



# INTERFACE DESIGN OF WEB-BASED EDUCATIONAL PLATFORMS FOR YOUNG STUDENTS

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# Agenda



## Research Background

Major Challenges for Instructors  
Major Challenges for Students and  
Parents



## Interface Design Ideas

Design of System

- Student
- Instructor
- Parent

Interface Styling

Multimedia Content

# Research Background

OUTBREAK OF  
THE COVID 19  
PANDEMIC

ONLINE  
EDUCATION  
CHALLENGES

NEEDS OF  
YOUNG  
STUDENTS

# Major Challenges for Instructors



PREPARATION FOR  
CLASS BECOMES  
MORE DIFFICULT



ONLINE SYSTEM NOT  
EASY TO USE



ONLINE CLASSROOM  
DISCIPLINE MORE  
CHALLENGING



LESS INTERACTIONS



GROUP WORK OR  
DISCUSSION NOT EASY  
TO CARRY OUT

# Major Challenges for Students and Parents



Students' computer skills are limited



Too much screen time



Difficult to follow virtual classroom rules and norms



Not interested in online learning



Homework and in class exercises not easy to submit



Learning progress tracking is difficult

# Interface Design Ideas



System Design



Interface Styling



Multimedia  
Content

Reference: Peters, Dorian. Interface Design for Learning: Design Strategies for Learning Experiences. New Riders (2014)

# System Design

A green rounded rectangle with a white rounded rectangle inside it, containing the text "Student Interface".

Student  
Interface

A green rounded rectangle with a white rounded rectangle inside it, containing the text "Instructor Interface".

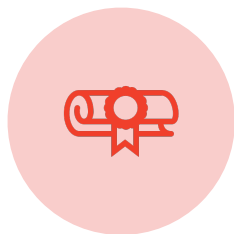
Instructor  
Interface

A green rounded rectangle with a white rounded rectangle inside it, containing the text "Parent Interface".

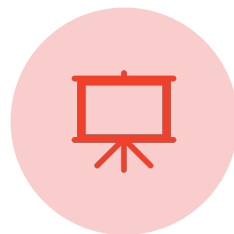
Parent  
Interface



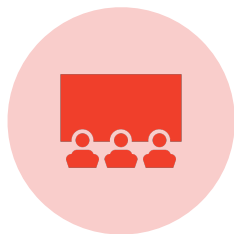
“ALL IN ONE”: ALL THE SUBJECTS AND CLASSES ARE INCLUDED IN THE SAME APP



“FIRST THING FIRST”: CLASSES LINE UP ACCORDING TO SCHEDULE, THE FIRST ONE IS THE ONE STUDENTS NEED TO ATTEND



“BIG SCREEN”: THE INTERFACE CAN BE AIR PLAYED ON SMART TV OR PROJECTOR, SO STUDENTS CAN ENJOY THE BIG SCREEN JUST LIKE IN THE CLASSROOM



“EXERCISE FIRST”: ANIMATED EYE EXERCISE VIDEO AVAILABLE TO RELAX THE EYES BEFORE CLASS BEGINS



“LESS IS MORE”: STUDENTS HAVE NO PERMISSION TO CONTROL VIDEO, ILLUSTRATION AND CHAT OPTIONS; PERMISSIONS GIVEN BY INSTRUCTORS



“KEEP MEMORIES FRESH”: ALL CLASSES WILL BE RECORDED FOR FUTURE REVIEW BY STUDENTS AND/OR PARENTS

# Student Interface





“Take control”:  
instructors can mute or unmute students, give permission to illustrate or send messages to chat with students, set up group discussions



“I see you”:  
instructors can see videos of all the students, videos can be highlighted if students raise their hands



“Markers and whiteboard”:  
instructors can easily switch to whiteboard, write with illustration tools



“You earn it”:  
instructors can reward students with stars or stickers or points



“Resourceful”:  
interactive teaching materials available for instructors to choose from the material library



“Go online”:  
announcements and assignments can be made in the system

# Instructor Interface



“Keep informed”: parents have access to online live classes, recorded classes



“Keep on track”: parents get notifications of homework, supply lists, student performance



“Follow-up”: parents can send messages to instructors in the system

## Parent Interface

# Interface Styling

Branding themes  
for schools using  
the system

Instructor & parent  
interfaces can  
have dark and  
light mode options

Student interface  
can have  
interesting designs  
of themes, avatars  
and stickers

Costumes  
available for  
instructors for  
special occasions  
or context



Course materials can be designed by interface designers, including interactive teaching materials and homework



Augmented Reality technology can be used in animations, and instructors and/or students can be characters in the stories



Partner with educational apps like Khan Academy, IML, Homer, Learning A-Z, etc.



Instructors are encouraged to design their own course materials and upload to the system

# Multimedia Content



THANK YOU!