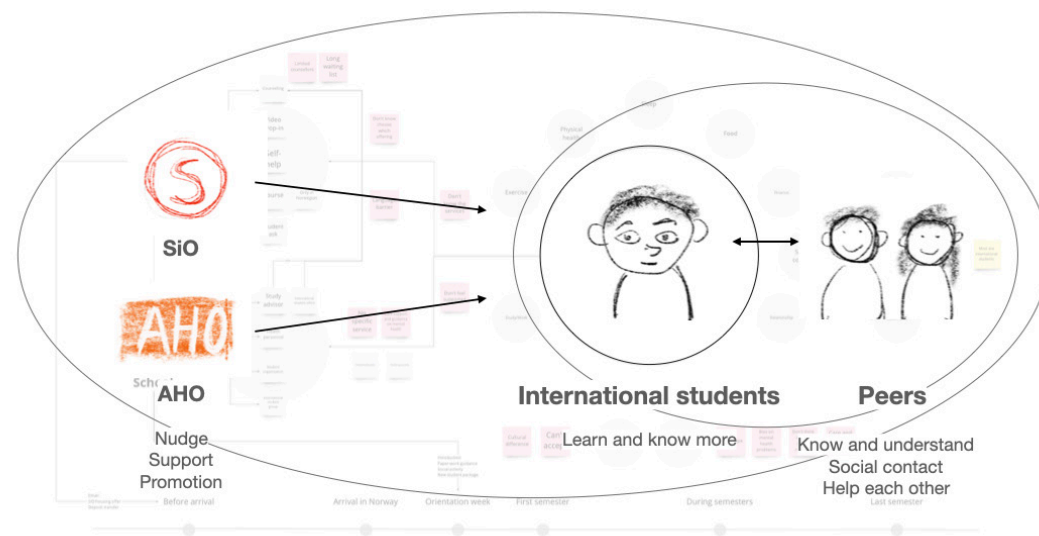
Reflection

Engage users and stakeholders in the evaluation

In the evaluation phase, I mainly did it from my perspective and bias because of time limitations. It would be better to engage users, experts and stakeholders in the evaluation phase to include their perspectives and make the evaluation more considerate and objective.

Direction

From the most potential ideas after evaluation, I find there are 3 levels to make interventions on international students' mental health based on the system frame. From international students themselves, they can learn and know more about mental health and mental health services; Support from peers - because the students know and understand students best, they can build social contact with and help each other, especially considering the capacity of SiO's counselors and psychologists is limited; The two main stakeholders, SiO and AHO, can provide a more supportive environment to promote mental health and services and better nudge students to pay more attention to mental health.



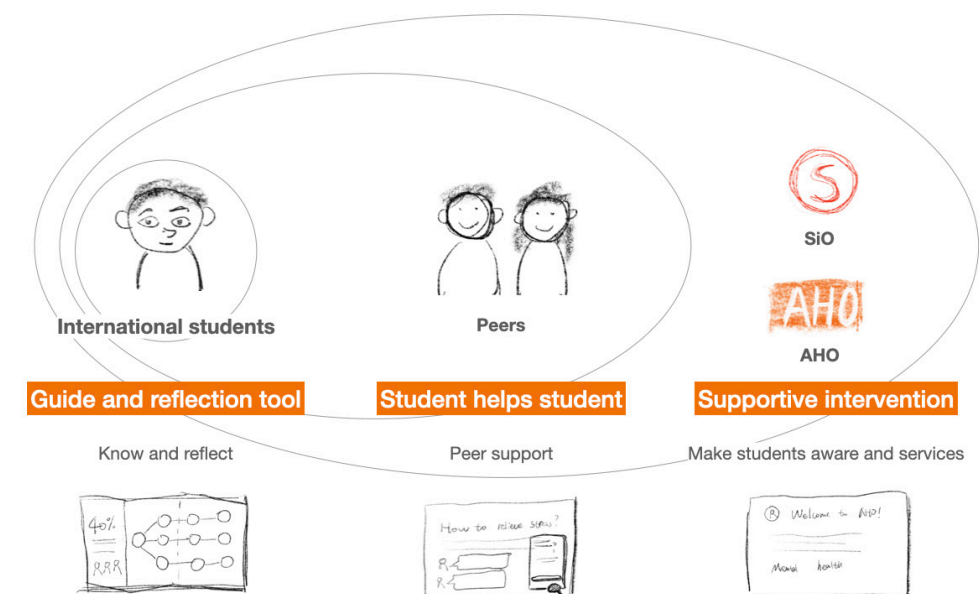
Integrate concepts with existing resources

As a service provider, SiO already has its website and mobile app to provide service information and services. AHO also has its website to provide information and every student at AHO has his/her email, which can receive information from the school easily. For new international students, they attend orientation week to learn more about school and student life, as well as join in some activities with other students before their first semester. These concepts can be combined with these existing information channels and activities for easy implementation.

3 levels in the system

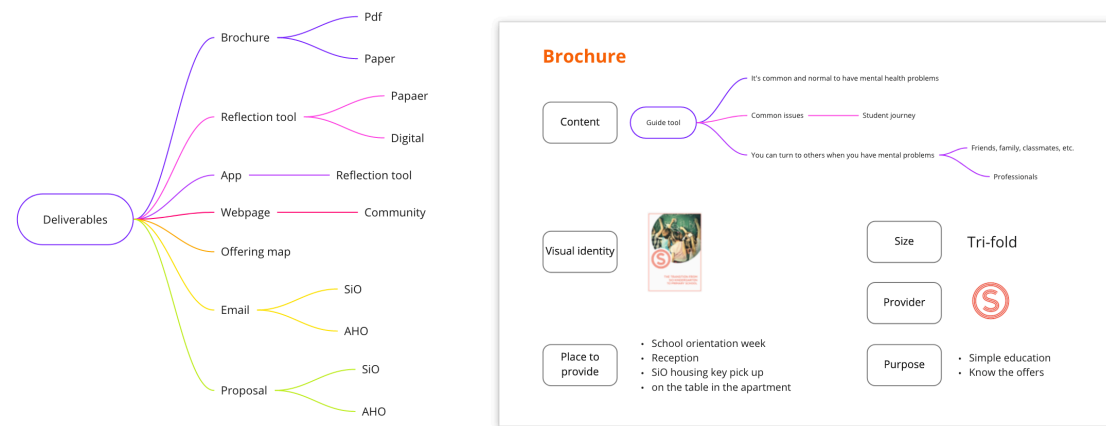
Then, I integrated the selected ideas from the evaluation into the 3 levels in the system frame.

The 1st level is the **guide and tracking tool** for international students, which can help students to know and reflect more on mental health to take care of themselves. The 2nd level is **students help students** to provide peer support, which can help international students feel not alone, build social contact and learn from other students. The last level is **supportive intervention** from the environment to make students pay more attention to mental health and be aware of mental health services. The interventions include **information promotion** and **low-threshold services**. Information flow can have high effectiveness to intervene in a system (Meadows, 1999) and accessible services can help international students seek help easily to prevent more serious problems.



Prototype and test

From the concepts, there are many potential touchpoints in the new service process. Then, I mapped out the potential interventions and deliverables. For each deliverable, the details like content, format, visual identity, place to provide, provider, and purpose were considered and mapped out. After mapping, the different interventions were designed, prototyped and tested for iteration.



The tone of voice of the services

Because this service is related to mental health, which is a sensitive topic and users might feel hesitant to turn to, the tone of voice is then decided to be friendly, approachable and warm, as well as correspond to SiO and the school's tone of voice.

Story building and test

To put the concepts in context and present the touchpoints and service process to international students and stakeholders in a vivid way, I wrote and created a story of a fictional international student based on the service concepts and interventions. In each step of the story, the details of the touchpoint and activity are included to show how these interventions work and the potential benefits of the new concepts. See more details of this story in the next chapter "Outcome".

App and website

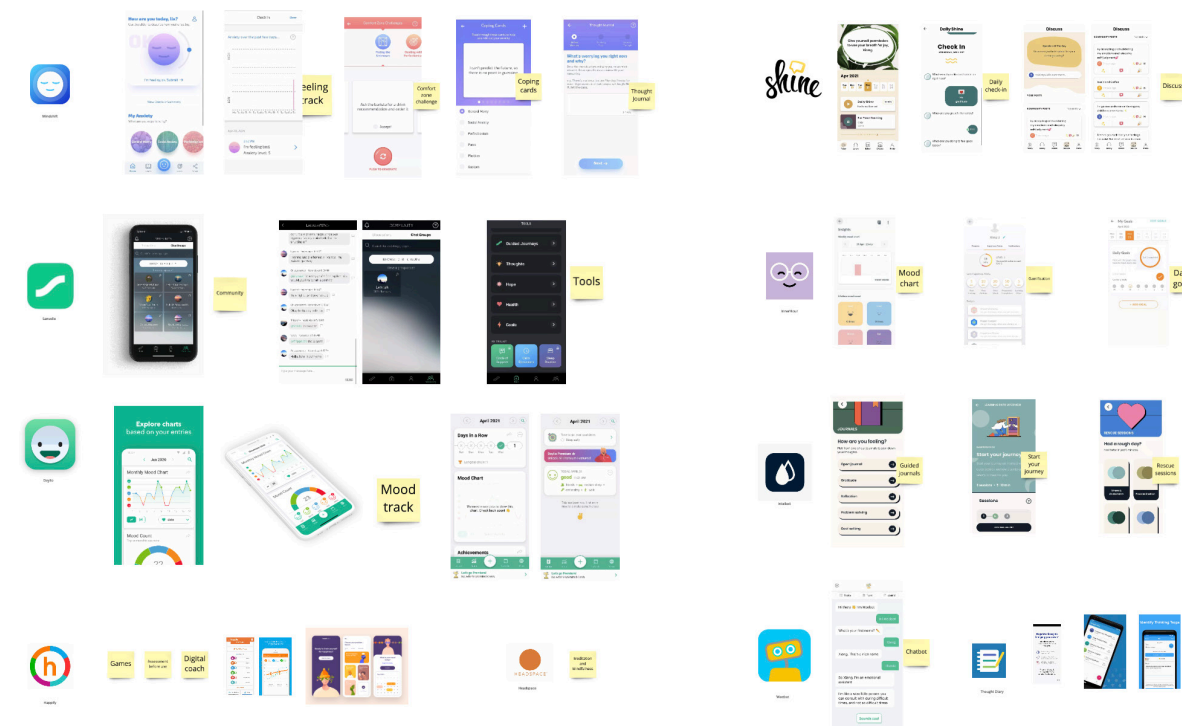
Why app and website?

SiO website and mobile app are existing information channel and service platform, where the information can reach out to international students easily, because most of the international students use SiO services, like housing and gym.

For now, SiO has two apps: one is the main application, Mitt SiO with services like gym and laundry booking; the other one is SiO health for video counseling. I would like to propose that the SiO health app be integrated with the main app Mitt SiO, to make the mental health services more **visible** and **accessible**.

Market research

Because the interventions involve the digital platform, I researched mental health apps on the market to look at their functions and features. Then the position and strength of the SiO digital platform were defined to support the concepts and be competitive on the market.



About the SiO mental health digital platform

Position:

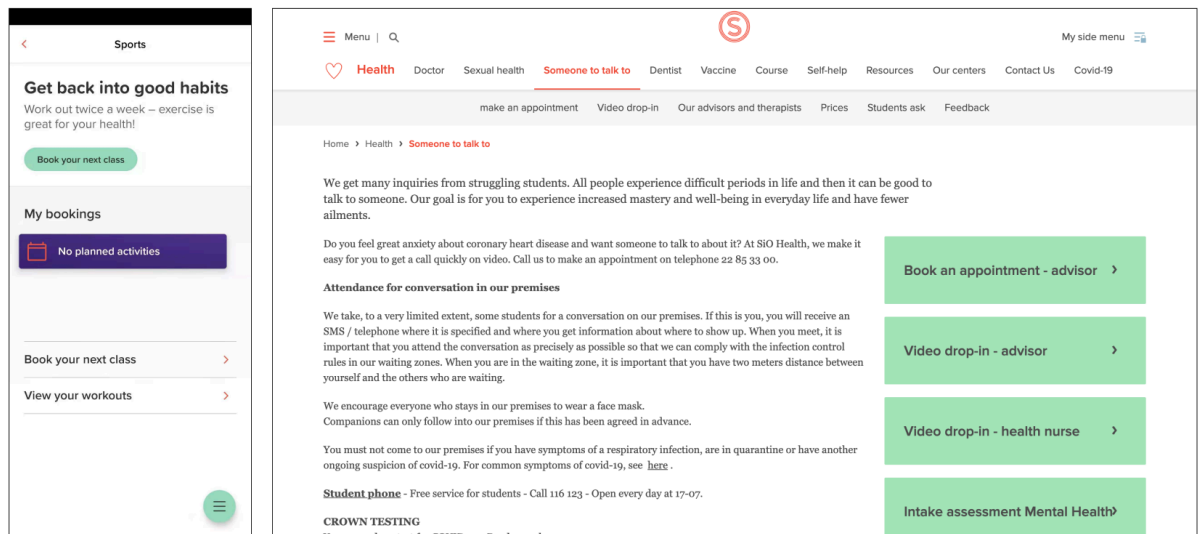
- A platform to help students know more about themselves and mental health
- Get support from students and the professionals

Strength:

- SiO platform is trustworthy and known
- International students can get access to it easily through the SiO app
- Users are in a similar situation and close location with other students

Visual language:

The visual identity of the digital platform refers to the SiO’s current websites and mobile app.

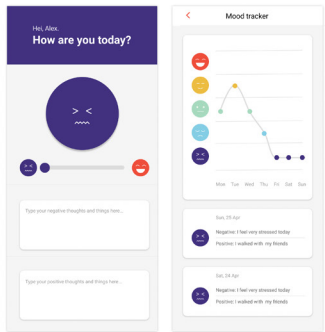
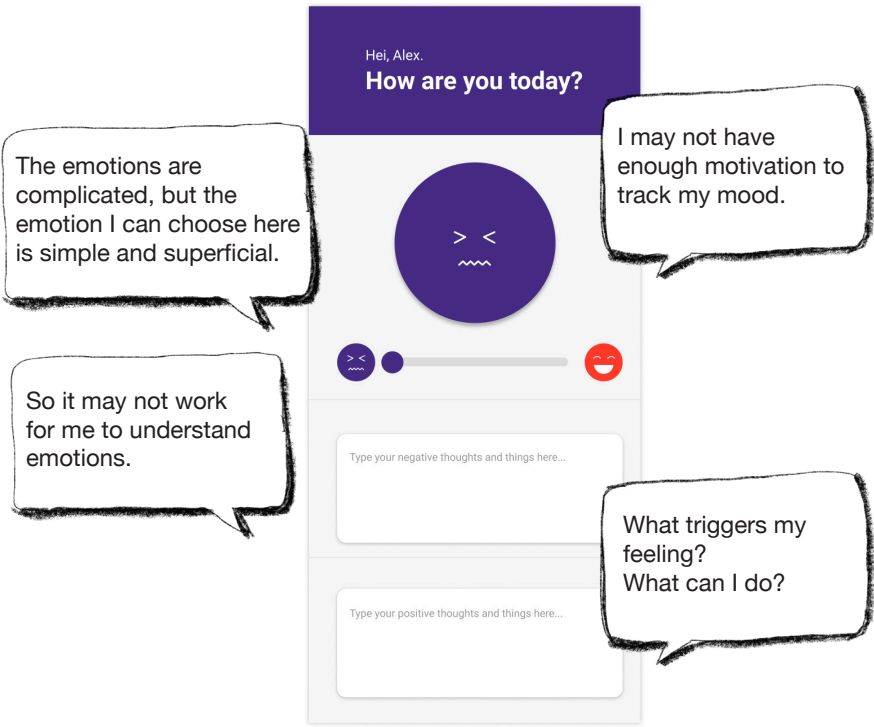


App and website

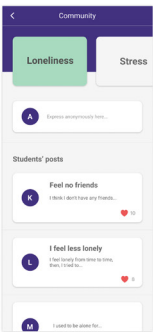
Main functions:

- Mood track
Help international students record and reflect on their mental health conditions to understand more about themselves
- Community
Help international students feel not alone and receive peer support
- Learn
Help international students learn more about mental health topics and strategies
- Professional help
Help international students turn to the counselors and psychologists easily

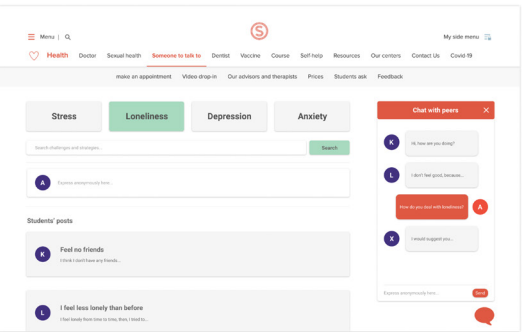
Feedback



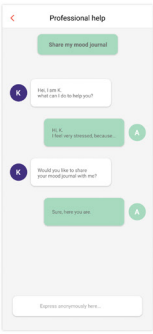
Mood track



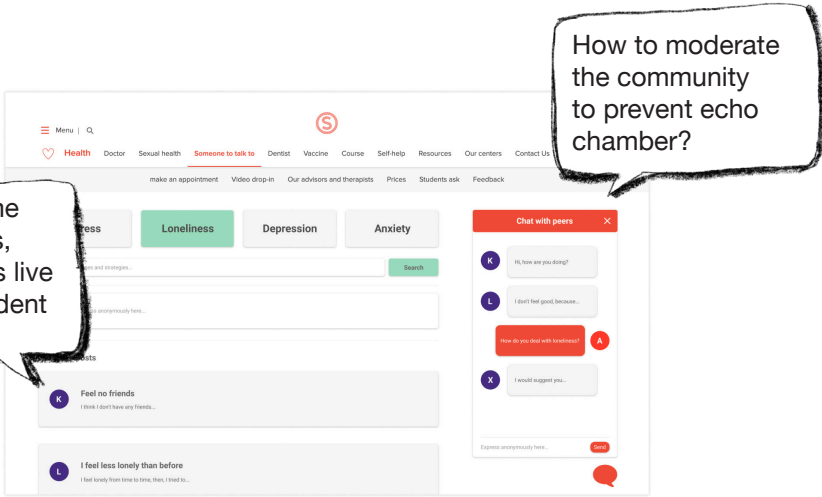
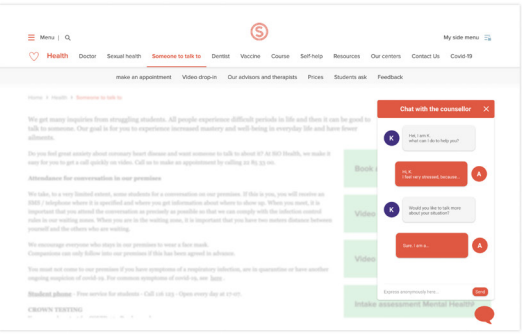
Community



Learn



Professional help



It can initiate some physical activities, because students live closely in the student village.

How to moderate the community to prevent echo chamber?

After testing, the app and website were redesigned with the tracking function to capture and help the users understand the complexity of the emotions. Some backstage activities were also considered. Check more details about this activity and in the next chapter “Outcomes”.

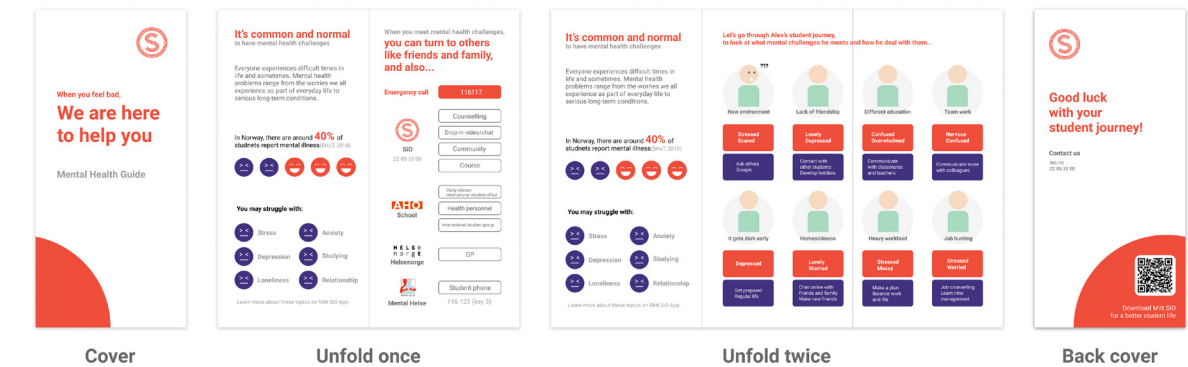
Brochure

Why the brochure?

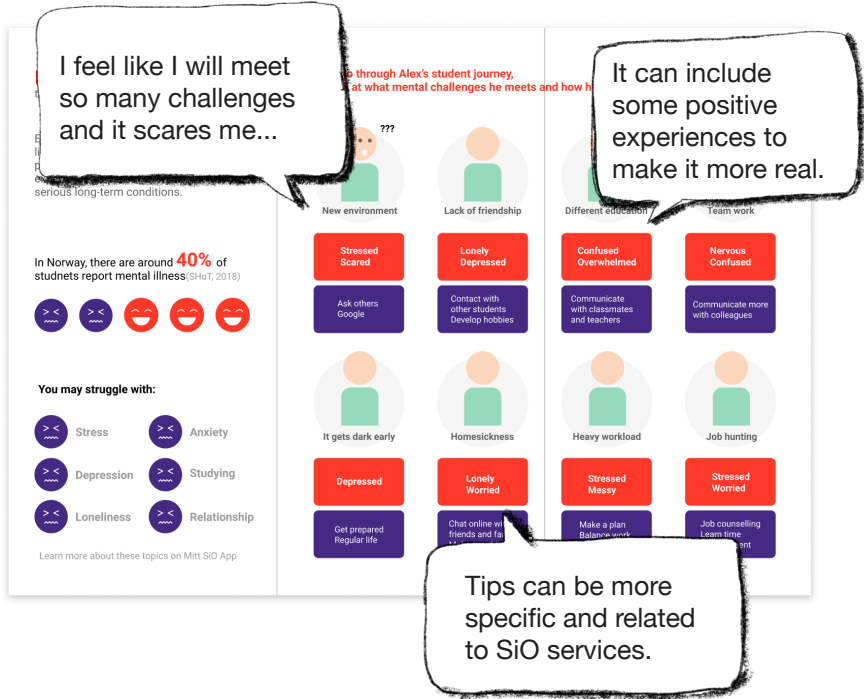
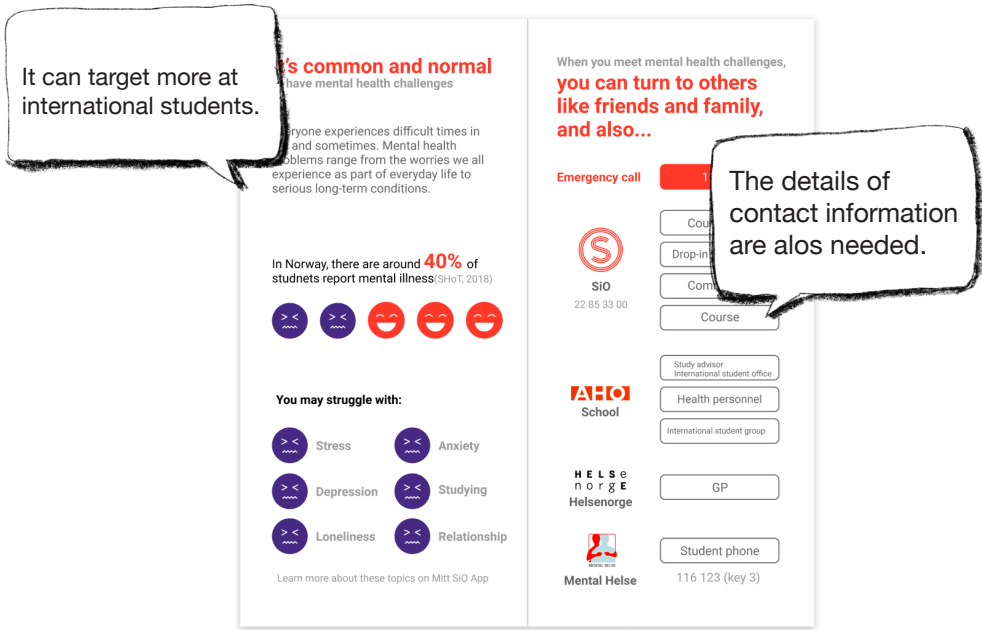
The brochure is a common and great way to present information and promote services. For now, SiO provides some brochures or leaflets about housing and gym services rather than mental health. There are also many potential scenarios for SiO to deliver the brochure, like in the customer service center, in the student village, or at the school.

Main contents:

- Introduction and statistics of mental health challenges
Help international students know it's common and normal to meet mental health challenges
- Common challenges and tips
Help international students be prepared for the potential challenges and strategies to deal with them
- Available mental health services
Help international students know where to seek help when they meet challenges
- Contact information
Help international students know how to seek help when they meet challenges



Feedback



After testing, the layout and content were redesigned. The content is redesigned with information that targets more international students. In the fictional journey, the challenges and positive experiences are combined with available services and contact information, which can help readers understand easily in an empathetic way. Check more details about this activity and in the next chapter “Outcomes”.

Paper tools and activity

Why the paper tools and activity?

Some paper tools or printable templates related to mental health can help international students learn more and reflect on mental health topics in a low-cost way. These tools can also be integrated into group activities for participants to open up about mental health and get peer support.

Feedback

The early prototypes of paper tools are reflection tools to record emotions with stickers. There are also some challenge cards to be used for each week with the paper reflection tool.

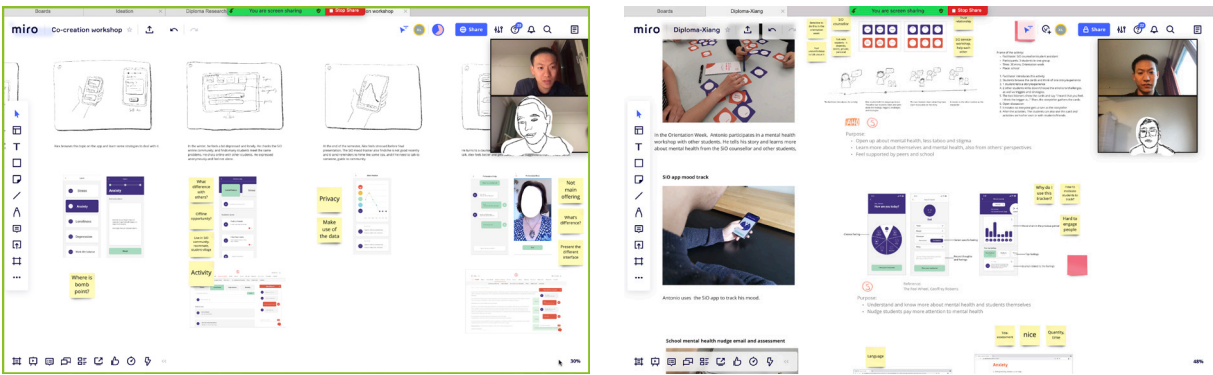


After testing, the paper tools were iterated and integrated into a group workshop activity on mental health, which is organized by SiO and School in orientation week. Check more details about this activity and in the next chapter “Outcomes”.

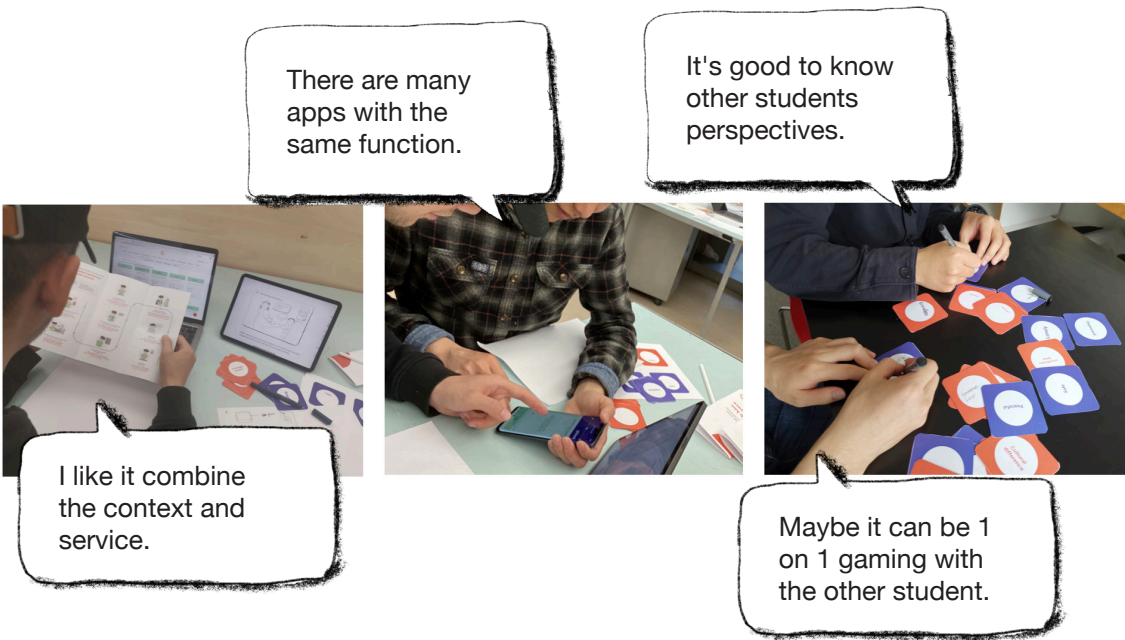
The process of testing

To iterate these service concepts and gather feedback from different perspectives, I present my concepts and interventions to 5 international students, SiO psychologists, and managers, as well as school staff, through online meetings or email.

In a digital way, I used the service concept story along with the touchpoint prototypes to get feedback.

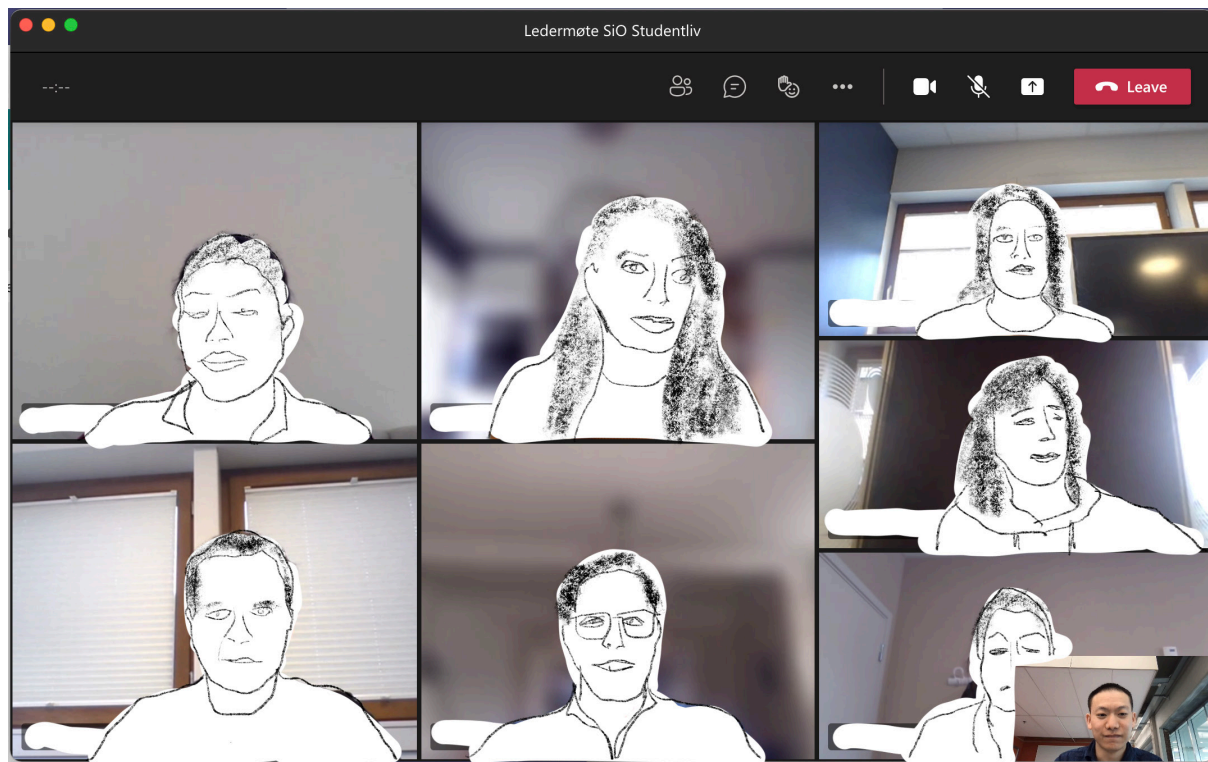


At school, I presented the touchpoints and artifacts to the international students to gather feedback and advice on the concepts.



The process of testing

Besides, I was invited to give a presentation to the SiO health management team with SiO health manager, mental health innovation team manager, staff from the SiO marketing department, and etecetra. In this meeting, I presented the project insights and concepts and get feedback from them.



“This map of offerings that shows what the different services actually represent and can offer that I think that that could be a very helpful tool because we experienced that, there are a lot of students that are applying for psychologists that might be should maybe apply for the advisor, and this reversal.”

- SiO health manager

“I think that one obvious barrier to them would be just getting the information out to the international students about the program.”

-SiO mental health innovation team manager

“A lot of good ideas that it could be interesting for us to look into and see if we can pick up and develop. I think the insights you had are very helpful. Some of them a little surprising also, but I think that is a good reflection. I see that we have some challenges and some work to do.”

- SiO health manager

Reflection

The digital way of testing

The pandemic challenges the way of testing. The digital way of testing service concepts with a storyboard works well. Besides, if I could meet in person with some other students in the prototyping process and show the papers with a sketch and get some quick feedback, it could help me make decisions and iterate the concepts quickly on solid ground.

Feedback from different perspectives

The users and stakeholders think from their perspective and benefits, so there can be some conflicts between their feedback and preferences. Designers need to balance and evaluate the different feedbacks and have systems thinking to make judgments on the impact in the system.

In the testing process, having a conversation with the stakeholders and share the project enabled me to bring forward the international students' perspectives and challenges in the system.

The tone of voice

The tone of voice of mental health services is important because mental health is related to privacy and feeling. Wrong terms and tones may cause a negative echo chamber and make the uses feel too serious.

OUTCOMES

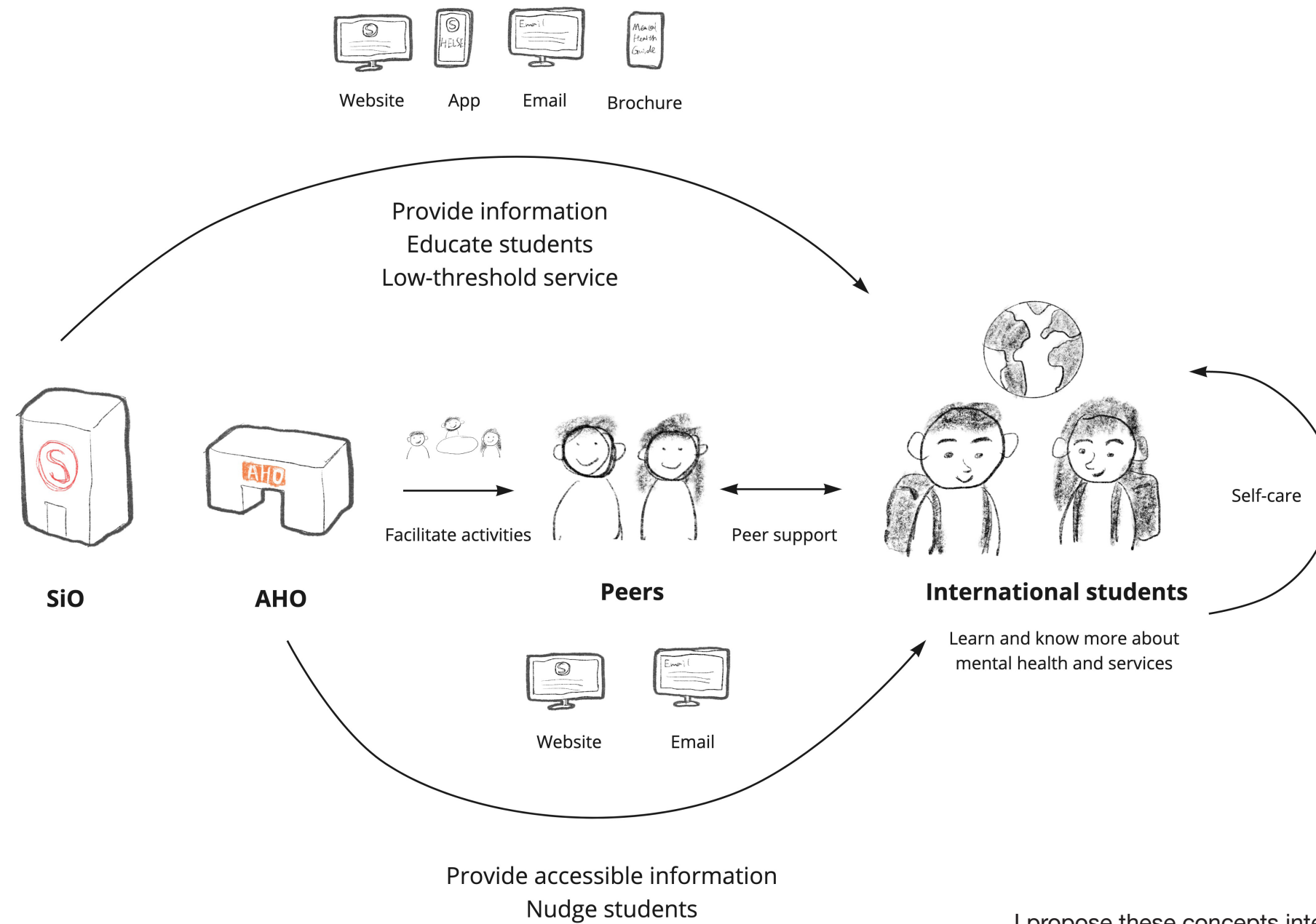
The main outcomes of this project are services concepts which includes

- Emails, websites and the brochure, to educate students and provide services information
- Improved application and website to provide information and low-threshold services
- Activities and programmes to help students learn more about mental health and build peer support and social contact
- Proposals of findings and potential interventions in the system, to be shared with main stakeholders. This report is also a part of outcomes, which is shared with stakeholders and contributors of this project.

My contributions are not only the final design concepts and proposals, but also the process of design. During the process, I shared my findings, insights, methods, concepts with experts and stakeholders, like SiO and school, which also helps bring forward the problems, international students' perspectives and promote Service Design and System Oriented Design.

The overview map of the concepts
Services storyboard
Details of the concepts
Proposals to stakeholders
Reflection

The overview map of the concepts

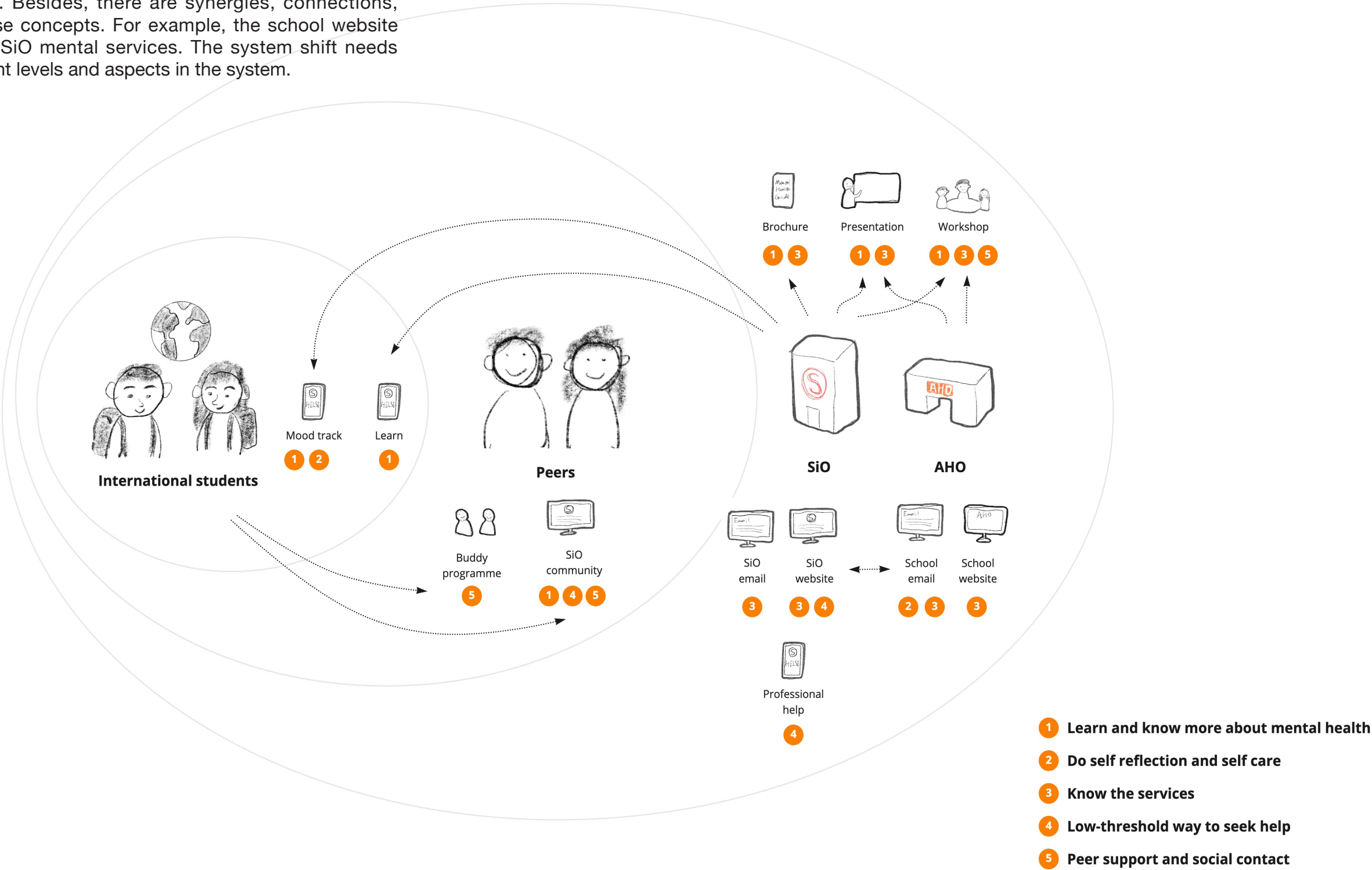


I propose these concepts intervene in the system from 3 levels:

- **International students:** Learn and know more about mental health; Do self-reflection and self-care
- **Peers:** Build social contact and peer support; Help and learn from each other
- **SiO and AHO:** Promote mental health and services, Provide tools and low-threshold services, Facilitate peer support

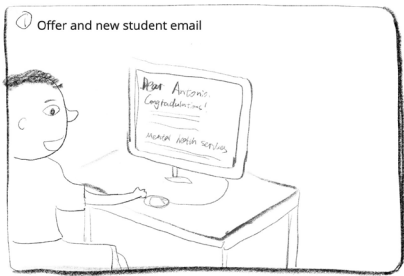
The overview map of the concepts

I would like to propose a portfolio of concepts in the system. This system is complicated and the challenges are hard to solve by a single intervention or concept. Besides, there are synergies, connections, and support among these concepts. For example, the school website and email can promote SiO mental services. The system shift needs collaboration from different levels and aspects in the system.

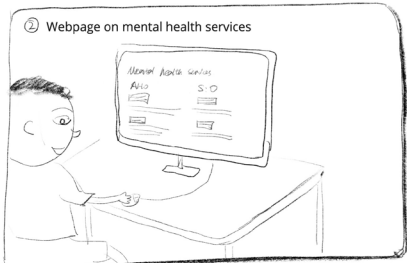


Services storyboard

This storyboard shows the service concepts with a fictional student and his student journey. Check my details of the concepts in the later pages.



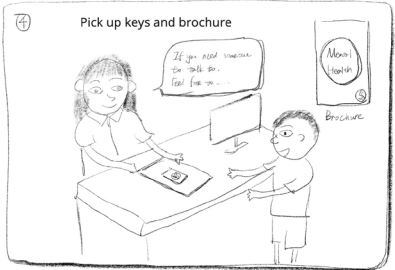
Antonio is from Brazil. He receives AHO's offer and new student email, which shows welcome and service offerings of student life in Oslo like mental health services. Antonio feels warm and excited.



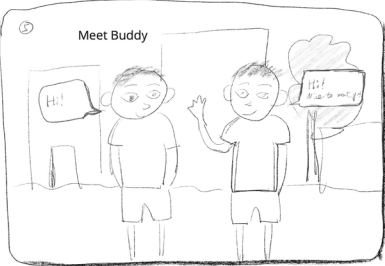
Antonio checks the website link of school website and mental health services. He thinks AHO is considerate.



Antonio applies for SIO housing and receives the offer email. This email also introduces other service offerings and includes the QR code of SIO app and link to mental health service website. Antonio have a rough picture of what SIO offers to students.



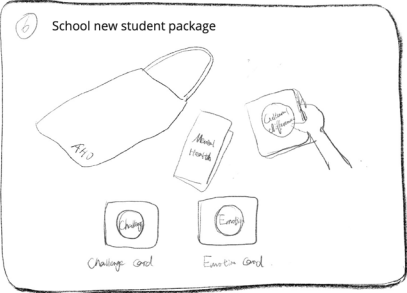
When Antonio moves to Norway, he goes to SIO's service centre to pick up apartment keys and also gets the welcome package, including the mental health brochure.



Antonio applies for Buddy programme from SIO and Paulo who is from Brazil and lives in the same student village with Antonio is assigned as his buddy. Paulo shows Antonio around the student village and city centre as a guide.



During the Orientation Week, Antonio attends a presentation on Mental health. He gets to know it's common to have mental health issues and there are some offerings he can turn to.



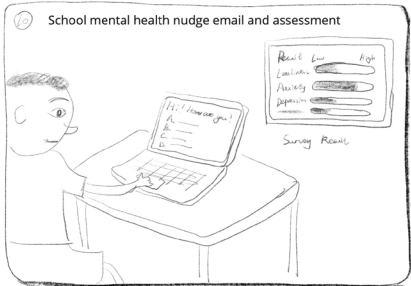
In the Orientation Week, Antonio goes to school and receives the New Student Bag. In the new student bag, he finds emotion and challenge cards.



In the Orientation Week, Antonio participates in a mental health workshop with other students. He tells his story and learns more about mental health from the SIO counsellor and other students.



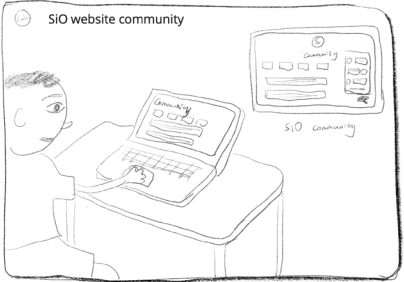
Antonio uses the SIO app to track his mood.



During semester, Antonio receives the nudge email from school and he does the mental health assessment. He find he has a bit high level of anxiety recently. This email also reminds him that he can turn to mental health services.



Antonio turns to SIO, browses this topic on the app and learn some strategies to deal with it.



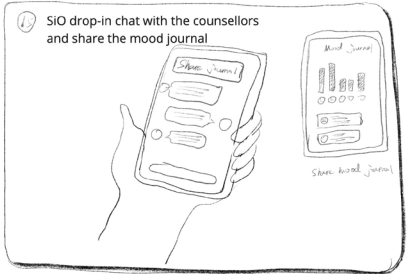
In the winter, Antonio feels a bit depressed and lonely. He checks the SIO online community, and finds many students meet the same problems. He chats online with other students. He expressed anonymously and feel not alone.



On weekends, Antonio joins in social activities organized by SIO and AHO international student group. He really enjoys these activities.



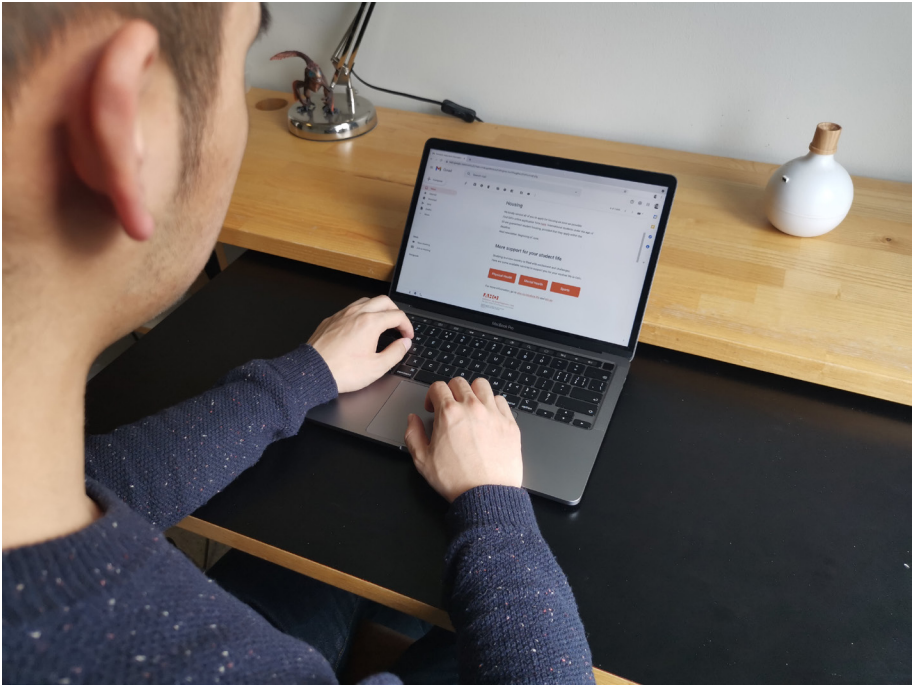
At the end of the semester, Antonio feels stressed before final presentation. The SIO app mood tracker also finds he is not good recently and it send reminders to him to show the services he can turn to.



He turns to a counsellor and shares his journal with the counsellor. After the talk, Alex feels better and gets some practical suggestions from the counsellor.

Details of the concepts

1. Receive new student email



Antonio is from Brazil. He receives AHO's offer and new student email, which shows welcome and service offerings of student life in Oslo like mental health services. Antonio feels warm and excited.

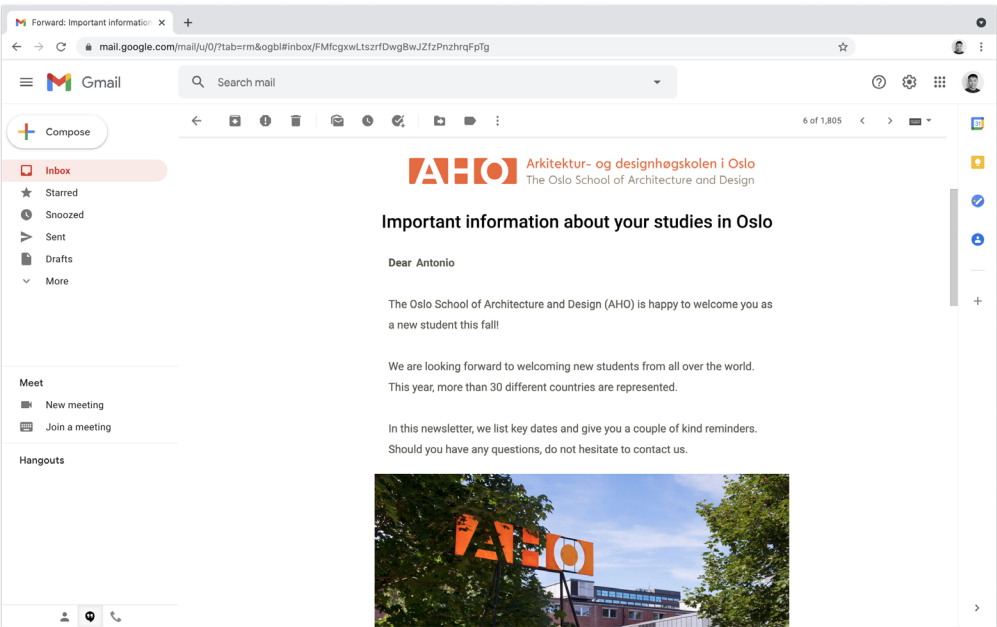
Why?

Every new international student receives a welcome email from AHO, which includes important information about studies in Oslo, like housing and residence permit. This is a good channel to promote information and services. I would propose that this email include other service information like mental health services.

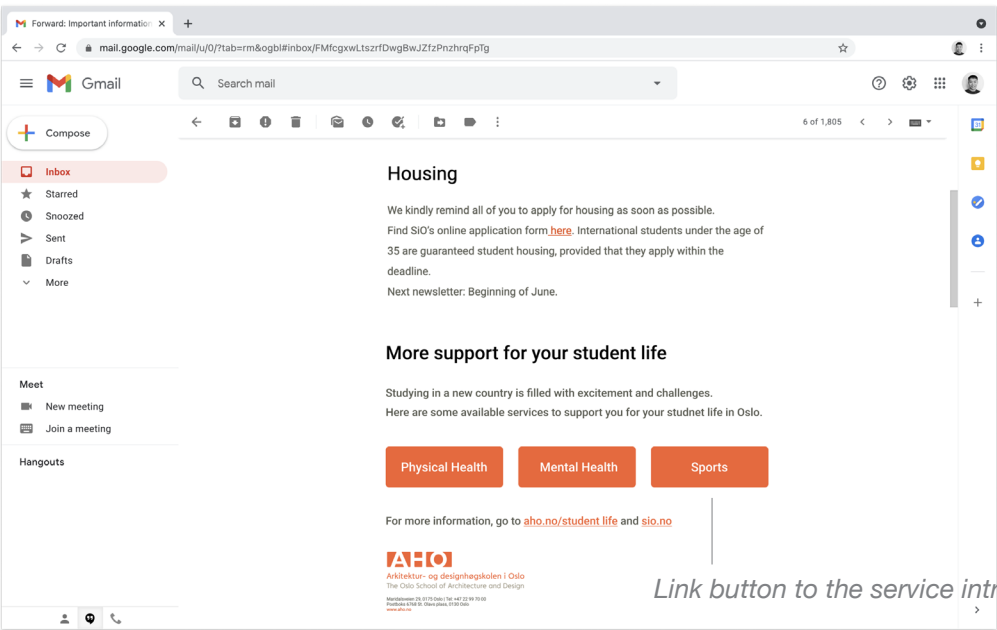
Purpose: show a warm welcome and let international students know services for international students

How?

AHO sends the welcome email to the new international students, which includes available services for international students and link buttons to the service introduction webpage.



Current welcome email



Link button to the service introduction

New add to the welcome email

Feedback

It's obvious and clear in the beginning.

Be careful about the tone of voice of this email.

2. Mental health services web



Antonio clicks the mental health button, then he goes to the AHO mental health services webpage. He thinks AHO is very considerate.

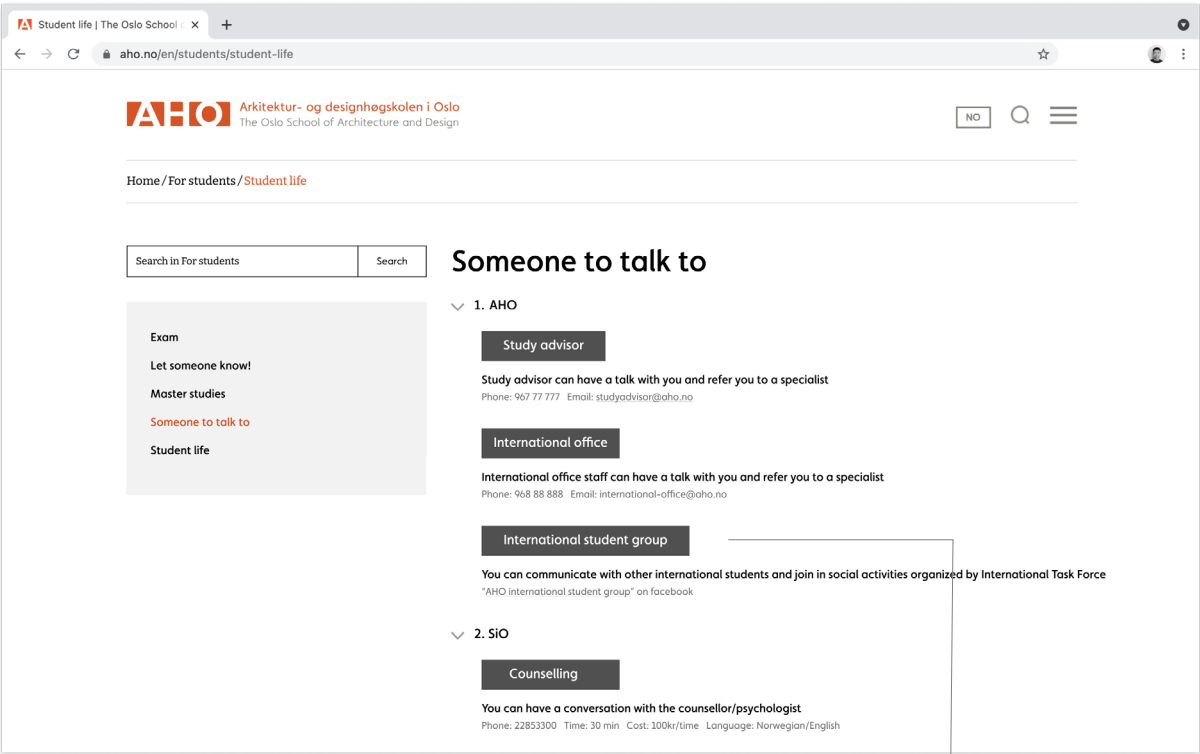
Why?

The school webpage is an accessible channel for students to know the services information and can be directed to the service providers easily. When the students meet the mental health challenges and want to search for services, they can go to the school webpage and find the resources easily.

Purpose: provide mental health services information and let students know them.

How?

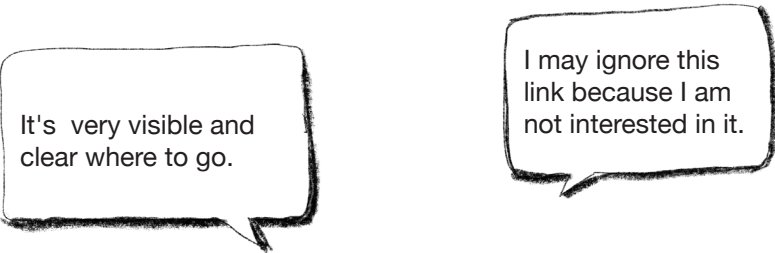
There are some new pages on the AHO website to introduce some practical information and services like mental health services. The mental health services webpage introduces some available offerings which the students can turn to and the contact information. The users can click the button and then be directed to the offering webpage.



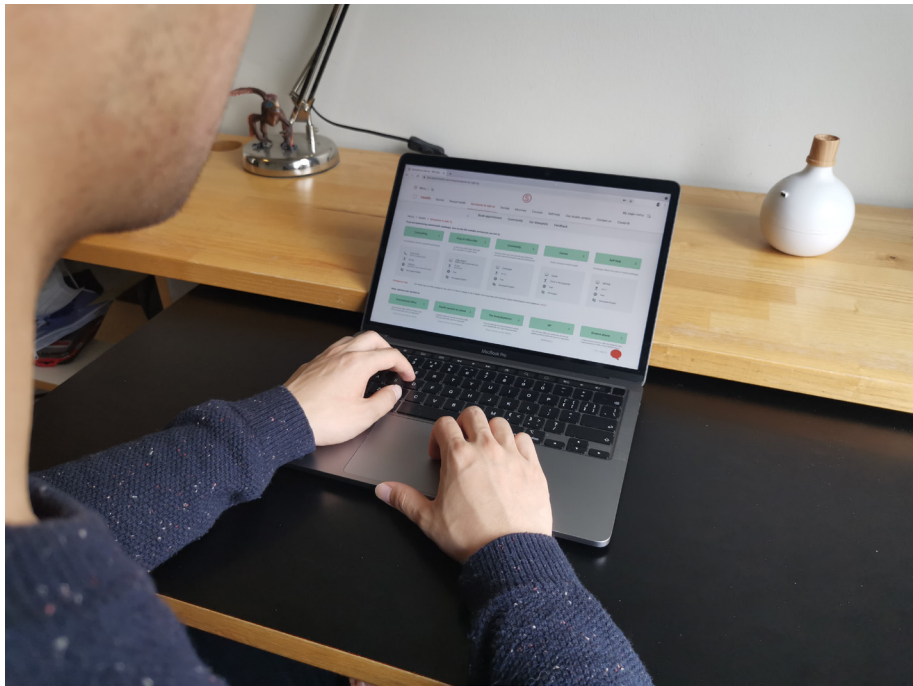
AHO mental health webpaeg

Link button to the service introduction

Feedback



3. SiO welcome email and mental health webpage



Antonio applies for SiO housing and receives the offer email. This email also introduces other service offerings and includes the QR code of the SiO app and a link to the mental health service website. Antonio has a rough picture of what SiO offers to students.

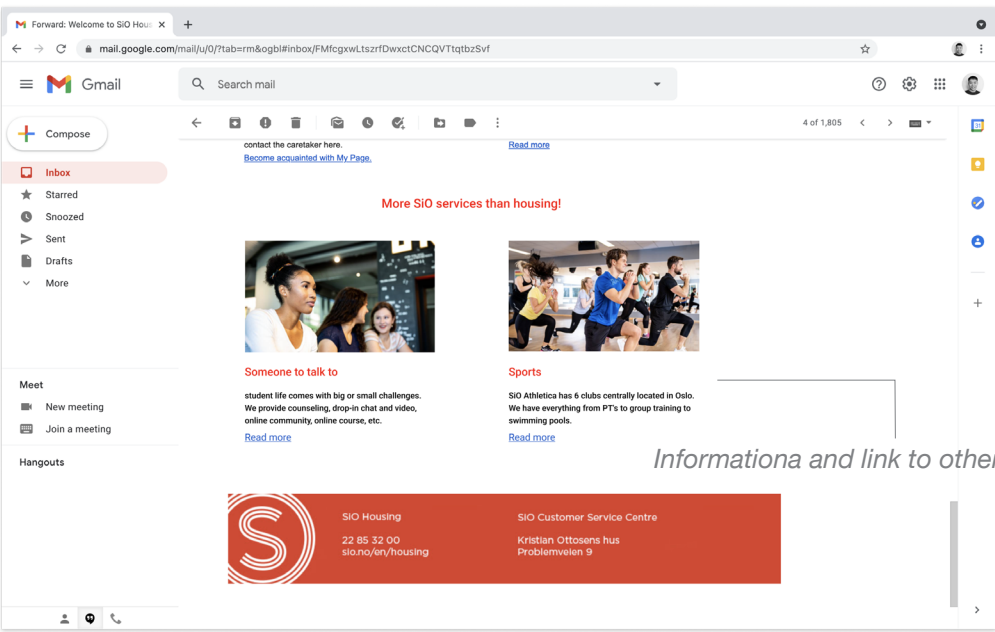
Why?

Most of the international students who study in Oslo live in the SiO student village, so the SiO housing email is a good channel to reach out to international students to introduce its other services like health and gym, because, from the research in this project, some international students who live in SiO housing are not familiar with or even don't know SiO mental health services. The new SiO mental health shows clear information of different service offerings because some international students don't know how to start the service or don't know which offering is suitable. Some other mental health services provided by other organizations are also shown on this page to let students know, make full use of the resources, and in case the SiO mental health services are too busy.

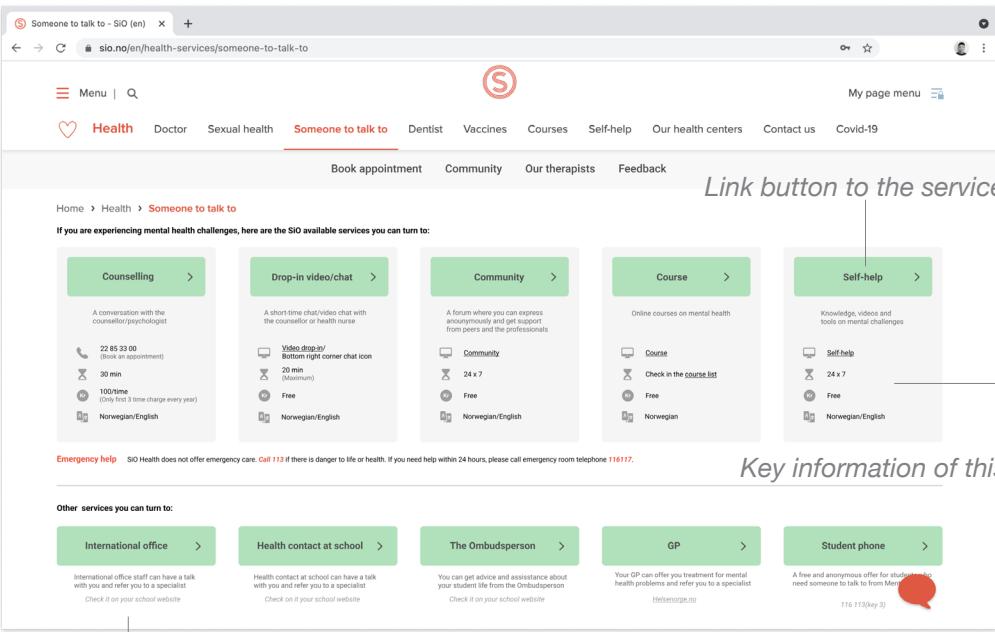
Purpose: Let students know about other SiO services like mental health services; Help students know the key information of different offerings and choose the suitable one.

How?

The SiO housing welcome email introduces other SiO services and the mental health webpage shows the buttons and key information of different offerings. The key information includes the contact information, time, cost, as well as language. Besides, at the bottom, students can see some other mental health services provided by other organizations.introduction webpage.



SiO housing welcome email



SiO mental health webpage

Services provider by other organizations

Feedback

This is much clearer, and, and yes it's super nice to know in advance if English is available or if it's free.

Need to see more differences between the offerings.

4. Pick up keys and brochure



When Antonio moves to Norway, he goes to SiO's service center to pick up apartment keys and also gets the welcome package, including the mental health brochure.

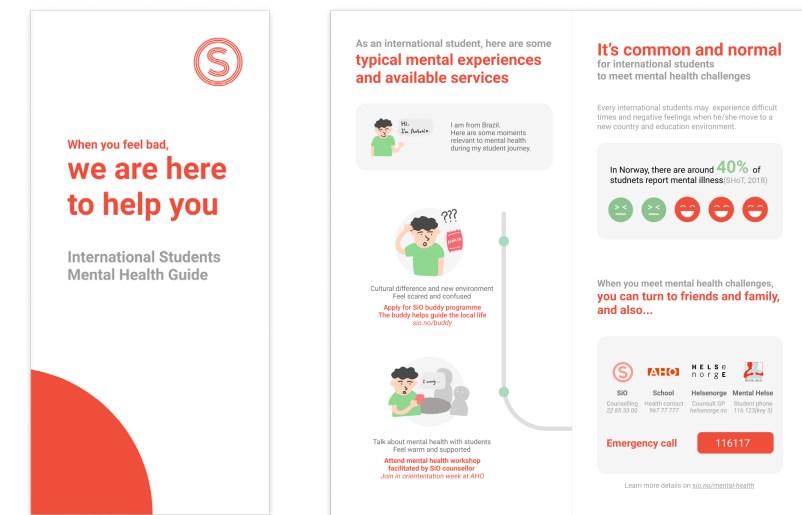
Why?

The brochure is an easy and low-cost way to present information and promote services. For now, SiO provides some brochures or leaflets about housing and gym services rather than mental health. The mental health guide brochure can be delivered in a welcome package in the SiO customer service with a short introduction by the SiO staff when the new students pick up keys. In this way, the new students can be aware of the mental health services easily and feel warm.

Purpose: Let students know the mental health services; Let students know it's common to meet mental health challenges; Make students feel warm on SiO services

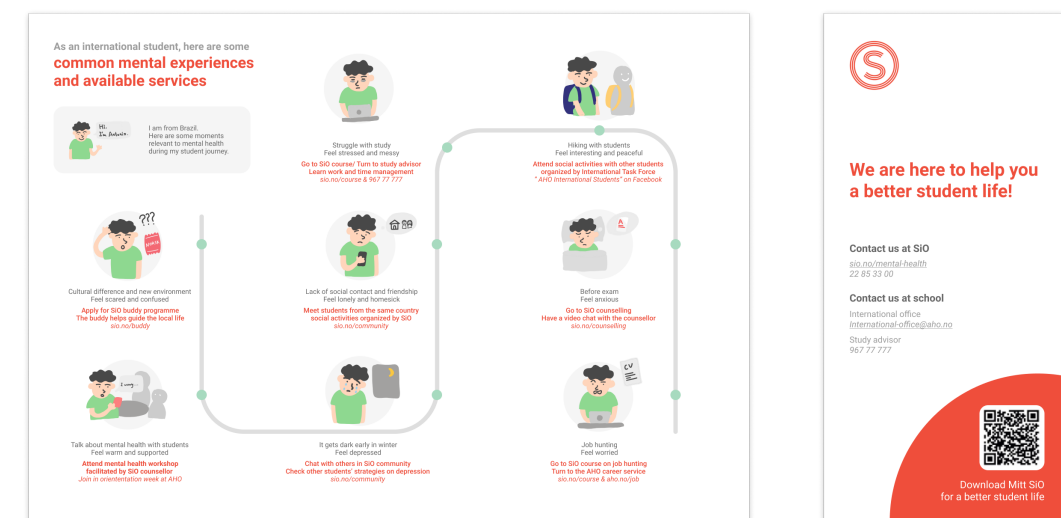
How?

This brochure includes a short introduction and statistics of mental health challenges, to let students know it's common and normal to meet these challenges. It also tells the students that they can turn to others when they meet challenges along with some services contact information. To show some positive and negative experiences related to mental health, this brochure presents a fictional student journey to introduce the experience and services in an empathetic way, to make students feel prepared and supported. On the back cover, there are some more contact information of the services and a QR code of the SiO mobile app.



Cover

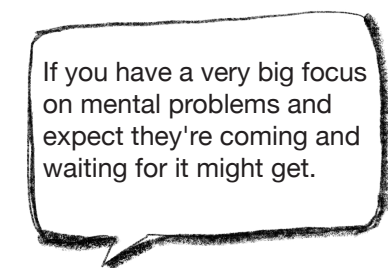
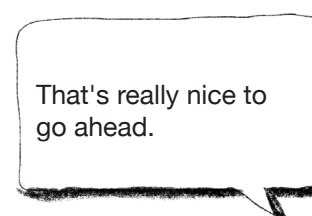
Unfold once



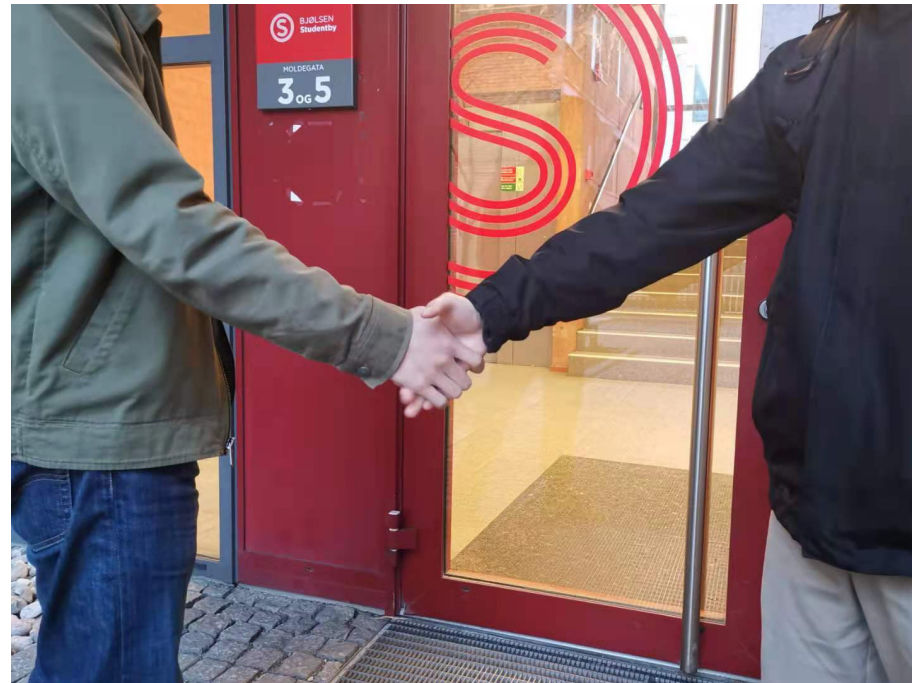
Unfold twice - fictional student journey
experiences related to mental health
and services students can turn to

Back cover

Feedback



5. Meet buddy



Antonio applies for the Buddy program from SiO and Paulo who is from Brazil and lives in the same student village with Antonio is assigned as his buddy. Paulo shows Antonio around the student village and city center as a guide.

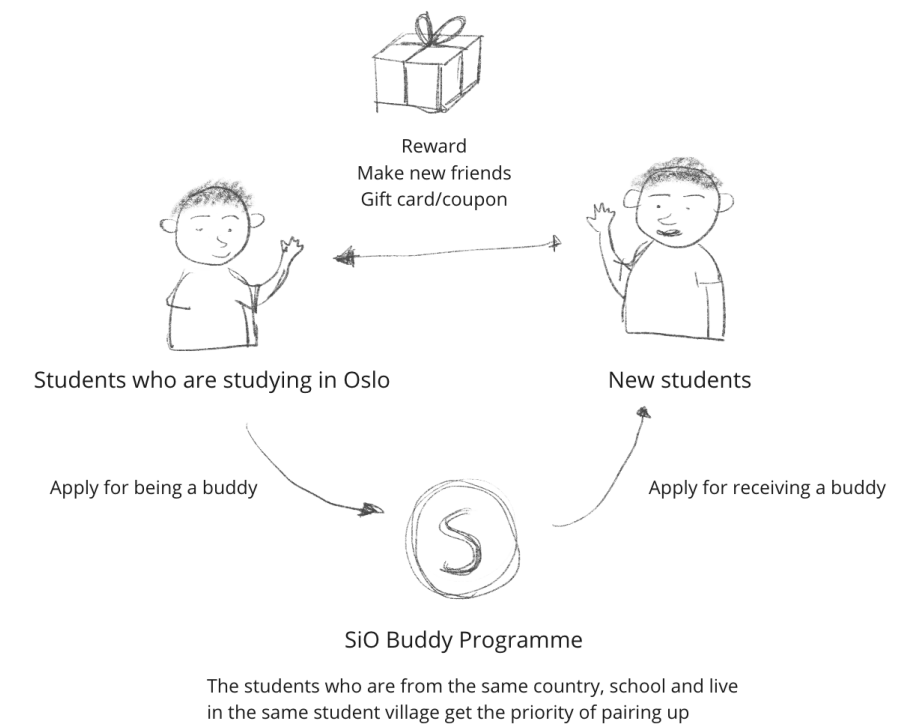
Why?

When international students moved to a new country, they may meet many challenges because of the big changes in the environment. The buddy can help new students introduce and adapt to life here with the buddy's previous experience. The buddy from a similar cultural background can communicate easily with the new students and may meet similar challenges. For now, many schools have buddy programs. If SiO provides this buddy program, there can be a large student base to ensure enough students can be volunteers as buddies. Students can be motivated to be buddies for making new friends and helping others. SiO can also reward the buddies with some coupons or gift cards to encourage the students.

Purpose: Let new students feel not alone; Help new students know and adapt to the new environment

How?

After the new students receive the housing offer from SiO, they can apply for a buddy on the SiO website. The students who are from the same country, school and live in the same student village get the priority of pairing up. The new students can also choose the preference of his or her buddy, for example, from the same country or from other countries. After being paired up, the new student will get the buddy's contact information. The new student can ask the buddy questions before moving and when the new student moves to Oslo, the buddy can help him or her set up.



SiO buddy programme

Feedback



6. Orientation week mental health presentation



During the Orientation Week, Antonio attends a presentation on Mental health. He gets to know it's common to have mental health issues and there are some offerings he can turn to.

Why?

In the orientation week, new students attend some presentations which introduce the student life here. For now, there is not enough introduction on the services outside the school like mental health services. Giving a presentation to new students in orientation week can be an accessible way to provide information and simple education on mental health. It can help students learn about mental health and know the services they can turn to.

Purpose: Let students know it's normal and common to meet mental health challenges; Help students learn more about mental health; Let students know the mental health services they can turn to

How?

In the orientation week, the students can participate the health service presentation which is organized by AHO. The presenter can be the SiO counselor. Some example contents of this presentation can be data of mental health issues, what are common challenges? How to take care? How to seek help? Q&A, and etcetera.

Presenter: The SiO counsellor

Potential contents of presentation:

- Data of mental health issues
- What are common problems?
- How to take care?
- How to seek help?
- Mental health workshop
- Q&A

Feedback

Good to know the services from the presentation.

There is so much information to give. Would it be too much at the same time for you to take in?

7. School new student bag



In orientation Week, Antonio goes to school and receives the New Student Bag. In the new student bag, he finds emotion and challenge cards.

Why?

In orientation week, new students receive new students’ bags with some materials. There can be some props or pintable materials on mental health to nudge students to pay more attention to and learn more about mental health.

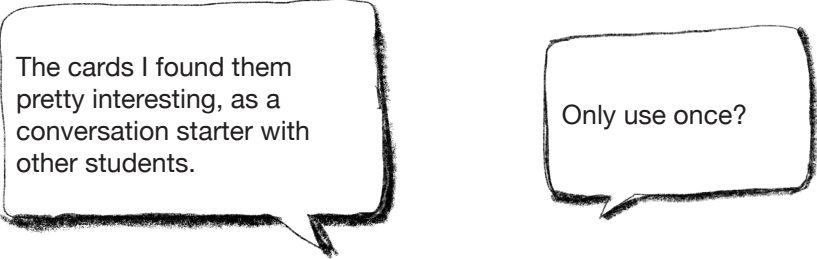
Purpose: Nudge students to pay attention to mental health; Help students learn more about mental health

How?

New international students receive new students’ bags, in which there are, for example, some emotion cards and challenge cards. There are some common emotions on the emotion card, and students can write down the triggers of the emotion on the backside. There are some common challenges for international students on the challenge card, and students can write down strategies for these challenges on the backside of the card. Some blank cards are provided in the deck for students to write.



Feedback



8. Mental health workshop



In orientation week, Antonio participates in a mental health workshop with other students. He tells his story and learns more about mental health from the SiO counselor and other students.

Why?

In the Orientation week, new students attend some activities organized by the school. Some activities or workshops on mental health are also potential to be organized in this time to help students learn more about mental health and receive peer support from the other students.

Purpose: Open up about mental health, less taboo and stigma; Learn more about themselves and mental health, also from others' perspectives; Feel supported by peers and school

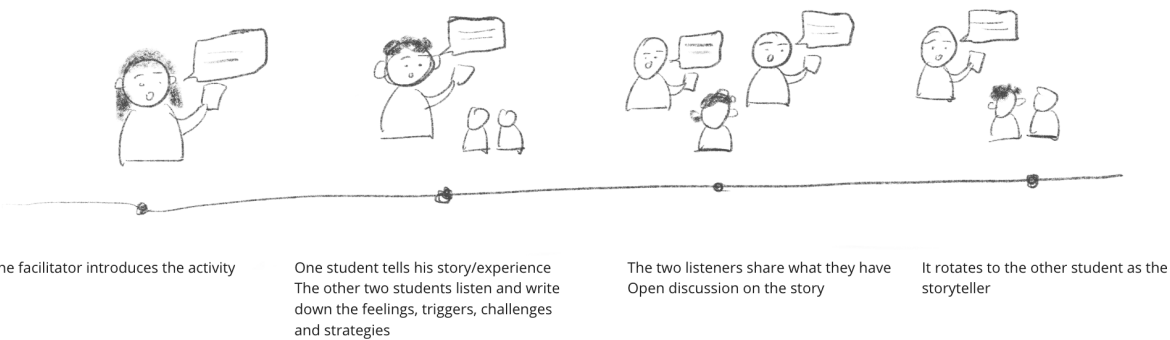
How?

The new students attend the mental health workshop after the mental health presentation in orientation week.

The frame of the activity:

Facilitator: SiO counsellor/student assistant
Participants: 3 students in one group
Time: 30 mins, Orientation week
Place: school

- 1. The facilitator introduces this activity
- 2. Students browse the cards and think of one story/experience
- 3. 1 student tells a story/experience
- 4. 2 other students write down/choose the emotions/challenges, as well as triggers and strategies.
- 5. The two listeners show the cards and say "I heard that you feel.. I think the trigger is..." Then, the storyteller gathers the cards.
- 6. Open discussion
- 7. It rotates so everyone gets a turn as the storyteller
- 8. After the activities. The students can also use this card and activities on his/her own or with students/friends.

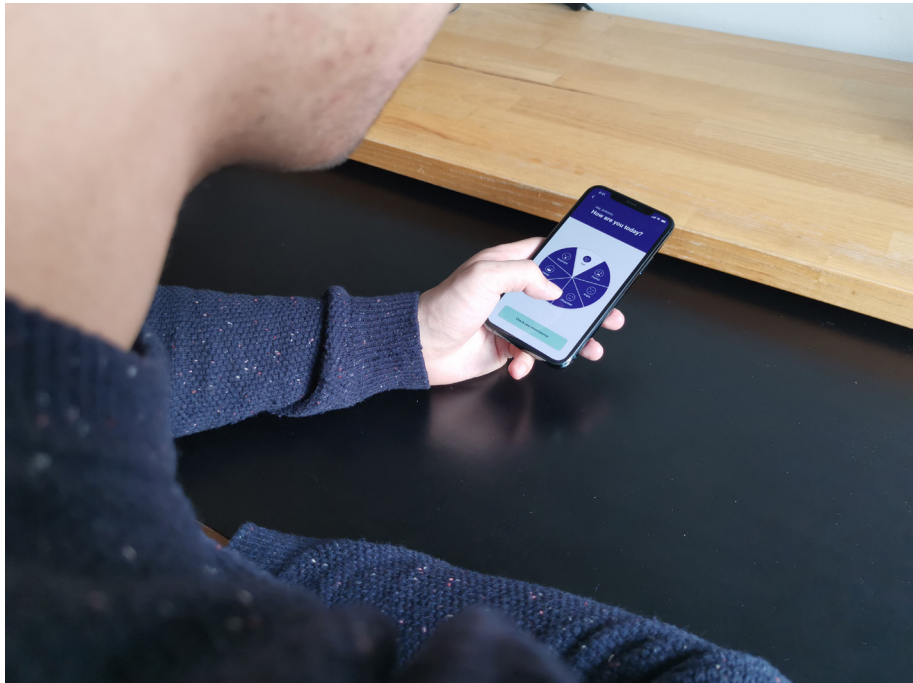


Feedback

it's nice to break the the taboo topic and be open to talk about this.

It may be challenging to talk with the students you don't know.

9. SiO app mood track



During semesters, Antonio uses the SiO app to track his mood.

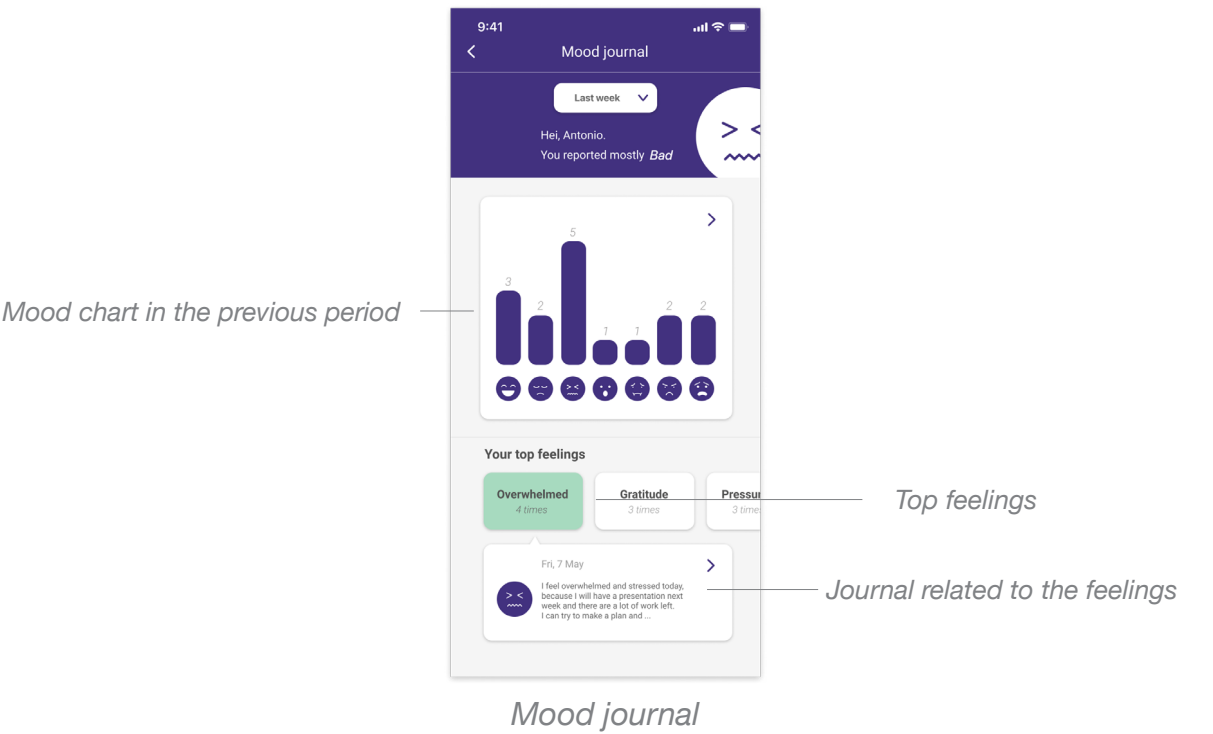
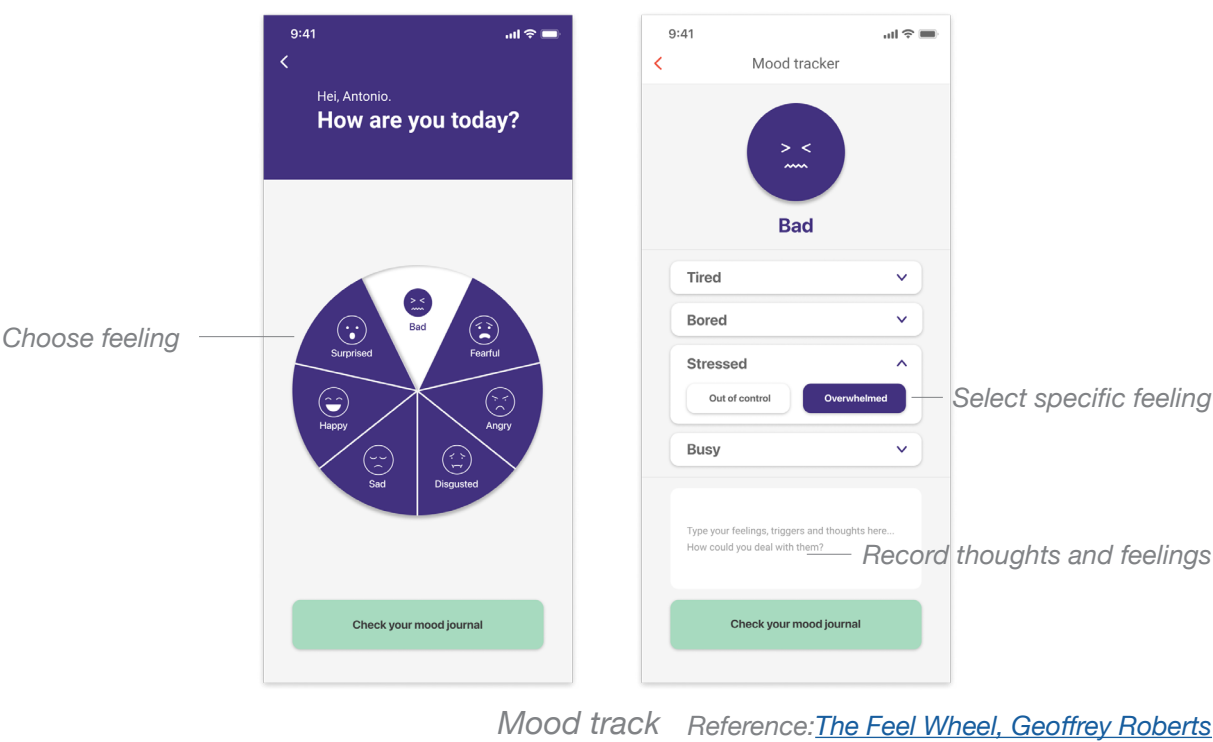
Why?

Tacking mood and taking a journal on mental health can help new students know more about mental health and themselves, as well as reflect on mental health. SiO app can make this tool available and accessible to international students and the digital tool is an easy way for students to record and check the mood journal history.

Purpose: Understand and know more about mental health and students themselves;
Nudge students to pay more attention to mental health

How?

The international students can use the mood track tool in the SiO app. The student can choose a general emotion first, and then he can choose more specific feelings in the different categories, as well as write down some thoughts about today's feelings. The user can also go to the mood journal interface to check the mood chart and recent frequent feelings along with the notes he or she wrote before.



Feedback

tracking the mood with the journal is helpful even just for your own awareness.

How to motivate students to use it?

10. School nudge email and assessment



During the semester, Antonio receives the nudge email from the school and he does the mental health assessment. He finds he has a bit high level of anxiety recently. This email also reminds him that he can turn to mental health services.

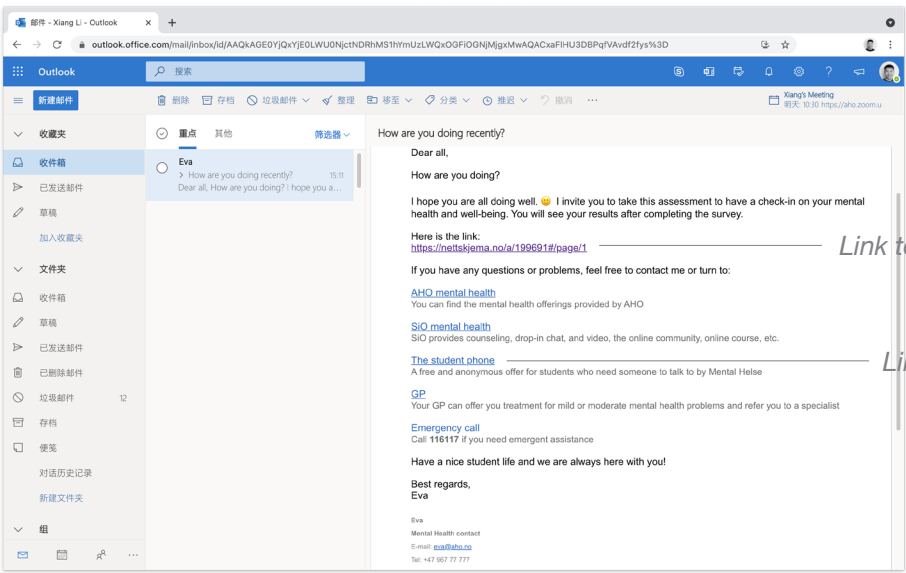
Why?

School email is a good channel to provide information and nudge students to pay attention to their mental health. School can send nudging emails on mental health to students regularly to invite them to do an assessment and reflection on their mental health condition and show the mental health services.

Purpose: Nudge students to pay more attention to and reflect on mental health; Prevent serious issues; Make students feel warm.

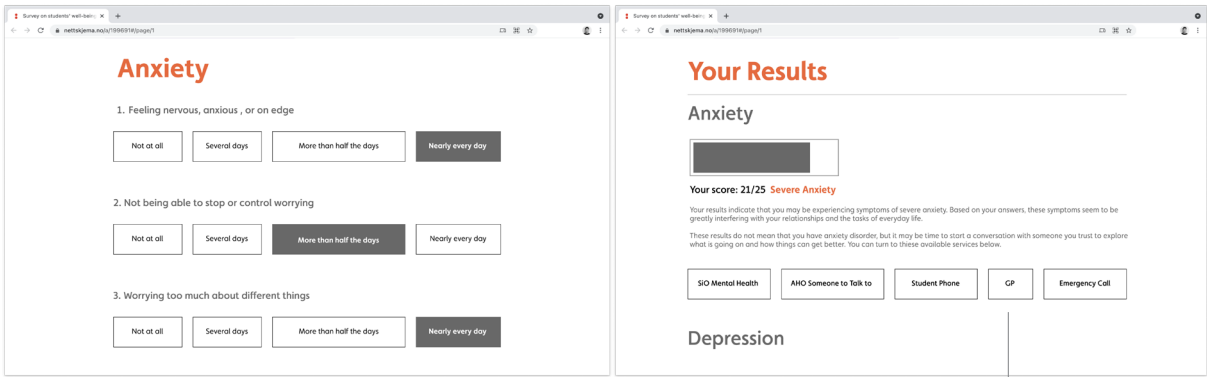
How?

The students receive check-in emails regularly during the semester. This email includes the mental health assessment link and mental health services information. They can go to the assessment website from the email. After completing the survey, they can find the results as well as the services they can turn to.



School check-in email

Link to assessment
Link to services



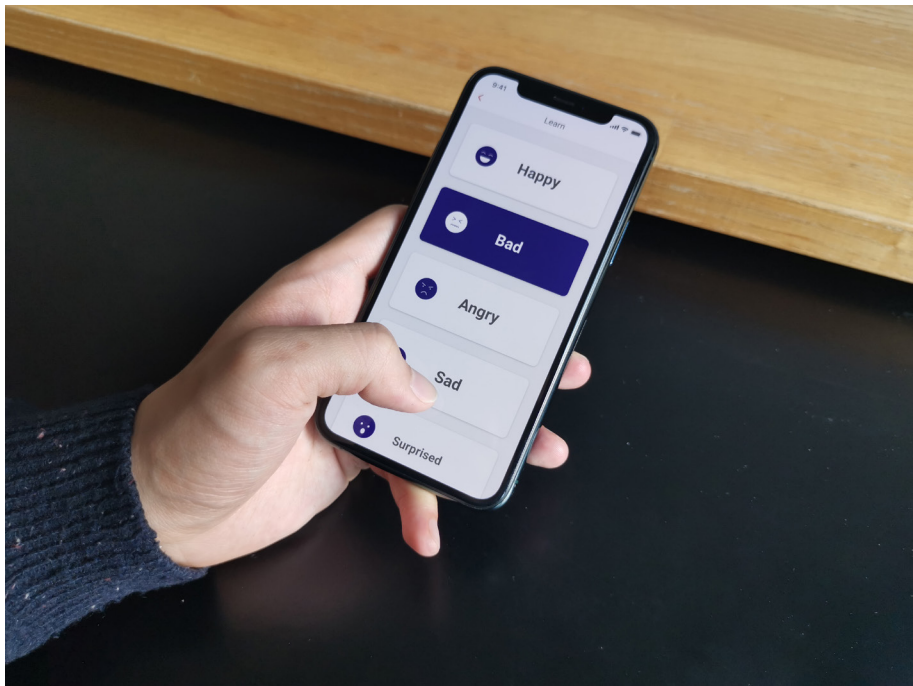
Mental health assessment
Link to services
Reference: [Anxiety test, Mental Health America](#)

Feedback

I value the school email and need the results.

It may challenge the role of school. It's a bit more than school could handle.

11. SiO app mental health laern



Antonio turns to SiO learn, browses this topic on the app, and learns some strategies to deal with it.

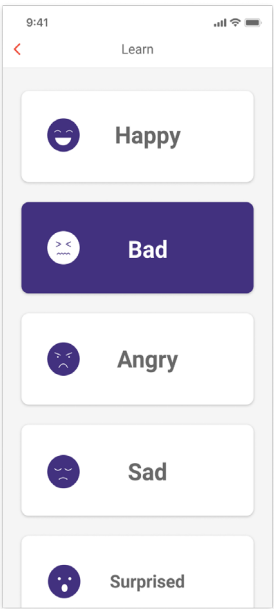
Why?

The SiO digital platform can help students learn more about mental health by providing some knowledge and strategies on mental health challenges. The content of this part can be developed by SiO counselors and psychologists, based on some current SiO resources, like self-hep, online course and the student ask. This digital tool can be an accessible way for students to turn to at any time.

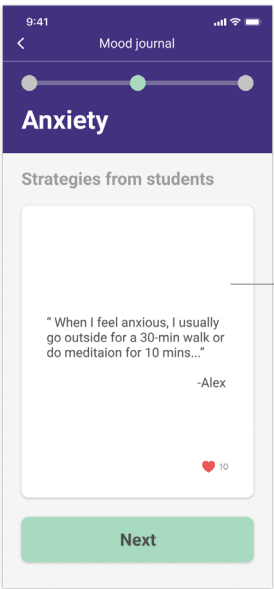
Purpose: Help students learn more about mental health and the strategies

How?

The user can choose the topic he or she would like to learn more about. It shows some introduction and knowledge about the feeling or challenge. Then, there are some tips and strategies from other students and professionals.



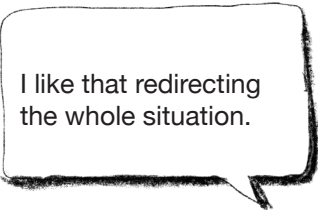
Different topics to learn



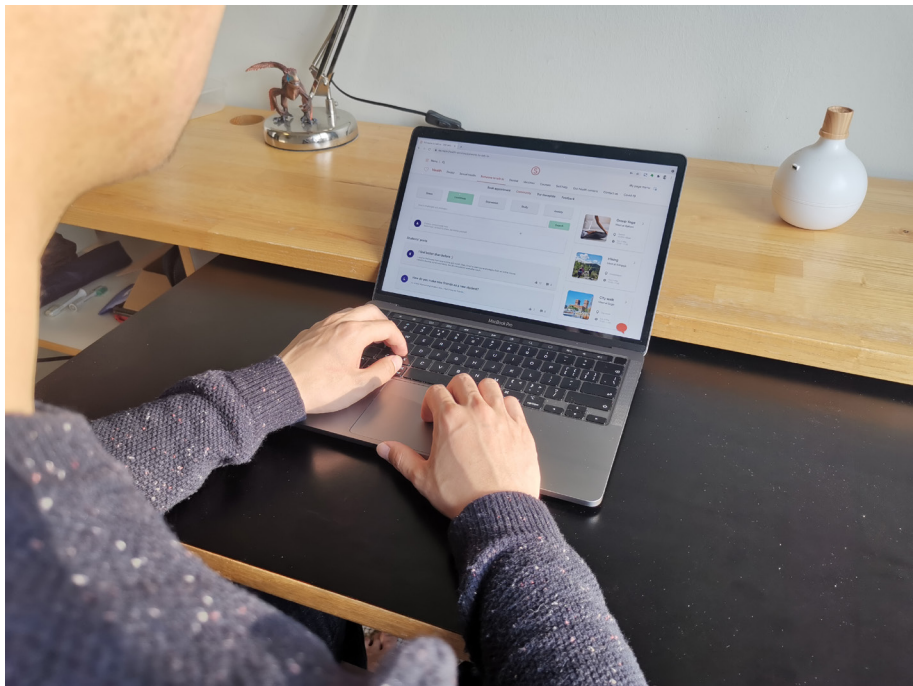
Strategies from other students or professionals

Learn strategies from others

Feedback



12. SiO website community



In the winter, Antonio feels a bit depressed and lonely. He checks the SiO online community and finds many students meet the same problems. He chats online with other students. He expressed anonymously and feel not alone.

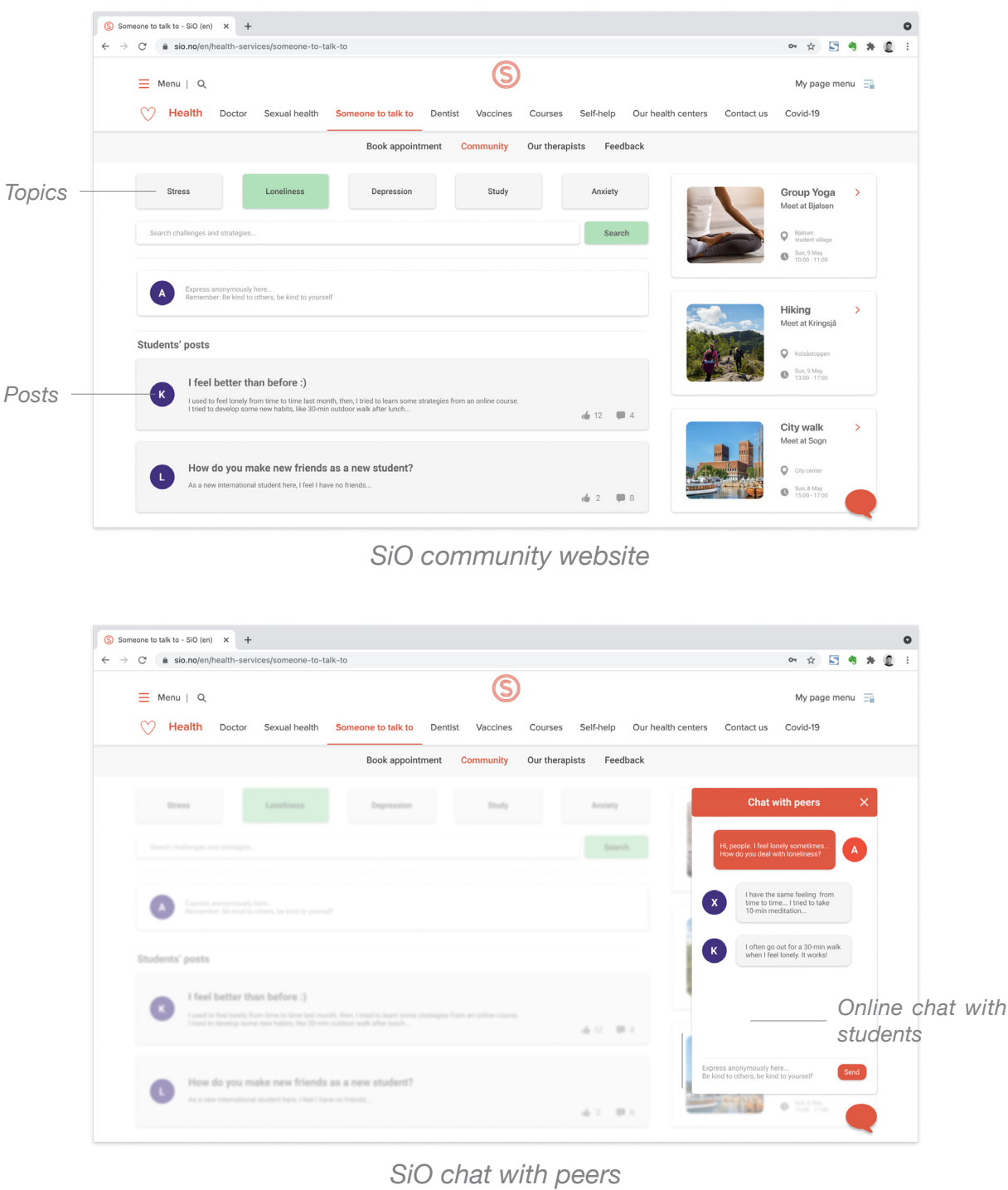
Why?

Peer support is important for international students to maintain their mental health. Besides, the capacity of counselors and psychologists is limited, so peer support and an online community can be a good complement. In this community, international students can find it is normal and common to meet mental health challenges. Students can also express themselves anonymously or check other students' posts to learn strategies. Besides, there is an online chat with other students to let them communicate with and turn to other students easily.

Purpose: Help students feel not alone when they meet problems; Provide a low-threshold platform for student to express anonymously and receive peer support; Communicate with and learn from other students

How?

The user can go to the SiO online platform and check other students' posts on different mental health topics. He can also ask questions and share thoughts anonymously. There is a chat button in the right bottom corner as a low-threshold way for students to communicate with other students. Some SiO counselors will help moderate this community and answer some questions asked by students.



Feedback

I like the fact that it's anonymous because it makes you feel much more free to just pick up.

The icon makes me feel like chatting with the robot.

13. student social activities



On weekends, Antonio joins in social activities organized by SiO and AHO international student group. He really enjoys these activities.

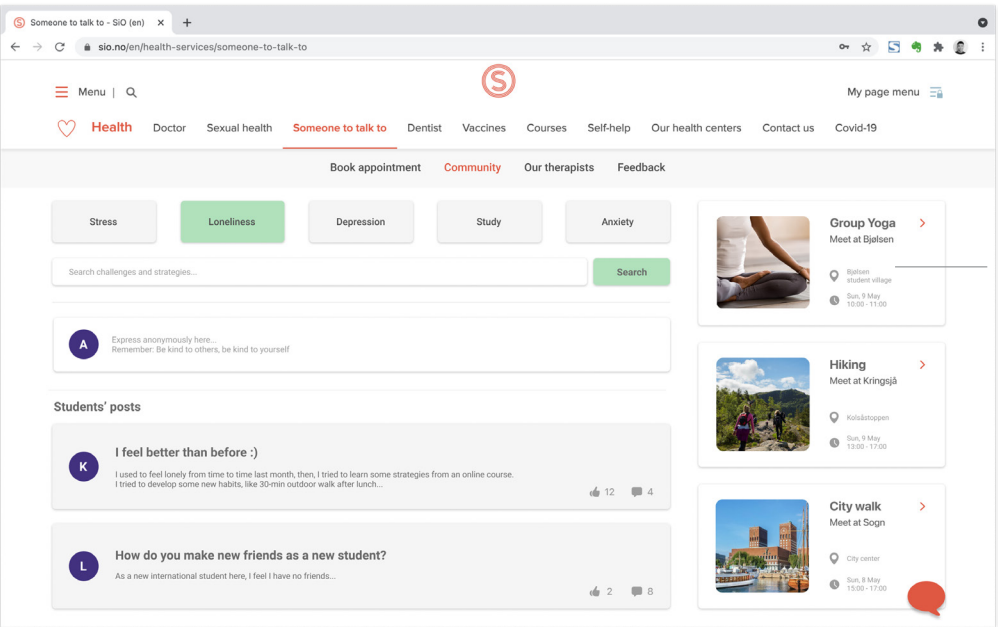
Why?

Attending social activities and building social contact are beneficial to mental health. SiO and AHO can help facilitate social activities for international students.

Purpose: Help students build social contact and feel not alone

How?

Students can find social activity posts that are organized by SiO or other students on the SiO community website or on the AHO international student group on Facebook. Students can know the posts and join in these activities easily.



SiO community website

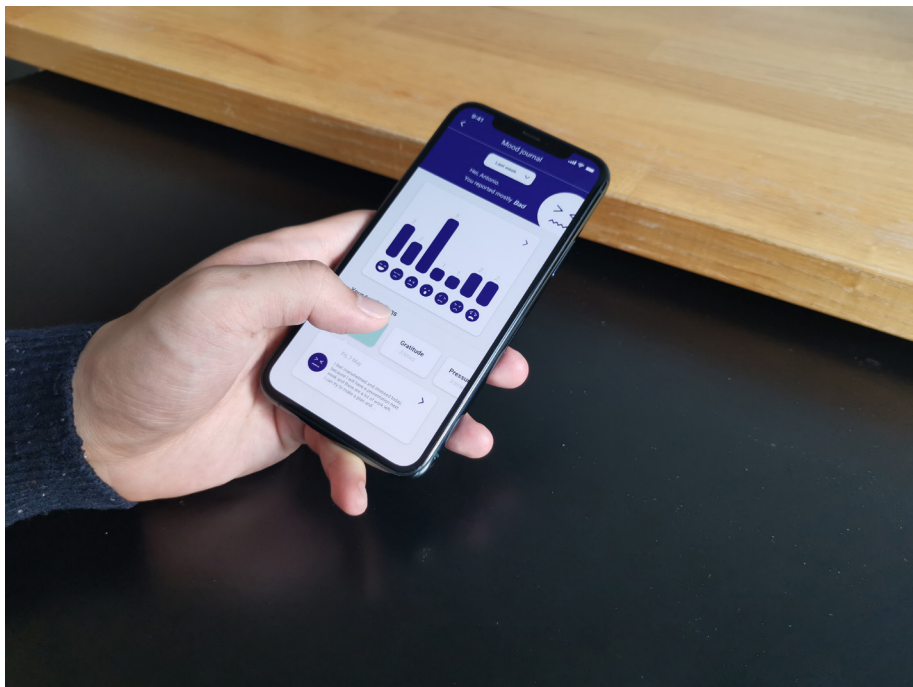
Social activities organized by SiO or students

Feedback

"I really like activities, I keep coming back to that like having people nudge to meet other people outside of school."

That's building a community outside of like this competitive school environment.

14. SiO app mood tracker reminder



At the end of the semester, Antonio feels stressed before the final presentation. The SiO app mood tracker also finds he is not good recently and it sends reminders to him to show the services he can turn to.

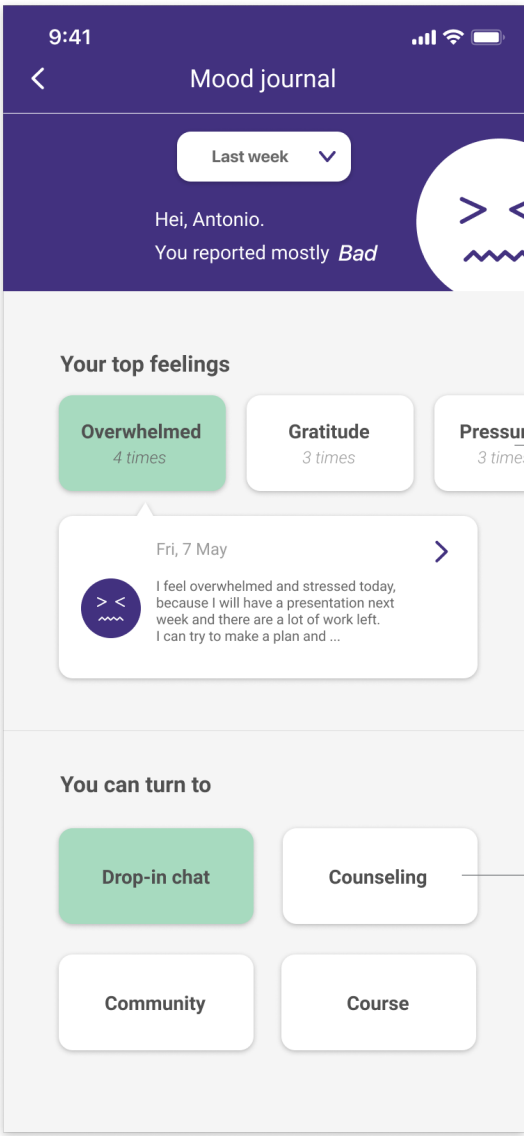
Why?

The mood track tools can help record the users’ mental health conditions and send reminders when the users don’t feel good in case they are not conscious of it. It can also show the available service offerings, which can help the users step out to seek help.

Purpose: Help students aware of the problems; Help students step out to seek help and prevent serious problems

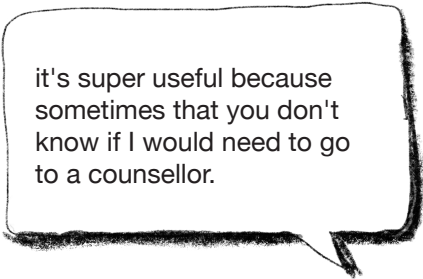
How?

The user can receive a reminder if he or she records bad emotions frequently in the tool. The user can turn to the services quickly by clicking the button on the page.

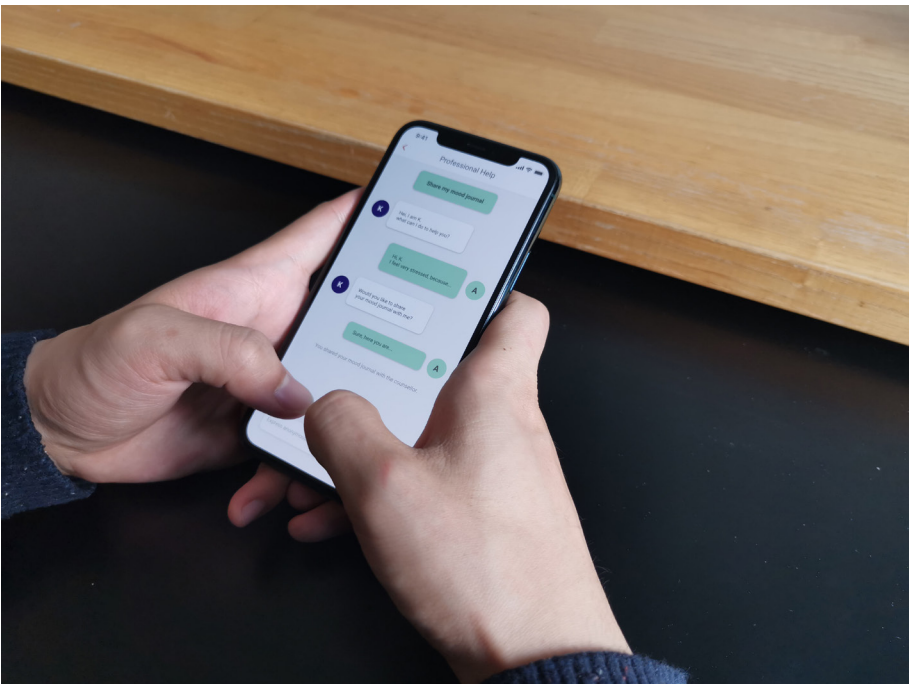


SiO App mood tracker reminder

Feedback



15. SiO drop-in chat and share the mood journal



He turns to a counselor and shares his journal with the counselor. After the talk, Alex feels better and gets some practical suggestions from the counselor.

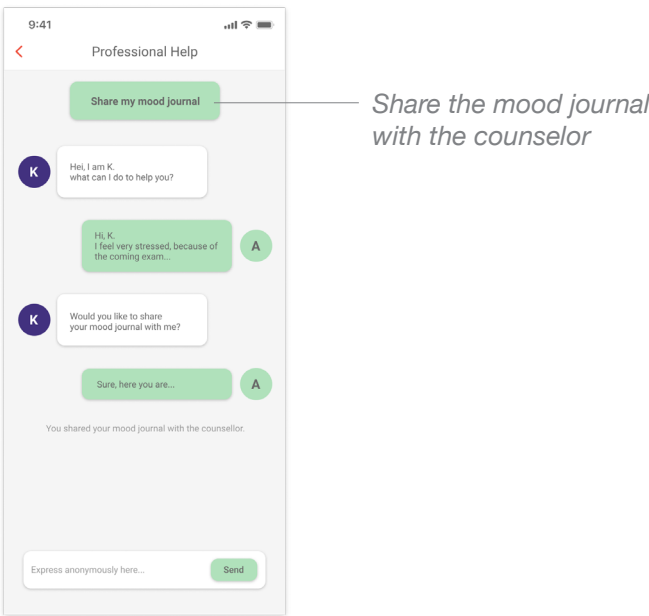
Why?

For now, SiO has a drop-in video service with the counselor. I would propose an additional drop-in chat service with the counselor, which can be a more low-threshold way for students to seek help. The students can also share the mood journal with the counselors to help them explain and the counselors can understand the student's situation easily.

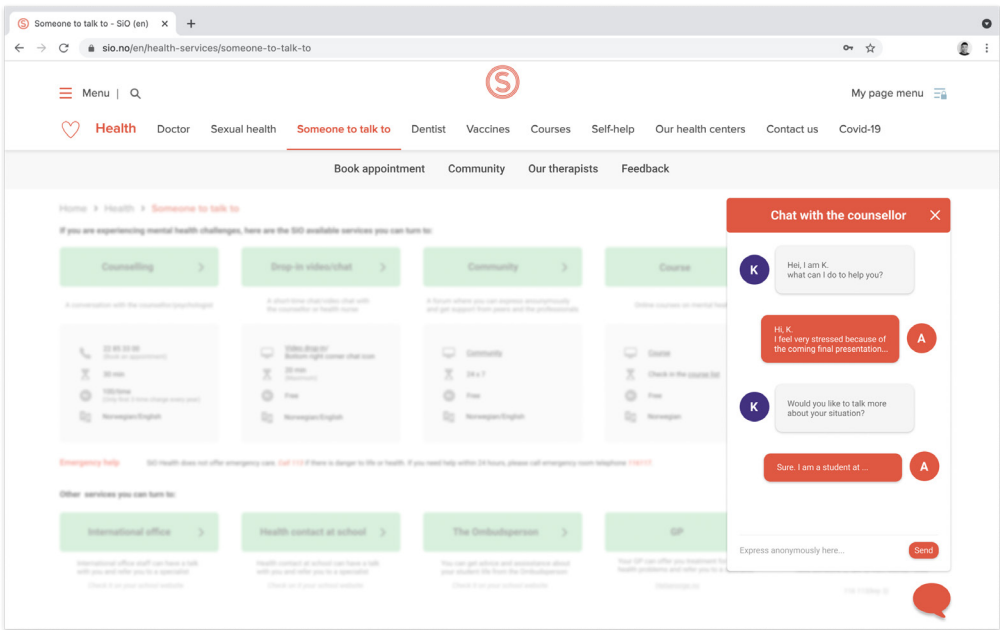
Purpose: Low-threshold seeking help way; Help the counselor understand the student easily and give specific advice

How?

The user can turn to the drop-in chat with the counselor service on the SiO app or website during working time. In the app, the user can also share his or her mood journal with the counselor.



SiO App drop-in chat with the counselor



SiO website drop-in chat with the counselor

Feedback

that makes it feel much easier.

The chat icon is the same as chat with peers, which makes me feel confused.

Proposals to stakeholders

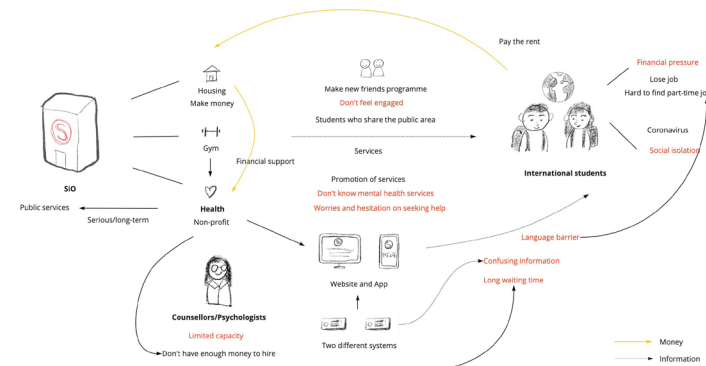
I would like to look at the bigger picture and deliver proposals to the two key stakeholders: SiO and AHO. The proposal is mainly to gather my findings and potential interventions from different aspects of the organization.

Proposal to SiO:

This proposal mainly includes:

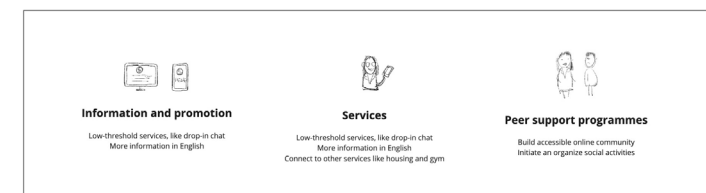
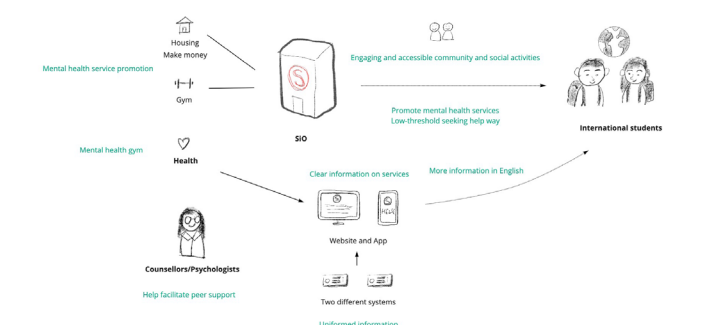
- My user journey map from self-ethnography
- Findings from this project in the system map
- Potential interventions in the system
- Example concepts can be provided by SiO

Findings in the SiO system



Interventions in the SiO system

System shift:
Not only treatment, but also prevention
Low-threshold and inclusive services
Help facilitate peer support



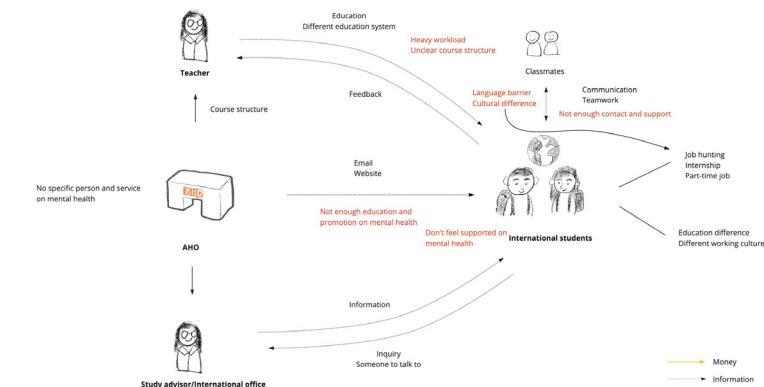
Proposal to AHO:

This proposal mainly includes:

- Findings from this project in the system map
- Potential interventions in the system
- Example concepts can be provided by AHO

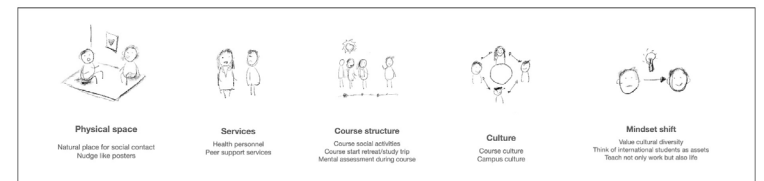
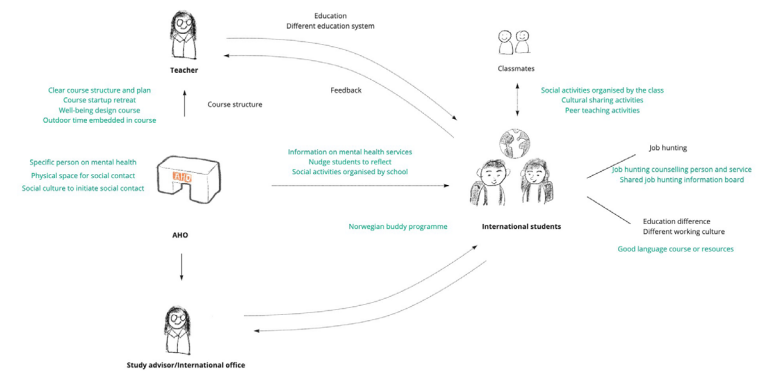
See more details in the "Appendix".

Findings in the AHO system



Interventions in the AHO system

System shift:
Provide accessible information
Nudge students to pay attention to mental health
Help facilitate peer support



REFLECTION

My reflections are mainly about the value of service design and service designer in the process. Service designers can not only design new concepts and service process but also can be a connector and promoter. SD and SOD can be combined together to research, analyze and design from different levels, from the details of the touchpoint to the whole system picture, which is important to make the change and create value.

Value of the design process

In the design process, I kept in touch with the target group, international students and the main stakeholders, SiO and school. I was invited twice to give a presentation to the SiO mental health innovation and prevention team and the SiO health leader team. I participated in two open discussions on mental health with the student council, SAHO, and the international student group at AHO. I also presented my project to the working group on the psychological environment at AHO.

During the process, I tried to build a mutually beneficial relationship with the users and stakeholders. I believe I made the problems more visible, brought forward the international students' voices and perspectives, shared design methods and processes, let students know the resources, etcetera.

Value of this project

In this project, I would like to propose new or improved touchpoints, programs and activities, and service concepts, the proposals, as well as this report to the stakeholders, SiO and AHO. The goal of this project is to make some real changes and help international students as soon as possible. This project is shared with these two main stakeholders, which helps them discover the international students' challenges and see the concepts as inspirations. The report and proposals also share the service design and system-oriented design methods and process with the stakeholders to help them think from different perspectives and improve their services.

The concepts target international students at AHO as an example in this project, at the same time, some concepts in this project are inclusive and general. These concepts and interventions can be adapted slightly to be useful for international and Norwegian students in other schools in Norway to expand the value of the design. Till now, I have received some positive feedback from the stakeholders, who have interests in these concepts and maybe there will be some opportunities of implementing these concepts in a near future.

My roles in this project

I think I played different roles in the process.

- **Service Designer**
Use design thinking and methods to design new touchpoints and service process
- **Systems Thinker**
Think from the system frame and propose interventions to make the systemic impact
- **Connector**
Connect to the users and different stakeholders; exchange their perspectives and feedbacks
- **Spokesman of users**
Bring forwards the voice and experience of users to the service providers

About mental health

Mental health is an important part of our life. In the process, learning about mental health does benefit my life, which helps me understand more about mental health and myself and helps me develop new habits. It would be great for more international students to learn more about mental health and increase their awareness of self-care. Peer support can be a potential to help each other, build social contact and make students not feel alone. A supportive environment is also important to open up mental health, educate and nudge students to pay more attention to this topic. We should value the mental health of international students more. The school and SiO should better prioritize this to help these students have a better student life.

Limitation and further work

As an individual project, I also realize the importance of collaboration with users and stakeholders for users' needs, professional knowledge and various perspectives.

I tried to understand the complexity of the system, and I believe some small interventions can be done for a small step of the shift of the system. In the process, to narrow down the scope and simplify my project, I lost a little bit of the bigger picture of the complicated system, like intervening in the more invisible part, culture.

Because I am a member of this project's target group, I have my own bias on the experiences and services. To avoid bias, more communication and engagement with stakeholders, diverse students from different backgrounds are needed. Besides, I didn't engage users and stakeholders in the process of evaluation to help make wiser choices on concepts because of time limits and lack of response from the stakeholders.

I would like to gather more feedback from international students, SiO and the school to iterate the concepts, as well as have more conversations with the users and stakeholders to share my project, findings and concepts. If I had more time, I could think and design more from the big picture, system perspective, as well as the implementation of the concepts.

ACKNOWLEDGMENT

Thank you to

My supervisors Josina Vink and Simon Clatworthy;

The international students and stakeholders from SiO and AHO who were involved in this project;

My friends and classmates, especially Yahang Cheng, Ziyue Wang and Xiyu hu;

and also my family.

REFERENCE

Batterbee, I. (2021, January 4). 20 Behavioural ideas and techniques | UX Collective. Medium. <https://uxdesign.cc/the-behavioural-design-toolbox-of-20-ideas-and-techniques-3372d31f2803>

Mental health: strengthening our response. (2018). WHO. [https://www.who.int/en/news-room/fact-sheets/detail/mental-health-strengthening-our-response`](https://www.who.int/en/news-room/fact-sheets/detail/mental-health-strengthening-our-response)

SHoT 2018. (2018). Studentenes helse- og trivselsundersøkelse. https://www.studenthelse.no/tema/psykisk_helse_og_trivsel

Grafill. (2021, March 2). Funn fra Grafills tredje kartlegging av koronakrisens påvirkning. <https://www.grafill.no/nyheter/funn-fra-grafills-tredje-brukerundersokelse-om-koronakrisen>

Trædal, T., Strand, H. K., & Schei, A. (2021, February 25). Tips oss. Khrono. <https://khrono.no/digitalt-oppror-blant-arkitektstudentene/558018>

Hansen, B., & Veiby, G. (2021, February 27). Arkitektstudenter gjør opprør mot dårlig læringsmiljø: NRK. https://www.nrk.no/norge/arkitektstudenter-gjor-oppror-mot-darlig-laeringsmiljo_-1.15393677?fbclid=IwAR2D21_pn0JgkQN5vBdBxZqloj5uMn7g0jDVIXzQw0r3dw3nZHY-Fkvqk3w

What is the framework for innovation? Design Council's evolved Double Diamond. (2019, September 10). Design Council. <https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond>

B. (2009, November 18). About. Systems Oriented Design. <https://www.systemsorientreddesign.net/index.php/sod/about-sod>

The Science of Well-Being. (2021). Coursera. <https://www.coursera.org/learn/the-science-of-well-being>

What Is Mental Health? | MentalHealth.gov. (2020). <https://www.mentalhealth.gov/>. <https://www.mentalhealth.gov/basics/what-is-mental-health>

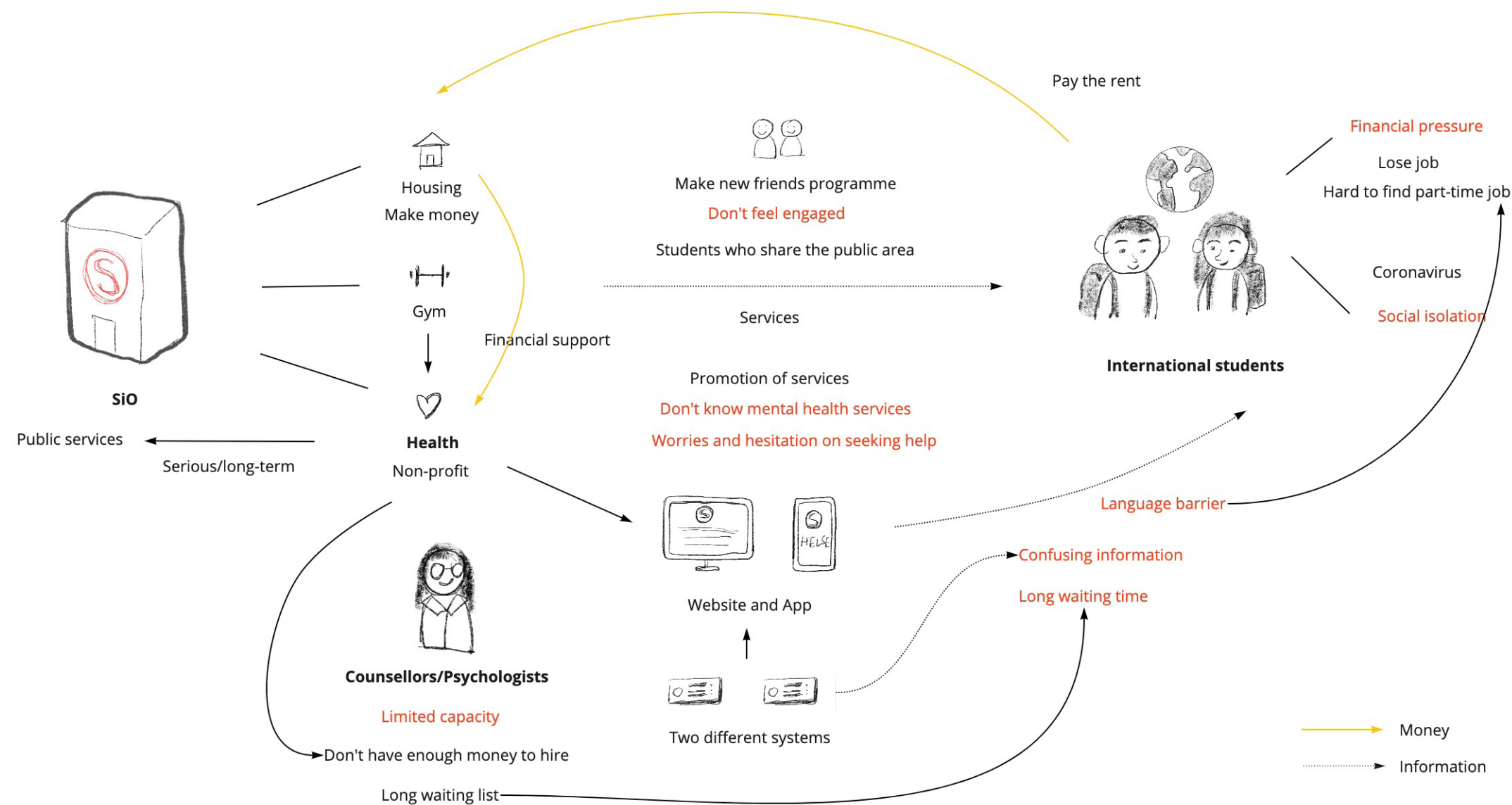
Felman, A. (2020, April 14). What is mental health? Medical News Today. <https://www.medicalnewstoday.com/articles/154543>

Leverage Points: Places to Intervene in a System - The Donella Meadows Project. (2012, April 5). The Academy for Systems Change. <http://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/>

Behavioural Economics Principles – Designing Behaviour Change Toolkit. (n.d.). Designing Behaviour Change. <https://toolkit.bridgeable.com/behavioural-economics-principles>

APPENDIX

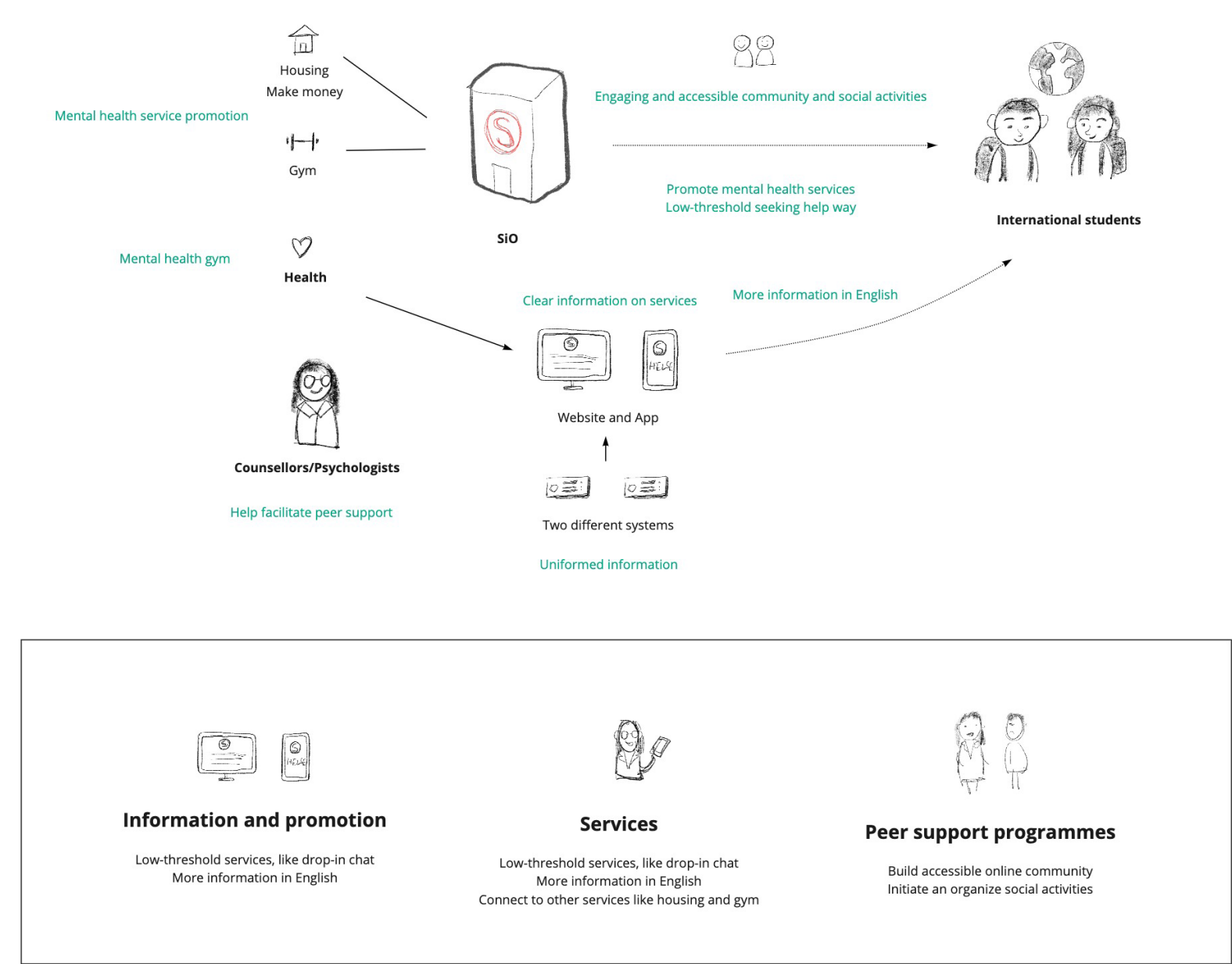
Findings in the SiO system



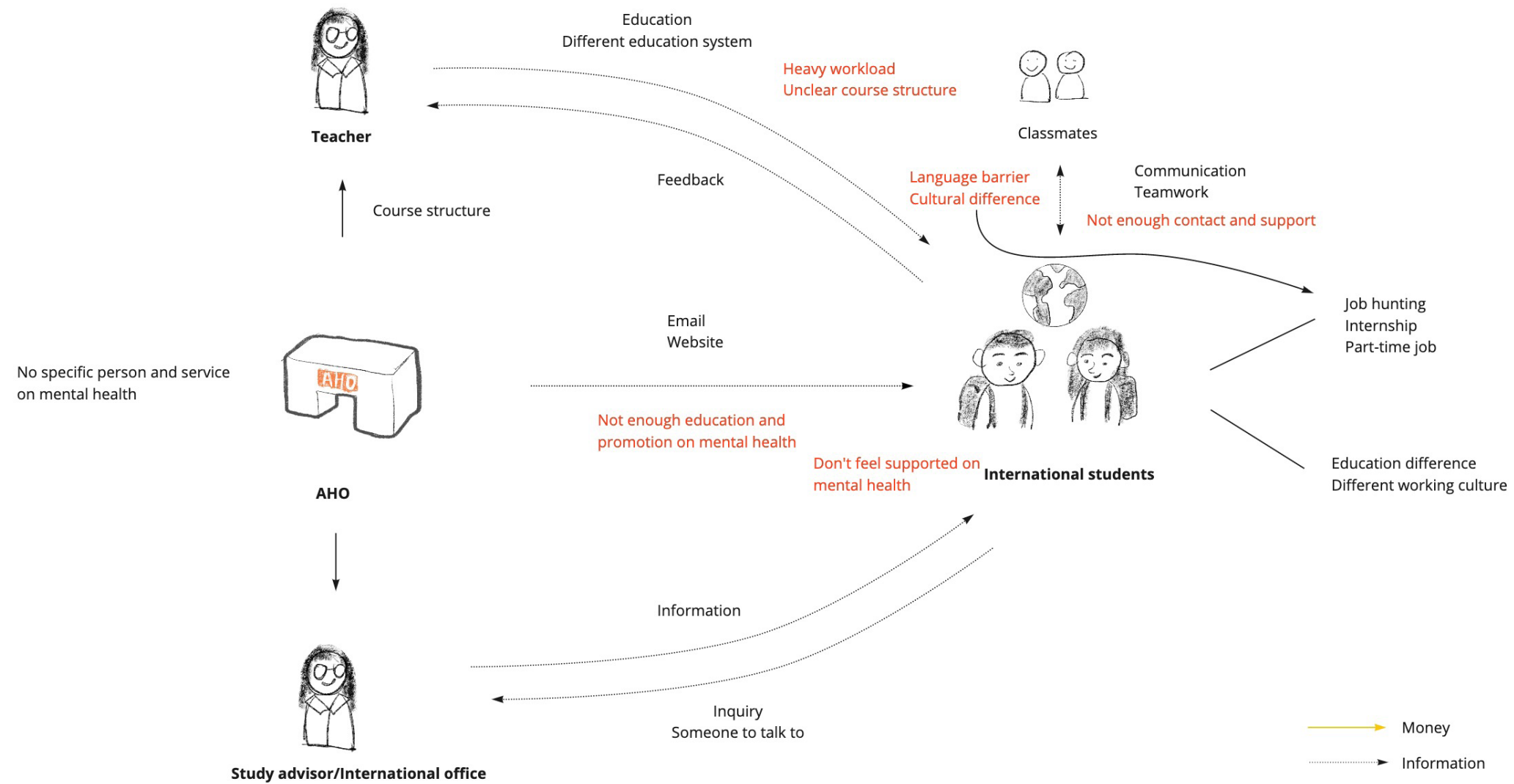
Interventions in the SiO system

System shift:

Not only treatment, but also prevention
Low-threshold and inclusive services
Help facilitate peer support



Findings in the AHO system



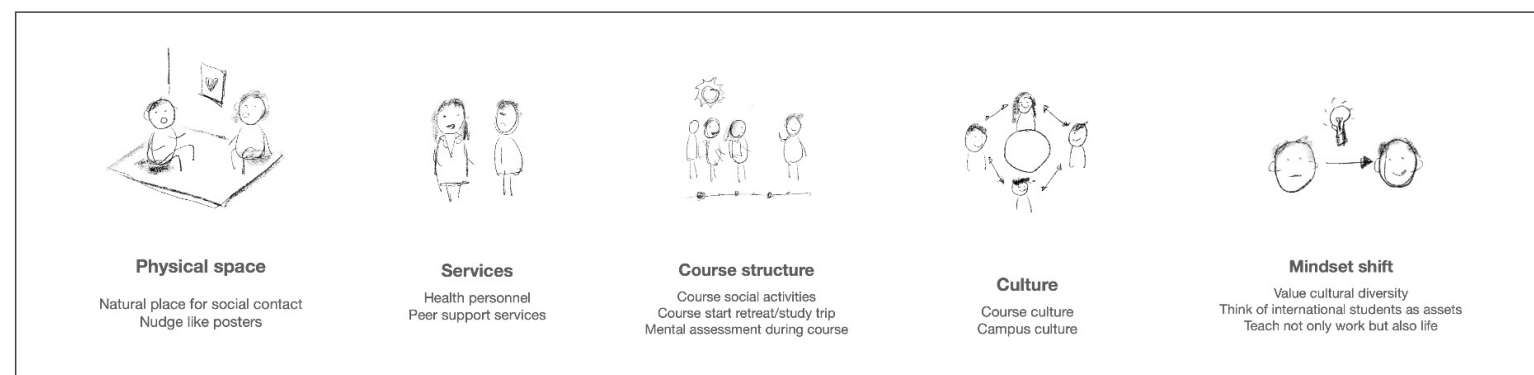
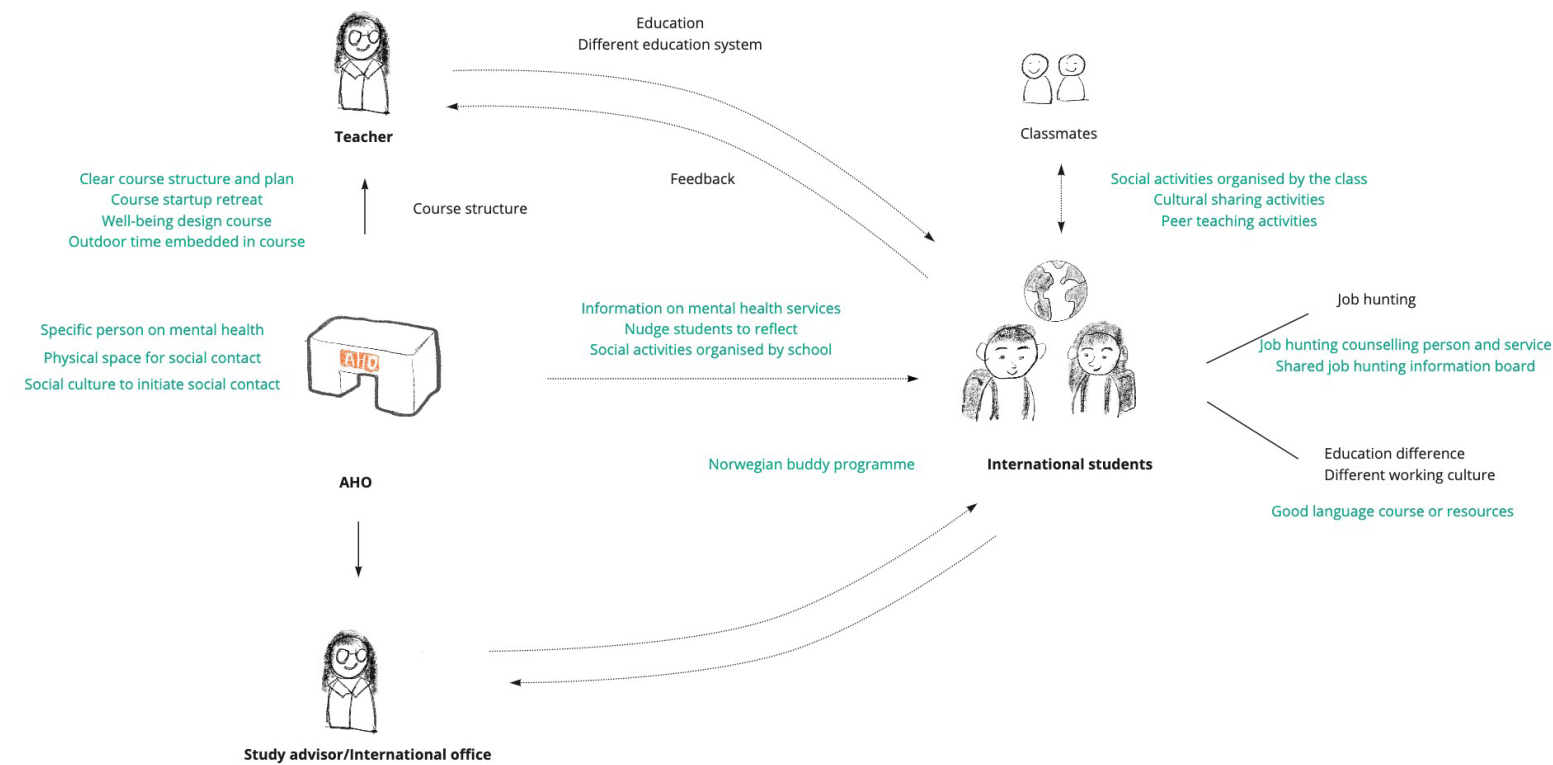
Interventions in the AHO system

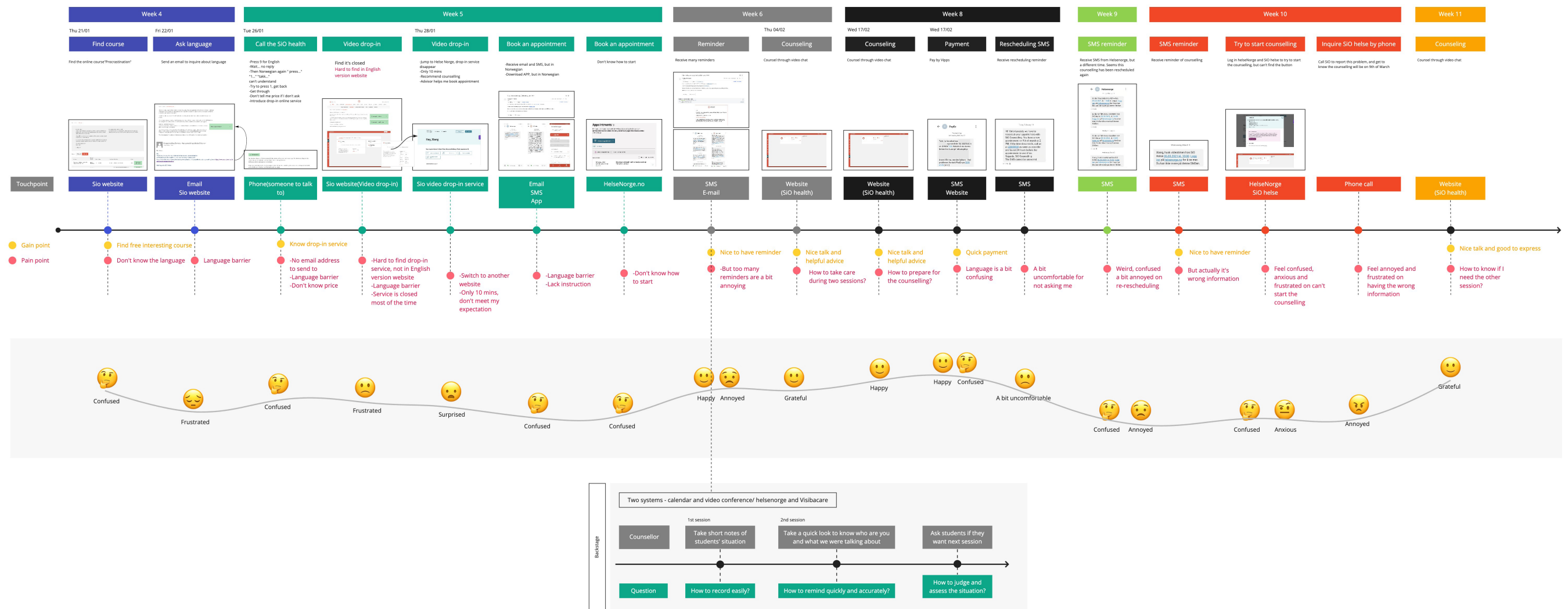
System shift:

Provide accessible information

Nudge students to pay attention to mental health

Help facilitate peer support





Customer journey map on self-ethnography

Now table





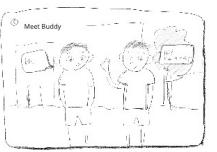
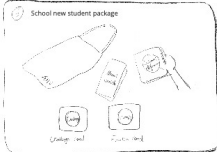

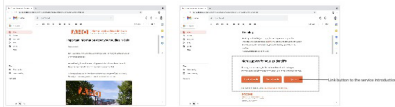



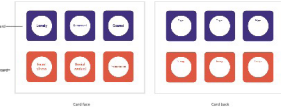








Scenario	 <p>Antonio is from Brazil. He receives AHO's offer and new student email, which shows welcome and service offerings like mental health services. Antonio feels warm and excited.</p>	 <p>Antonio checks the website link of school website and mental health services. He thinks AHO is considerate.</p>	 <p>Antonio applies for SD housing and receives the offer email. This email also introduces other service offerings and includes the QR code of SD app and link to mental health service website. Antonio have a rough picture of what SD offers to students.</p>	 <p>When Antonio moves to Norway, he goes to SD's service centre to pick up apartment keys and also gets the mental health brochure.</p>	 <p>Antonio applies for Buddy programme from SD and Paulo who is from Brazil and lives in the same student village with Antonio is assigned as his buddy. Paulo shows Antonio around the student village and they centre as a guide.</p>	 <p>In the Orientation Week, Antonio goes to school and receives the New Student Bag. In the new student bag, he finds emotion and challenge cards.</p>	 <p>During the Orientation Week, Antonio attends a presentation on Mental health. He gets to know it's common to have mental health issues and there are some offerings he can turn to.</p>
Touchopts							
Stakeholders							
Purposes	<ul style="list-style-type: none">• Show a warm welcome and makes the offer more attractive	<ul style="list-style-type: none">• Let students know the mental health services	<ul style="list-style-type: none">• Let students know the mental health services	<ul style="list-style-type: none">• Let students know the mental health services• Let students know it's common to meet mental health challenges• Make students feel warm on SD services	<ul style="list-style-type: none">• Let new students feel not alone• Help new students know and adapt to the new environment	<ul style="list-style-type: none">• Nudge students to pay attention to mental health• Help students learn more about mental health	<ul style="list-style-type: none">• Let students know it's normal and common to meet mental health challenges• Help students learn more about mental health• Let students know the mental health services they can turn to
Positive feedback	<ul style="list-style-type: none">• "Something obvious or clear in the beginning."	<ul style="list-style-type: none">• "It's very visible and clear where to turn, what, where to go."• "So it's not like it's like a smooth transition. So you don't have to worry about how am I going to find these people."	<ul style="list-style-type: none">• "This one is much clearer, and, and yes it's super nice to know in advance if English is available or if it's true, too."• "It's very direct. I like know that like a lot of international students, that's something that they worry about is like the health care."	<ul style="list-style-type: none">• "I like combining the content and service."• "Very structured and clear."• "It's better to be maybe to be sure that you have, you know where to turn, it's very easy to find help if you need it."• "As I watched them. In general, I don't see a clear separation and maybe just read some of them maybe the negative ones. So I don't see the brighter side"• "That's really nice to go ahead, because a lot of people, they don't know that they're having like mental health issues, understanding and expecting those struggles early. I think is really nice."• "And having it seem like it's like you're not by yourself."	<ul style="list-style-type: none">• "I think that's very nice. That's something I would sign up for. Like, I would sign up to help someone get settled."• "It's nice to have people outside of class to talk to you"		
Challenges	<ul style="list-style-type: none">• Tone of voice about mental health in this email• "Maybe forget it later."	<ul style="list-style-type: none">• Not interested and ignore this link• "It's like nice if there was a, there were some examples, I don't know if there's actually any difference between the study advisor and international office."• "Title is not clear."	<ul style="list-style-type: none">• "Differentiate the offerings."	<ul style="list-style-type: none">• "Throw away and forget the brochure"• "I feel well must experience these challenges soon"• "If you have a very big focus on mental problems and you kind of expect they're coming and waiting for it might get"• "Make the experience and services more different."• "Can it be digital to update the information?"	<ul style="list-style-type: none">• Motivation of being a buddy• Not enough students want to be a buddy•	<ul style="list-style-type: none">• Only use the tools once	<ul style="list-style-type: none">• "There is so much information to give. Would it be too much at the same time for you to take in?"• "I don't know how many people will go to the lecture. Unless you feel it's really useful for you, people are like, I don't want to go there."
Backstage							<p>Presenter: The SD counsellor</p> <p>Frame of presentation:</p> <ul style="list-style-type: none">• Date of mental health issues• What are common problems?• How to seek help?• Reflection and guide tool• Q&A
Potentials				<ul style="list-style-type: none">• Welcome package<ul style="list-style-type: none">• "I prefer to have it at my apartment."• Can be delivered at school	<ul style="list-style-type: none">• School buddy programme, build close contact	<ul style="list-style-type: none">• Other printable mental health tools	
More feedback					<ul style="list-style-type: none">• "Would there be some that will give some guidelines for what kind of what the body should do, they had some tasks that the body is kind of caught encouraged to do or cover."• "Maybe the student could choose the buddy from the same nationality or from a different cultural background."• "Would you be like, how would you sign up for the buddy program? Like is it automatically you're signed up? Or? Like, what? And then the people that you're paired with? Are they like volunteering their time?"		<ul style="list-style-type: none">• "Same as the brochure content?"• "Yeah maybe could be just is something that is written down somewhere, to more detail than the brochure."

Table of feedback



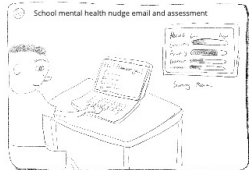

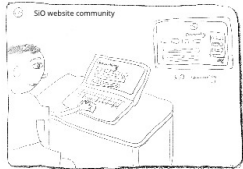

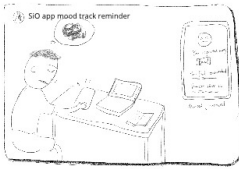

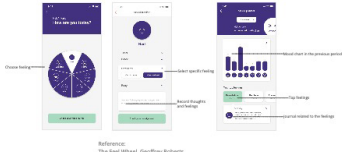

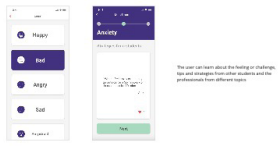
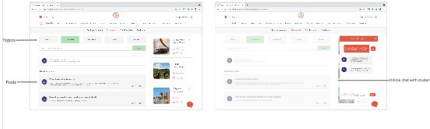
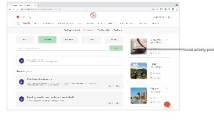










 <p>In the Orientation Week, Antonio participates in a mental health workshop with other students. He tells his story and learns more about mental health from the SIO counsellor and other students.</p>	 <p>Antonio uses the SIO app to track his mood.</p>	 <p>During semester, Antonio receives the nudge email from school and he does the mental health assessment. He finds he has a bit high level of anxiety recently. This email also reminds him that he can turn to SIO health services.</p>	 <p>Antonio browses this topic on the app and learn some strategies to deal with it.</p>	 <p>In the winter, Antonio feels a bit depressed and lonely. He checks the SIO online community, and finds many students meet the same problems. He chats online with other students. He expressed anonymously and feel not alone.</p>	 <p>On weekends, Antonio joins in social activities organized by SIO and AHD international student group. He really enjoys these activities.</p>	 <p>At the end of the semester, Antonio feels stressed before final presentation. The SIO app mood tracker also finds he is not good recently and it send reminders to him like some tips, and if he need to talk to someone.</p>
						
						
<ul style="list-style-type: none"> • Open up about mental health, less taboo and stigma • Learn more about themselves and mental health, also from others' perspectives • Feel supported by peers and school 	<ul style="list-style-type: none"> • Understand and know more about mental health and students themselves • Nudge students pay more attention to mental health 	<ul style="list-style-type: none"> • Nudge students pay more attention to mental health • Prevent serious issues • Make students feel warm 	<ul style="list-style-type: none"> • Help students learn more about mental health 	<ul style="list-style-type: none"> • Help students feel not alone when they meet problems • Provide a platform for student to express anonymously and receive peer support • Communicate with and learn from other students 	<ul style="list-style-type: none"> • Help students build social contact and feel not alone 	<ul style="list-style-type: none"> • Help students aware of the problems • Help students step out to seek help and prevent serious problem
<ul style="list-style-type: none"> • "Yes, it's super nice that you have this session when you're sharing your experiences with a peer because at times I think that either you think that you're the only one having a certain problem, and it's not true. Or, if you still know that it's a common problem for other people so it's nice to break the the taboo topic and be open to talk about this." • "the cards I found them pretty interesting, as a conversation starter with other students" • "It's good to know others' perspectives." • "You can also it will help you find people that like, have the same struggles as you. Because like that, that builds a connection and a community pretty quickly." • "I may not feel this way right now. But if I start to feel this way, I know people I can go talk to that have already been through this." 	<ul style="list-style-type: none"> • "I guess it can be a good tool, if we want to help you reflect, I guess, and it's good." • "It's nice to keep track of your mood, over a period. And be aware of how you have been feeling like, if you have been feeling overwhelmed, I think it's super helpful to notice that." • "Tracking the mood with the journal is helpful even just for your own awareness." • "would be interesting to see if my mood is changing based off of like, the season, or if like, there are other triggers that I could bring up with, like a mental health practitioner. And then I would have like that platform to discuss that with someone who I knew could help me walk through that." 	<ul style="list-style-type: none"> • "I need the direct results. Call to action is good." • "I value school email and may ignore SIO email. I would trust it if the assessment is reliable." 	<ul style="list-style-type: none"> • "That's really nice. I like that redirecting the whole situation to like, here are some strategies to help you." 	<ul style="list-style-type: none"> • "I like the fact that it's anonymous because it makes you feel much more free to just pick up, but your problem because nobody's going to know who you are. So no stigma." • "It's like you don't know each other so you didn't need to deal with side effects" • "That's, that's really nice. Like getting people involved in the community, like, nudging them to get involved in a community." 	<ul style="list-style-type: none"> • "I really, really liked, like activities, I keep coming back to that like having people nudge to meet other people outside of school, having people nudge to meet people outside of like, their comfort zone within, like a similar interest thing." • "That's building a community outside of like this competitive school environment. I think that's really beautiful." 	<ul style="list-style-type: none"> • "Yeah, I think it's super useful because sometimes that you don't think it's reasonable sometimes to know if I would need to go to a counsellor, or if I just talk to somebody through a chat. So, having this kind of screen in front is like being being held by the hands. So, being supported and being a con to the whole journey. I think this helps you feel safer."
 <p>Phases of the activity</p> <ol style="list-style-type: none"> 1. Introduction: SIO app mood track assessment 2. Introduction: SIO app mood track assessment 3. Introduction: SIO app mood track assessment 4. Introduction: SIO app mood track assessment 5. Introduction: SIO app mood track assessment 6. Introduction: SIO app mood track assessment 7. Introduction: SIO app mood track assessment 8. Introduction: SIO app mood track assessment 9. Introduction: SIO app mood track assessment 10. Introduction: SIO app mood track assessment 	<ul style="list-style-type: none"> • Lack motivation to use mood track app • "Do you really need the app to track your mood?" • "I think it will be wrong if they, or it will become a more stressed exam to feel that they have to use it." • "Is it user-friendly and easy to choose the emotion for users?" • "I personally probably wouldn't use that part just because I would be curious as to what co would be doing with that, like, what are they doing with? what are they going to be doing with that information?" • "I wouldn't want SIO to intervene without my permission." • "How to motivate students to use it? Hard to engage people." 	<ul style="list-style-type: none"> • Lack motivation to do the assessment • "If this is really realistic to implement?" • "Change the role a bit further as a school. I think it will be a bit more than school could handle actually, it would be above school's capacity. The role of the school is to provide accessible information." • "I would be wary about like a computer like algorithm telling me that I have depression." • "It's not like saying you have depression, it's like, you may be experiencing symptoms of depression." • "I think that could get really tricky and that might like, worsen like that may make people think that okay, I'm sick, that might be more alienating than like the rest of like your work because the services that you provided are not alienating at all that like once you slap someone with a label, like, they're forced to own that label, and you may want to like avoid that." • "With the title - assessment can be clear. Be careful about the number of questions and time." 		<ul style="list-style-type: none"> • "The icon makes me feel like chatting with the robot." 		
 <p>Phases of the activity</p> <ol style="list-style-type: none"> 1. Introduction: SIO app mood track assessment 2. Introduction: SIO app mood track assessment 3. Introduction: SIO app mood track assessment 4. Introduction: SIO app mood track assessment 5. Introduction: SIO app mood track assessment 6. Introduction: SIO app mood track assessment 7. Introduction: SIO app mood track assessment 8. Introduction: SIO app mood track assessment 9. Introduction: SIO app mood track assessment 10. Introduction: SIO app mood track assessment 		<p>SIO counsellor moderate the community to avoid echo chamber Also answer questions and give suggestions</p>		<ul style="list-style-type: none"> • "Students can post activities which are organized by students." 	<ul style="list-style-type: none"> • "you could even have like, some suggested activities for people." 	

Table of feedback

