

# Attention and Online Learning

Design Informed by psychology



# Blackboard UX UI

## Directing Attention

### The Problem

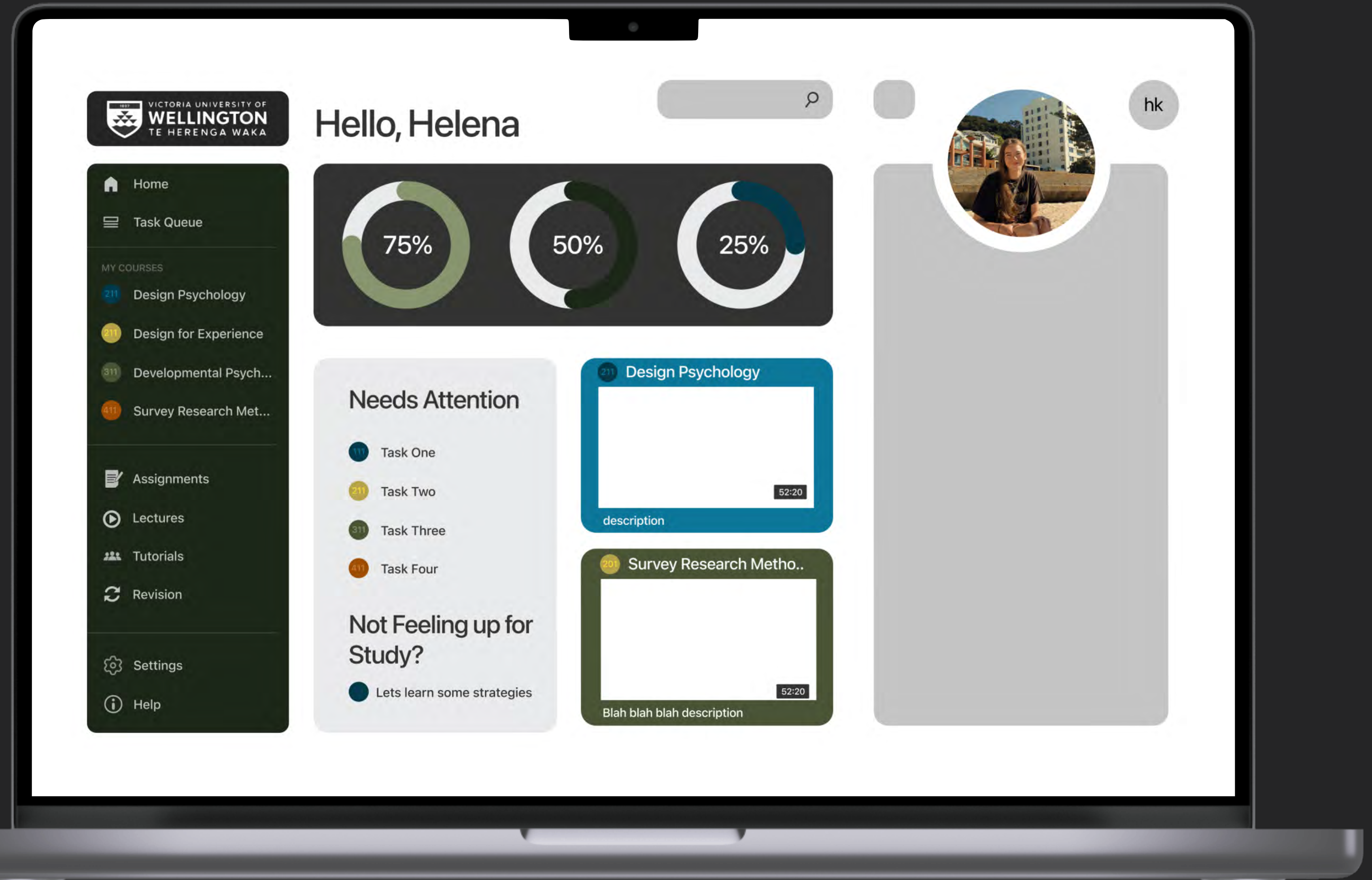
Feelings towards the current Blackboard UX/UI are not overly positive. The layout could be dramatically improved and the structure of the online learning could flow seamlessly to allow online students to enter the flow state. Blackboard could assist students by recommending tasks or helping to break down large assignments into bite-sized pieces.

### Psychological Understanding

Social determination theory explains how we need a sense of competence or feeling effective in our environment. It's hard to feel effective in an environment if it's not keeping up with students' demands. We can intercept procrastination at the nonconscious level through task selection and appraisal by recommending students bite-sized tasks that match students perceived motivation. By doing little tasks and visibly seeing progress students could feel a sense of achievement that feeds their intrinsic motivation and increase their chances of entering a flow state. By addressing procrastination from an institutional level we can help students cope in healthy ways and not enter cycles of distress from the pile-up of work and the lack of motivation.

### Concept One

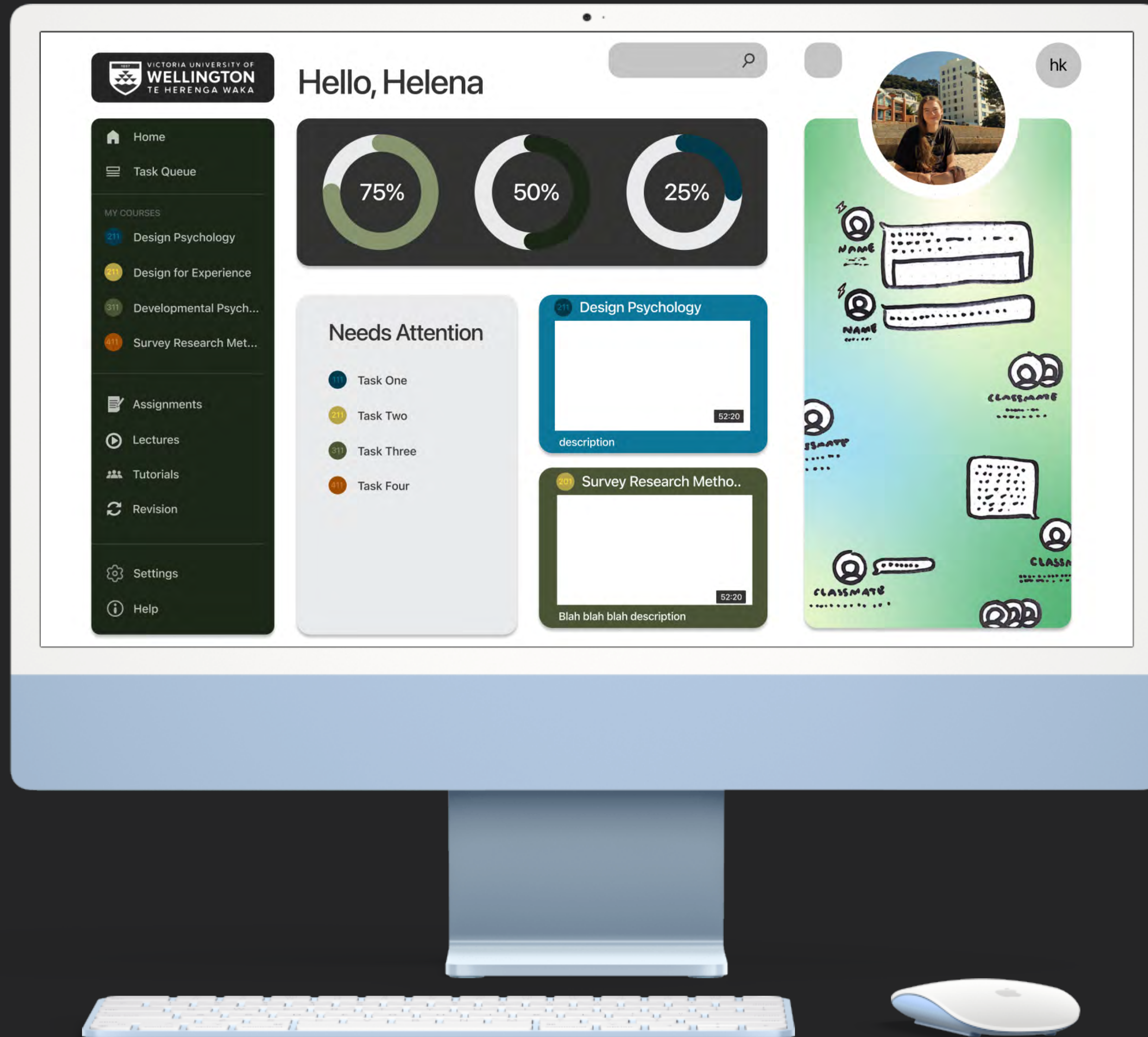
This idea is to reconfigure Blackboard so it has customisable elements such as widgets, visible progress bars and smart elements that suggest tasks or things that need attention. Students can move seamlessly across online spaces and feel like their time is used efficiently for their online learning.





# Student Interaction

## Relatedness and Social Reward



### Isolation

Isolation and the negative emotions evoked from feeling geographically or socially isolated can serve as a massive distraction to online students (Croft et al., 2010). Not only are students not surrounded by vibrant communities and a rich immersive learning experience, but it's also hard for online students to have the reassurance that they are on the right track. The current system means it's hard to maintain workflow and connection which can decrease the satisfaction of the learning process

### Psychological Understanding

Without an online identity, it's as if online students become a number. It's hard to remain self-determined and motivated to maintain identity if there is no intrinsic motivation to do so. If we tend to experience motivation through our emotions then It's a constant battle for online students as these highly emotional states of isolation and anxiety take over the ability to focus. By addressing isolation through easy and comfortable social connections we can reframe the learning environment so students can experience a sense of relatedness and autonomy. Social determination theory explains how a sense of being cared for and connected as well as being included through receiving care and serving others is one of our three biggest needs. Croft et al. (2010) found that students are keen to know more about each other out of curiosity and by doing so they would feel part of a larger community, be able to quickly and consistently receive help and also be held accountable.

### Concept Two

This online student database will contain profiles of each online student that interact in a virtual environment. Through data from Blackboard, students will be able to see when others from their course are working on the same tasks they are and can move closer to each other to form groups and chats. The idea is that by being held accountable through an active status and an online identity you will be more inclined to engage in active work which improves the chances of moving into the flow state. Also with students available to each other to collaborate, work will not cease to a halt, destroying focus when students face a question they can't move past. The widget can be displayed throughout learning or just be there when students need it.



# Environment

## Intrinsic Motivation

### The Problem

Many online students are learning in the same spaces they are living in. Work and life balance are blurred and the ability to switch gears into study mode is difficult. Distractions at home pull online students away from their learning and focus and the chance of ever reaching flow states. Temptations are all around and extrinsic motivation takes too long to kick in for some students.

### Psychological Understanding

Flow requires a student to be intrinsically motivated. With prominent emotions moving attention away from learning and distractions all around the environment we need to set in place some dividers between life and study. By establishing the end of leisure time and the commencement of study we can create an autonomous switch in goals. We have a spacially linked memory which will need to be assisted in the process of commencing study time so other spacial temptations can be drowned out. In an act of regulating one's emotions, an online student can implement an enjoyable, intrinsically motivating routine that defines the borders between leisure and study, therefore assisting them in emotion appraisal of the start of the study and improving their mood.

### Concept Three

This idea stems from intrinsic motivations of colour and light and the physical act of pulling fabric screens down behind the workspace. If the colours are bright and beautiful they can be a significant action to improve an online student's mood as well as being rewarding to pack down and transition into rest at the end of the study session. This act and environmental change paired with the improved online environment and social atmosphere can all contribute to improving emotional states and increasing focus.





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