DepEd Commons Forum

Role

UX Research, UX Design

Timeframe

1.5 months

Tools

Miro, Figma

The Situation

Since the COVID-19 pandemic, the Department of Education (of the Philippines) has transitioned into modular learning where students learn half of their lessons through online or printed modules. These have been published on DepEd Commons.

The Problem

Due to the lack of interaction, teachers have had trouble holding students accountable for completing modules.

On the other side of things, students have had trouble seeking help in completing their modules.

The Solution

DepEd Commons Forum is an accessible platform that facilitates distance learning by allowing students and teachers to communicate about modules in an simplified manner.

The Research

Interviews and secondary research allowed me to empathize with my users and construct **user personas, competitive analysis, site maps, and user flows.**

Primary Persona

Philippine public school **teachers.**

Angela Dela Cruz, 28

Pampanga, Philippines

Grade 6 Public School Teacher

"I want to help my students learn and become successful, but distance learning makes this hard to achieve."

About:

Angela is passionate about what she does and will do all it takes to ensure that her students recieve access to a proper education despite current circumstances.

Tasks:

- Identify learning competencies
- Print lesson material
- Teach module content
- Communicate with students

Goals:

- Ensure students have **access** to modules
- Ensure students are **understanding** the material
- Efficiently manage time
- Learn more tools to help with distance learning

Challenges:

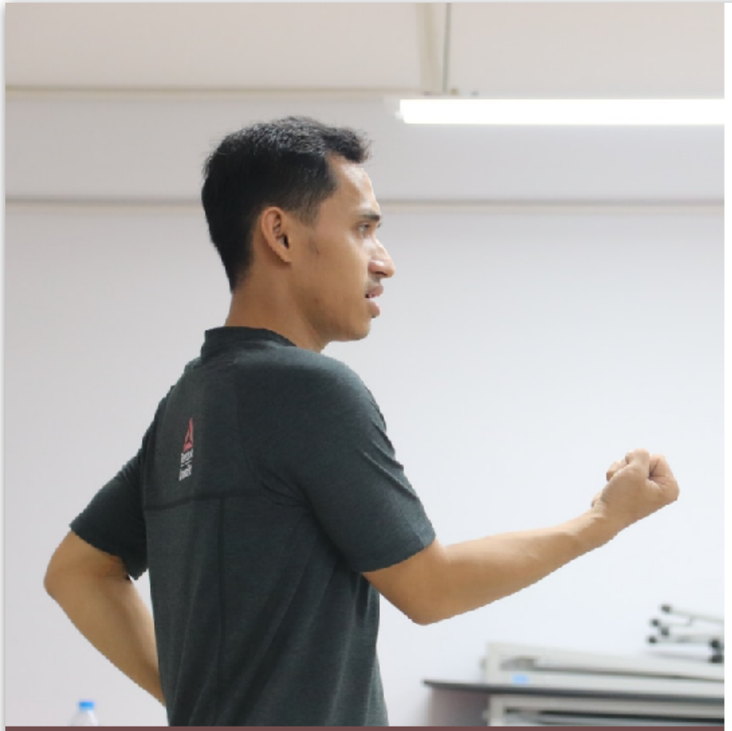
- Poor internet connection
- Incomplete Submissions
- Inability to properly help students
- Difficulties in communication

Needs:

- A channel for asynchronous communication
- A way to help students complete modules
- Better connectivity for students

Tools:

- Google Meet
- Google Classroom
- Google Sheets
- Microsoft Teams
- Messenger
- DepEd Commons



Gabriel Bautista, 33

Caloocan, Philippines

Grade 8 Public School Teacher

"I want to my students to be able to engage in lessons despite the transition to distance or asynchronous learning."

About:

Benjamin cares about his students. He knows the lengths students go through to obtain an education and wants to help students achieve their goals by engaging them in lessons and by making help more easily accessible.

Tasks:

- Identify learning competencies
- Create engaging material
- Provide access to material
- Answer questions students have

Goals:

- Ensure students have **access** to modules
- Ensure students are **engaged** during lessons
- Ensure students **understand** the material
- Make material accessible in **different formats**

Challenges:

- Not all students have access to tech
- Students are less engaged online
- Hard to help asynchronously
- Students don't know each other

Needs:

- A minimal tech approach to accessing lessons
- More efficient distribution of printed material
- Better ways to help students asynchronously

Tools:

- Zoom
- Messenger
- PowerPoint
- ClassIn
- Google Sheets
- DepEd Commons

Secondary Persona

Philippine public school **students.**

Benjamin Reyes, 11

Caloocan, Philippines

Grade 6 Student

"I want to study hard so that I can be successful and be able to help my parents out when I grow up."

About:

Benjamin is a hard-working student trying to stay on top of his work, but for harder subjects, there is no available help.

Tasks:

- Attend lectures
- Access lesson material
- Answer modules
- Submit completed modules

Challenges:

- Poor internet connection
- No help available
- Struggle to understand material
- Less accounntability

Tools:

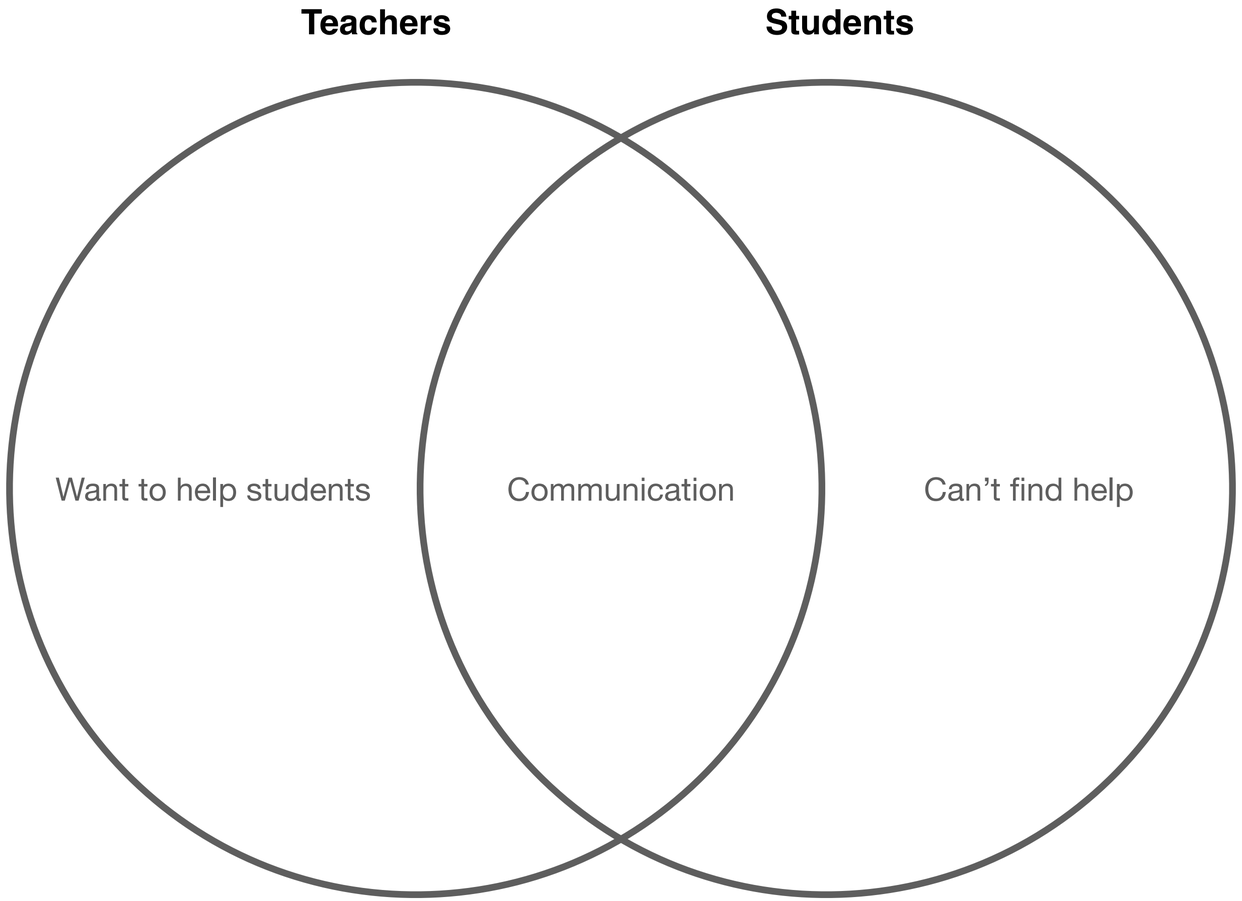
- Google Meet
- Google Classroom
- Messenger

Patterns:

Teachers need a way to ensure students understand the lessons.

Students need a way to find help in completing their lessons.

The gap in between is communication.


Teachers
Students
Want to help students
Communication
Can’t find help

What already exists?

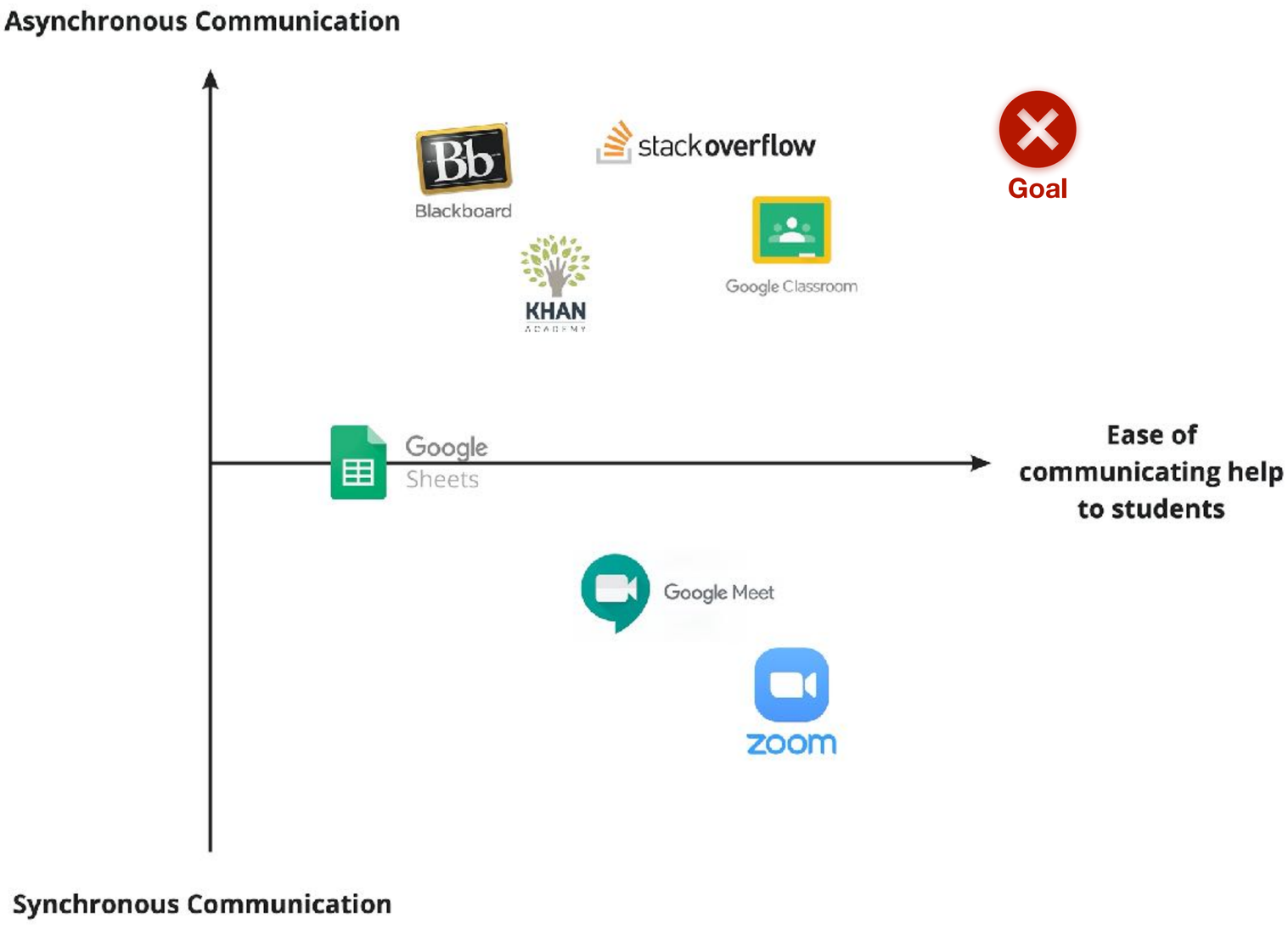
In order to create a platform for communication, I needed to gain a better understanding of what already exists and is being used.

I went about this by listing out needs teachers and students had and conducting competitive analysis.

	Direct		Indirect				
	Google Classroom	Blackboard	Gmeet	Stack Overflow	Zoom	Khan Academy	Google Sheets
Alternative Access (SMS/Paper)							■
Assign Homework	■	■	■		■		
Provide Resources	■	■		■		■	
Asynchronous Communnication	■						
Asynchronous Access	■	■		■	■	■	■
Forum / Q&A				■		■	
Organize Answers by Module							
Homework Discussion							
Answer Verification	■			■			

} Synchronous communication is common, but may be detrimental when messages are drowned out

} Modular learning is a new concept. Not a lot is out there to accommodate it.


Asynchronous Communication
Blackboard
stackoverflow
Goal
KHAN
Google Classroom
Google
Sheets
Ease of
communicating help
to students
Google Meet
zoom
Synchronous Communication

Feature Prioritization

With a better idea of features to include, I had to prioritize.

The MoSCoW Method

Must

- Forum
- Tagging
- Filter by subject

Should

- Responsive features
- SMS capabilities
- Print Requests

Could

- Linking to Module Section
- Image upload
- Audio / Video solutions

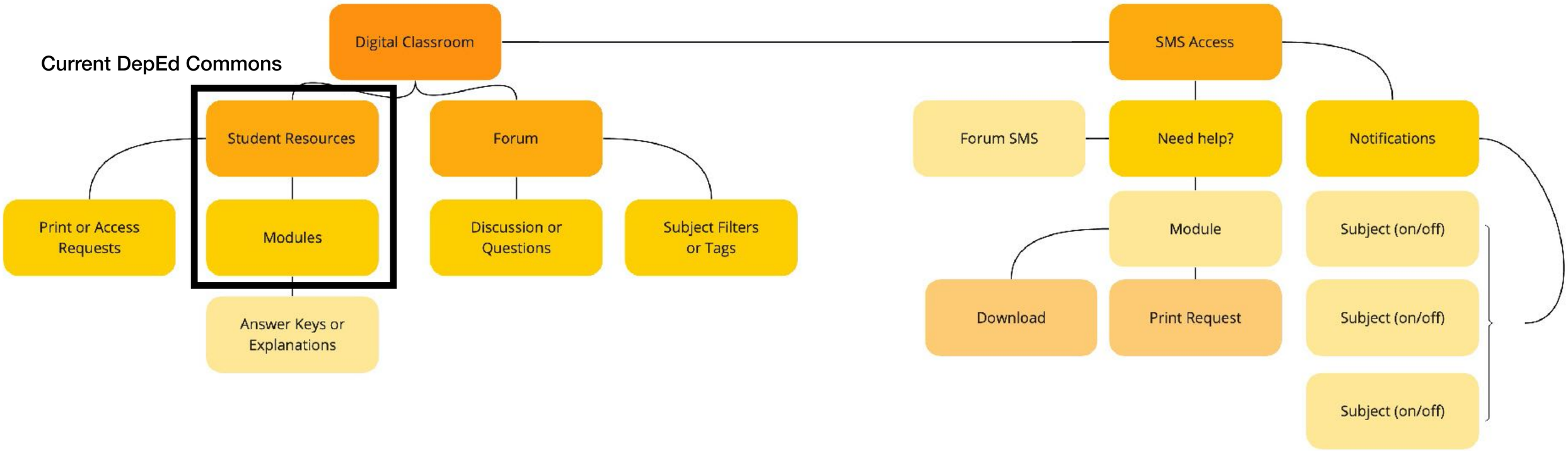
Would Like

- Highlighting & commenting on PDFs
- Statistics (Module areas and learning competencies frequently asked about)

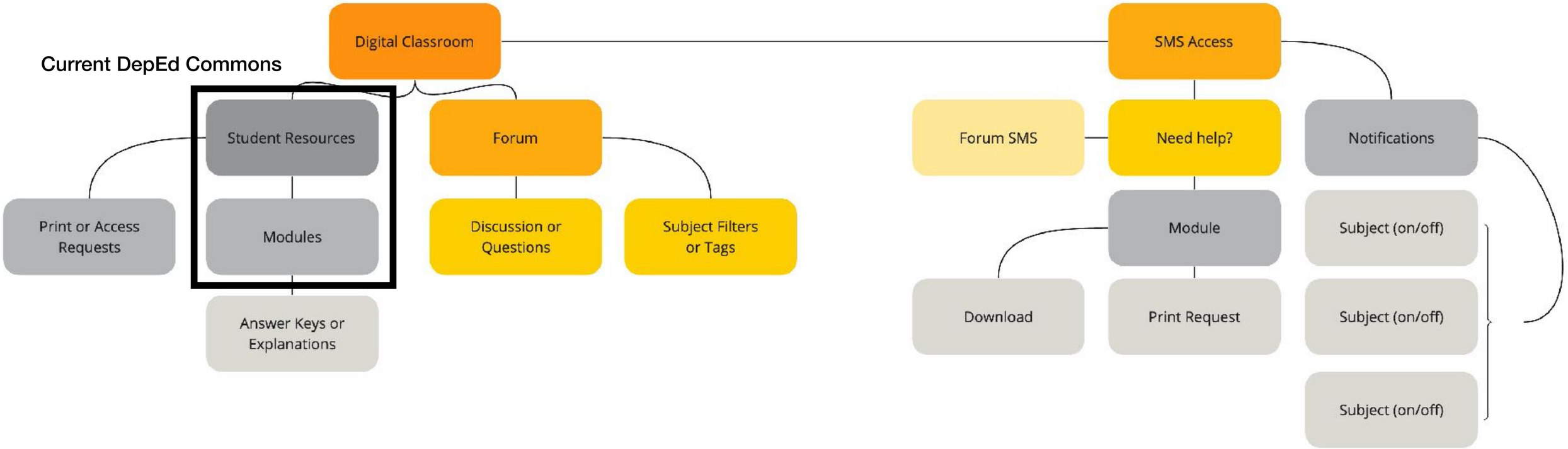
Preparing a solution

Prior to creating wireframes, I created a site map that took into account the current DepEd Commons and created a user flow to better understand how things will work.

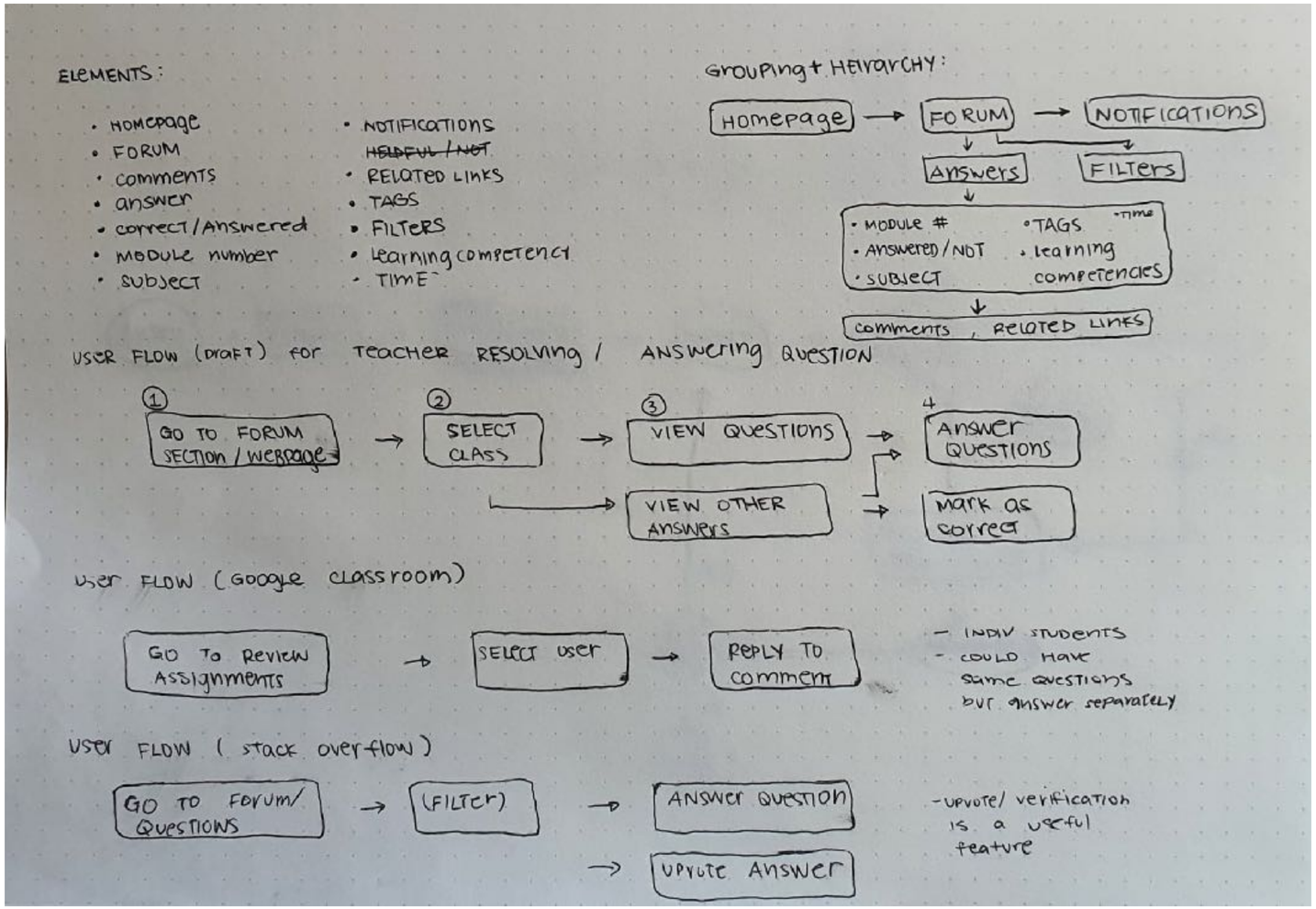
Site Map: Future Goal



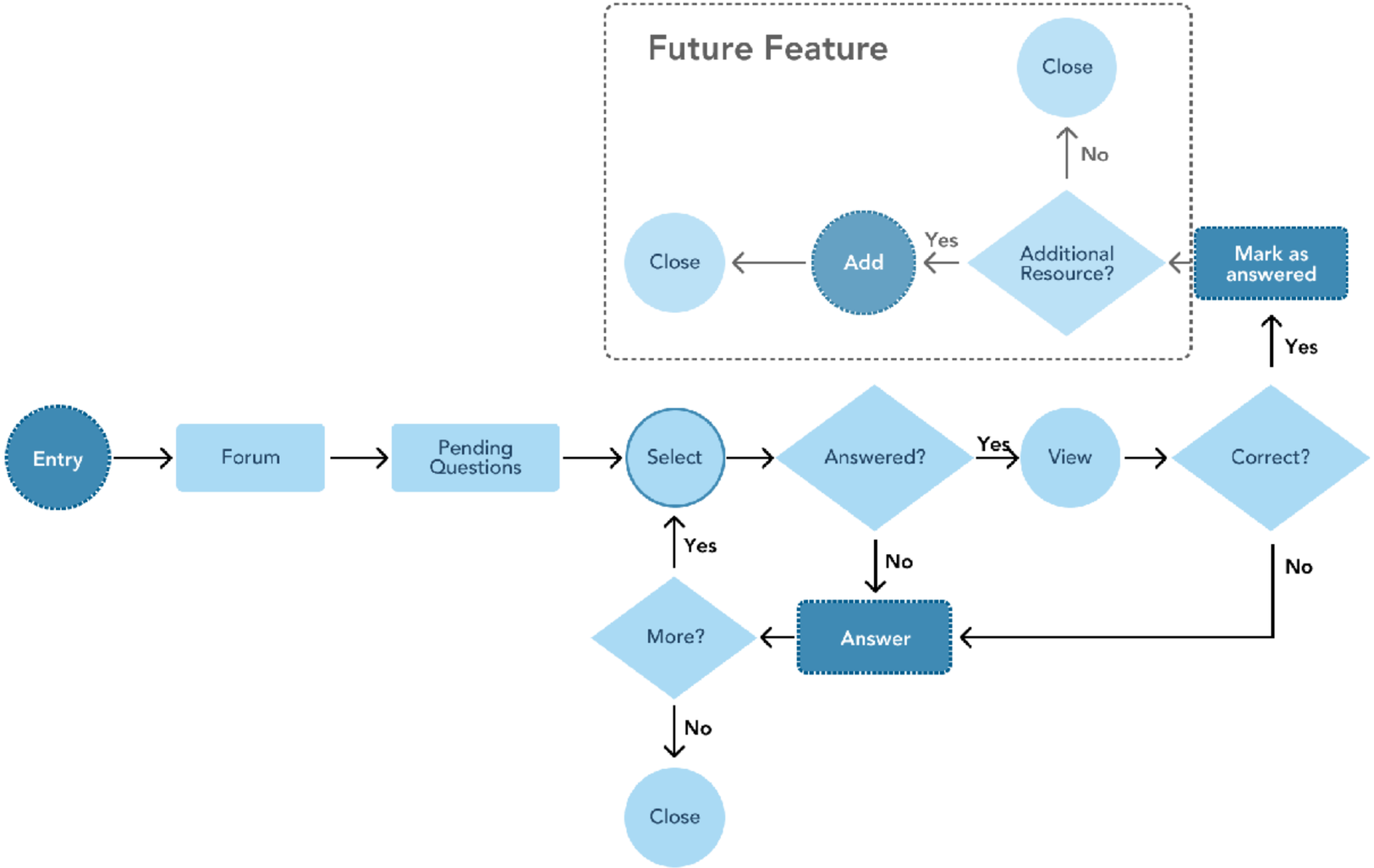
Site Map: MVP For Forum Feature



User Flow Study and Draft



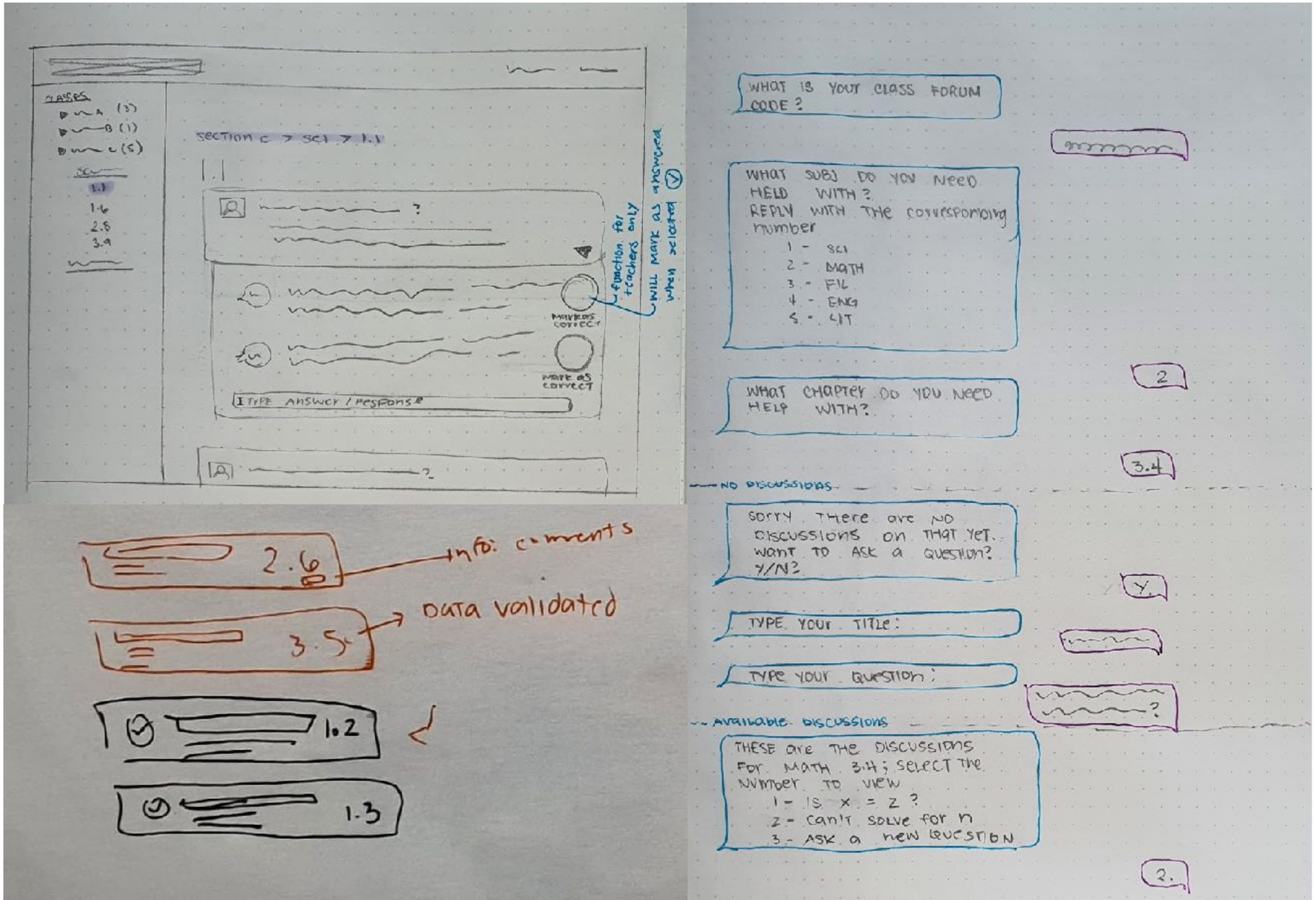
User Flow


Future Feature
Close
No
Close
Add
Yes
Additional Resource?
Mark as answered
Yes
Entry
Forum
Pending Questions
Select
Answered?
Yes
View
Correct?
Yes
No
No
More?
Answer
No
Close

Solution

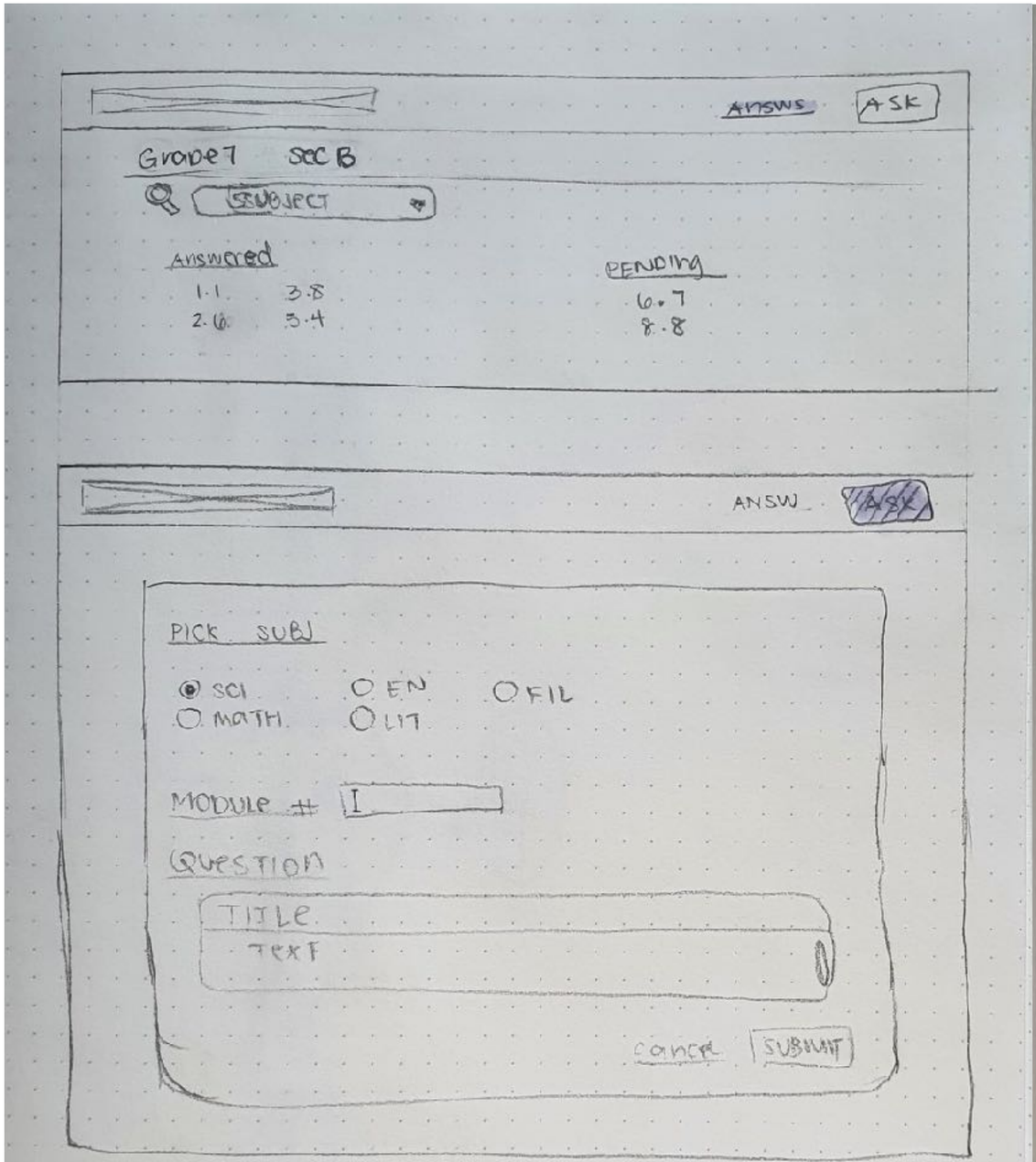
With a better understanding of structure, I set out to create a **design system, wireframes, and a high fidelity prototype.**

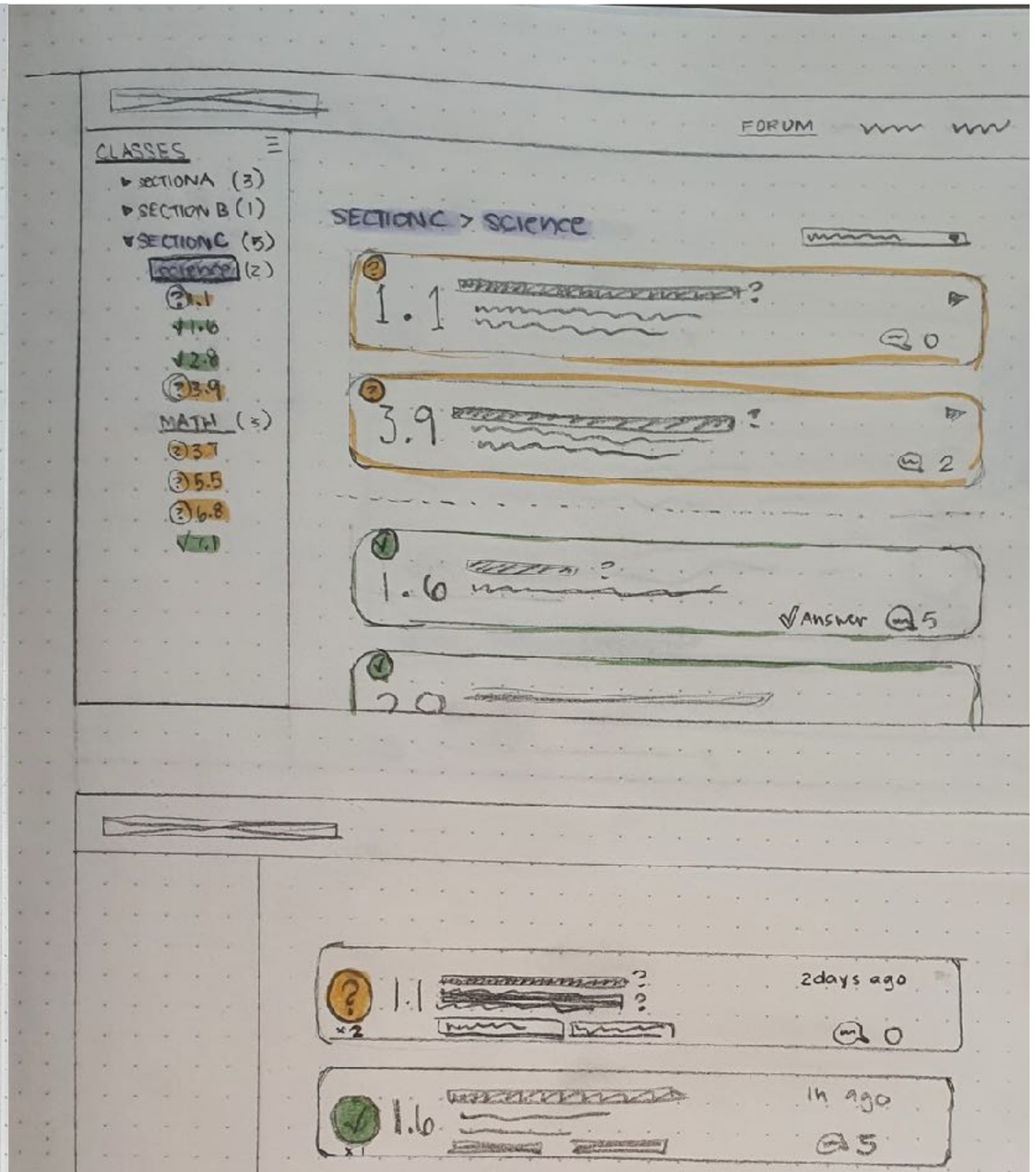
Sketches



CLASSES
A (3)
B (1)
C (5)
SCI
1.1
1.6
2.8
3.9
SECTION C > SCI > 1.1
MARKAS CORRECT
MARK AS CORRECT
I TYPE ANSWER / RESPONSE
function for teachers only
WILL MARK AS ANSWERED when selected
2.6
info: comments
3.5
Data validated
1.2
1.3
WHAT IS YOUR CLASS FORUM CODE?
WHAT SUBJ DO YOU NEED HELP WITH? REPLY WITH THE CORRESPONDING number
1 - SCI
2 - MATH
3 - FIL
4 - ENG
5 - LIT
2
WHAT CHAPTER DO YOU NEED HELP WITH?
3.4
NO DISCUSSIONS
SORRY THERE ARE NO DISCUSSIONS ON THAT YET. WANT TO ASK A QUESTION? Y/N?
Y
TYPE YOUR TITLE:
TYPE YOUR QUESTION:
?
AVAILABLE DISCUSSIONS
THESE ARE THE DISCUSSIONS FOR MATH 3.4; SELECT THE NUMBER TO VIEW
1 - IS X = Z ?
2 - CAN'T SOLVE FOR n
3 - ASK A NEW QUESTION
2.

More Sketches





Design System

Creating a design system containing UX components helped me keep consistency when designing.

Main Colors

#214882

#E5E5E5

#3D3D3D

Secondary Colors

#214882

#E5E5E5

#619CC7

#4BA964

Font

Aa

Poppins Bold
Poppins Medium
Poppins Regular

Typography

Poppins, Bold, 36px	**Header 1**
Poppins, Medium, 36px	Header 2
Poppins, Medium, 24px	Sub-Header
Poppins, Bold, 18px	**Title**
Poppins, Regular, 18px	Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ultrices cursus arcu urna, parturient elit lacinia. Venenatis sed tincidunt a, elementum mattis id aliquam.

Dropdowns

Dropdown

Option 1
Option 2
Option 3
Option 4

Dropdown

Option 1
Option 2
Option 3
Option 4

Text Fields

Type here. . . |

Typing with active state |

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aliquam ultrices cursus arcu urna, parturient elit lacinia. Venenatis sed tincidunt a, elementum mattis id aliquam. Ut sed at donec amet sed aliquam. . .|

Module Elements

2.2

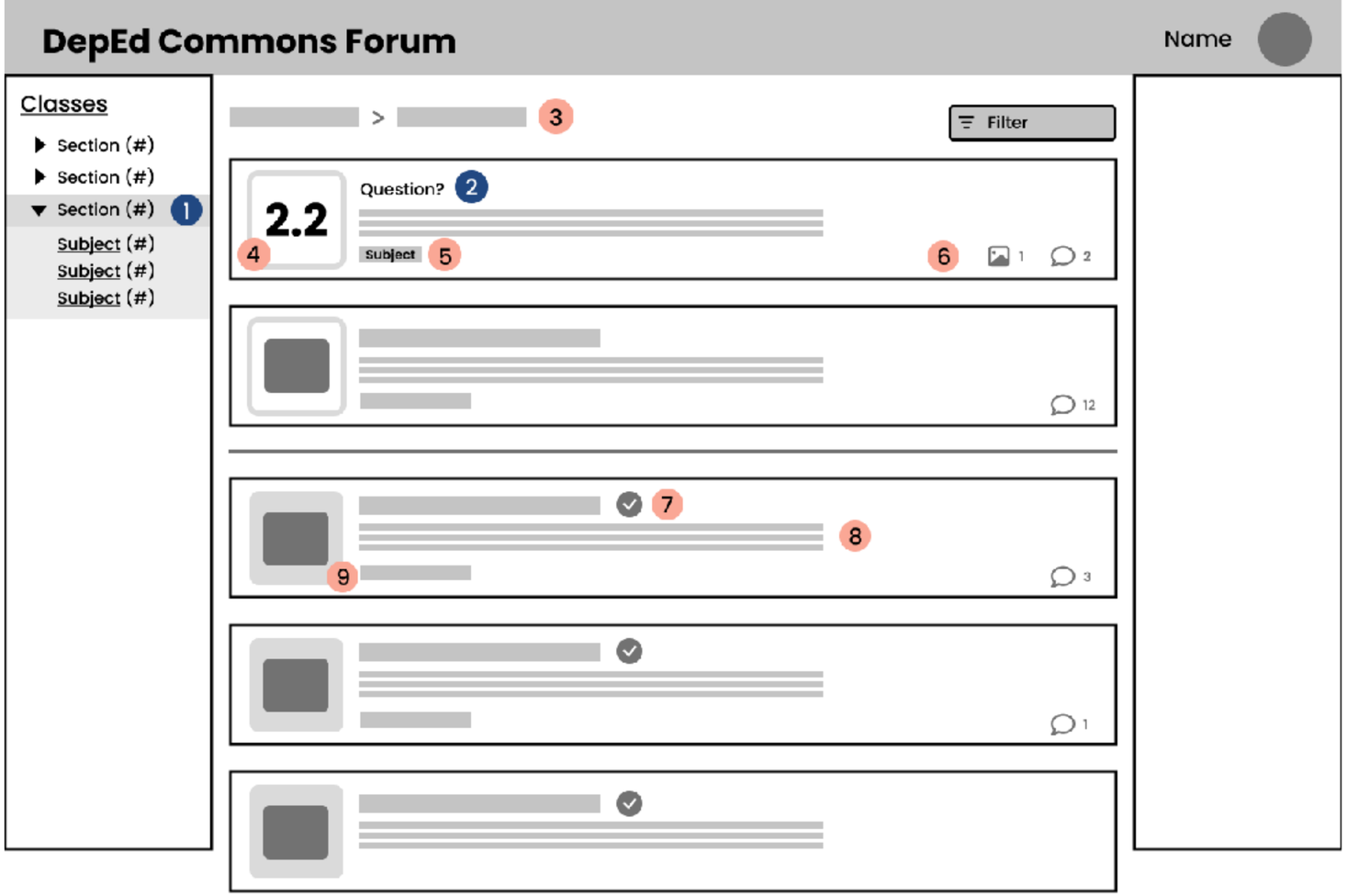
2.2 2.2 2.2 2.2

Buttons

Primary	Secondary		
Forward	Back	Forward	✓ Check
Forward	Back	Forward	← Back
Forward	Cancel	Forward	

+ + + +

Annotated Wireframes



1 **Clickable Navigation**
This allows the user to easily filter between classes

2 **Clickable Question**
This brings the user to a page ir pop-up that is dedicated to the question

3 **Breadcrumbs**
Easily tell users where they are and help tehm return

4 **Lesson and Chapter (Not Answered)**
Easily organize and filter data by module number according to what is specified in the module.
This is put in big numbers upfront in order to easily identify where the question might come from

5 **Subject Tag**
Help users identify subject and filter between them

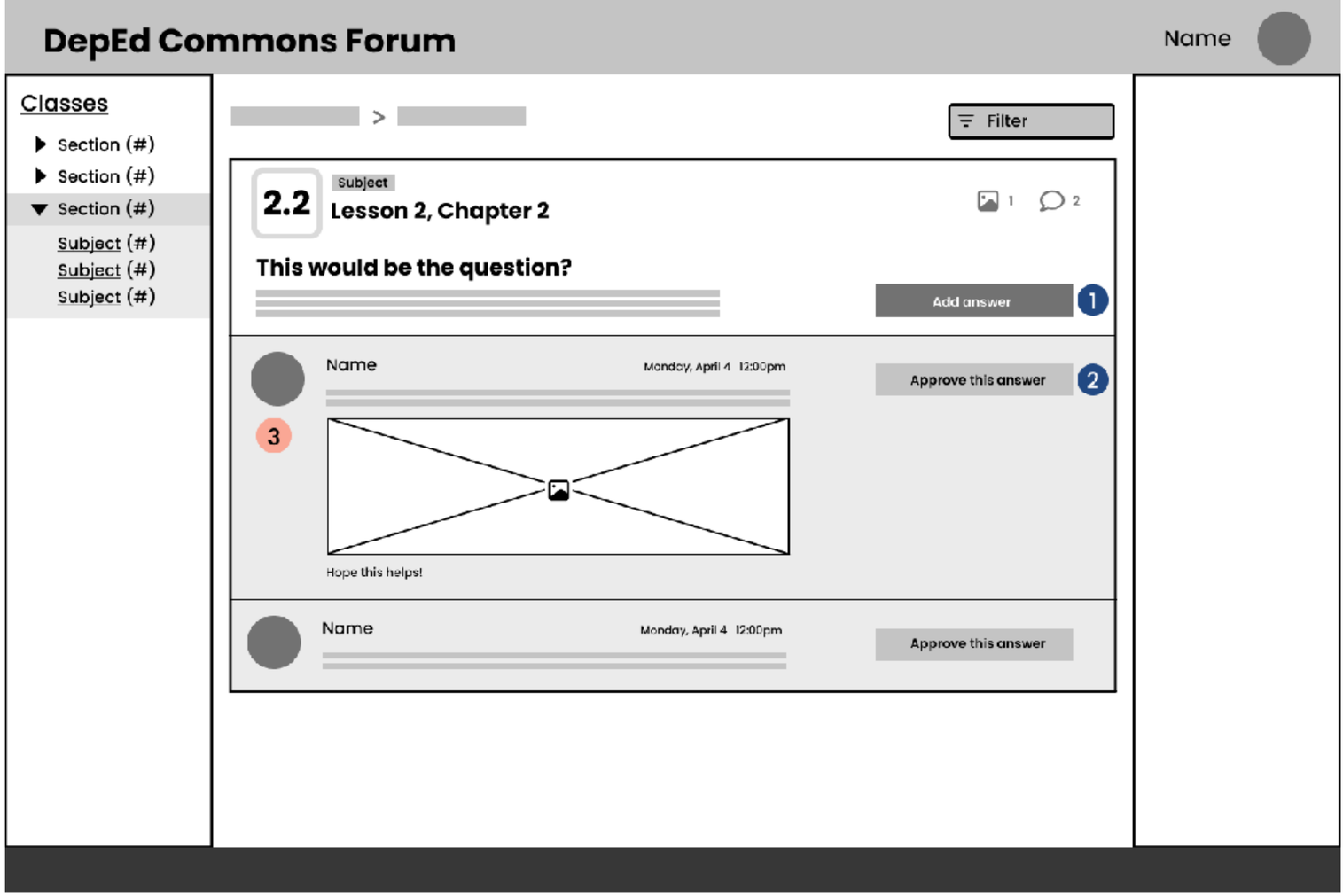
6 **Image and Answer Info at a glance**
Tells the user how many answers have been provided and if there are images included

7 **Verified answer**
These are answers either verified by or provided by the instructor or teaching assistant of the class

8 **Answer**
Answer appears here for questions answered

9 **Lesson and Chapter (Answered)**
Alternative colors for answered and verified ones to make it easy to identify

Annotated Wireframes



1. **Add Answer Button**
   Button to add an answer - if teacher does this, answer is automatically verified
2. **Approve Answer Button**
   Approve an existing answer instead of having to add one
3. **Answer View**
   This will display answers given by different users

Usability Tests

Prior to conducting tests, I created a **script** and outlined my goals.

(This informed my process of modifying wireframes; however, there were hiccups due to conducting it remotely)

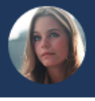
Research Objectives

- Find out if main tasks are achievable
- Identify ideal hierarchy for navigation
- Determine task time (how long user takes on a task)
- Determine learning curve

Usability Goals

- Be able to navigate the page
- Be able to answer questions
- Be able to verify answer

High Fidelity Prototypes

DepEd Commons Forum | Home | User Guide | Name 

Classes

- Section (#)
- Section (#)
- Section C
  - Science (7)
  - Math (5)
  - Subject (#)

Section C > Science

Search

Pending Verification

2.2 **How is smoke a colloid while gelatin is not?**

Science Homework 1 2

1.8 **I don't understand why the answer is 126m/s.**

When computing for Problem 3, I always seem to get an answer of 23m/s, considering that the value provided is 235.

Science Homework 2 3

Answered Questions

1.5 **What does viscous mean?**

Answer: Viscous often refers to a material with sticky consistency.

Science Reading 1

1.2 **I don't remember the formula for velocity.**

Answer: velocity is distance over time. (v = d/t)

Science Homework 1

Classes

- Section (#)
- Section (#)
- Section C
- Science (7)
- Math (5)
- Subject (#)

1.8

Science Homework

Lesson 1, Chapter 8

I don't understand why the answer is 126m/s.

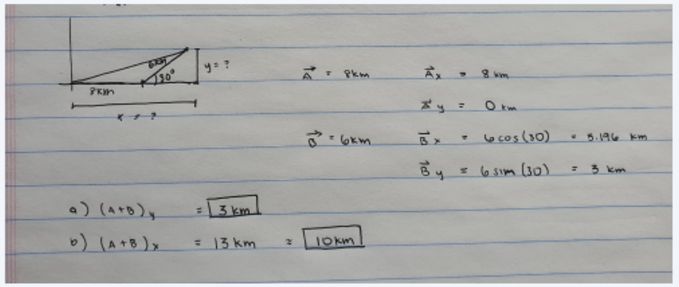
When computing for Problem 3, I always seem to get an answer of 23m/s, considering that the value provided is 235.

Type a response...

Add Answer

Anon Monday, April 4 12:00pm

I believe your issue has something to do with your order of operations.



Hope this helps!

Approve this answer

Anonymous Monday, April 3 12:00pm

Approve this answer

DepEd Commons Forum Home User Guide Name

Classes

- Section (#)
- Section (#)
- Section C
- Science (7)
- Math (5)
- Subject (#)

Section C > Science > 1.8

Search

1.8

Science Homework

Lesson 1, Chapter 8

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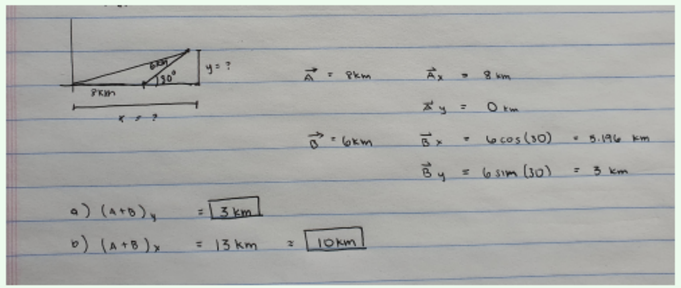


Hope this helps!

Approved

Anonymous Monday, April 3 12:00pm

Approve this answer

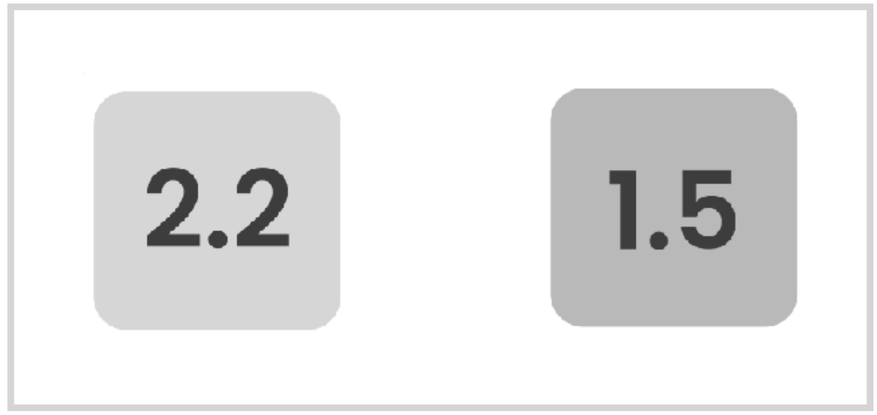
Notes and Lessons

Some notes on usability tests and accessibility.

1) Do not rely on color alone. If possible, use a pattern.

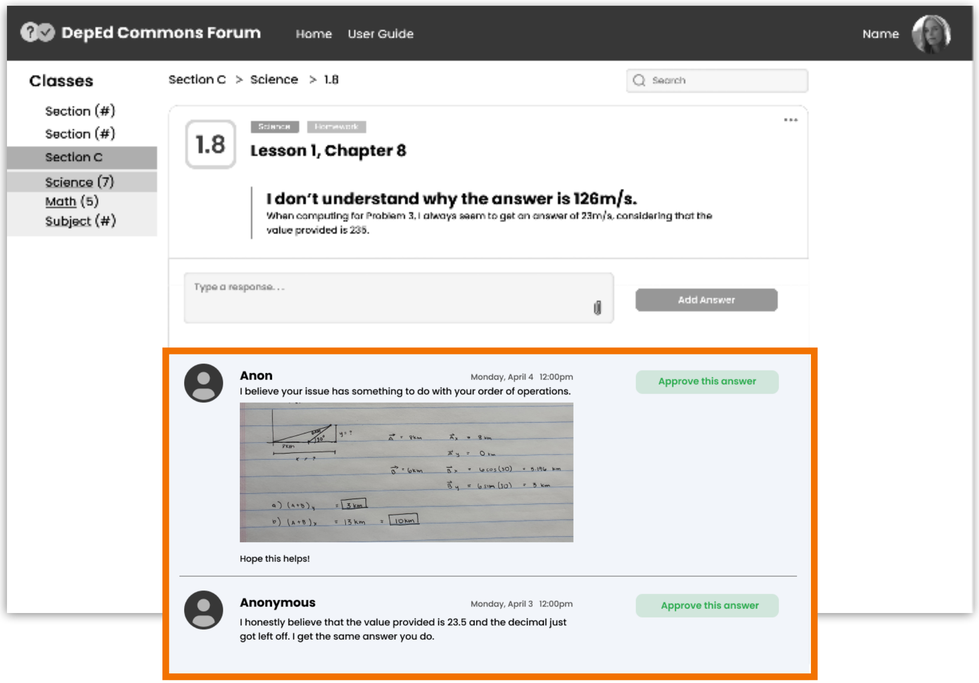
This is more easily distinguishable. . .

than this.

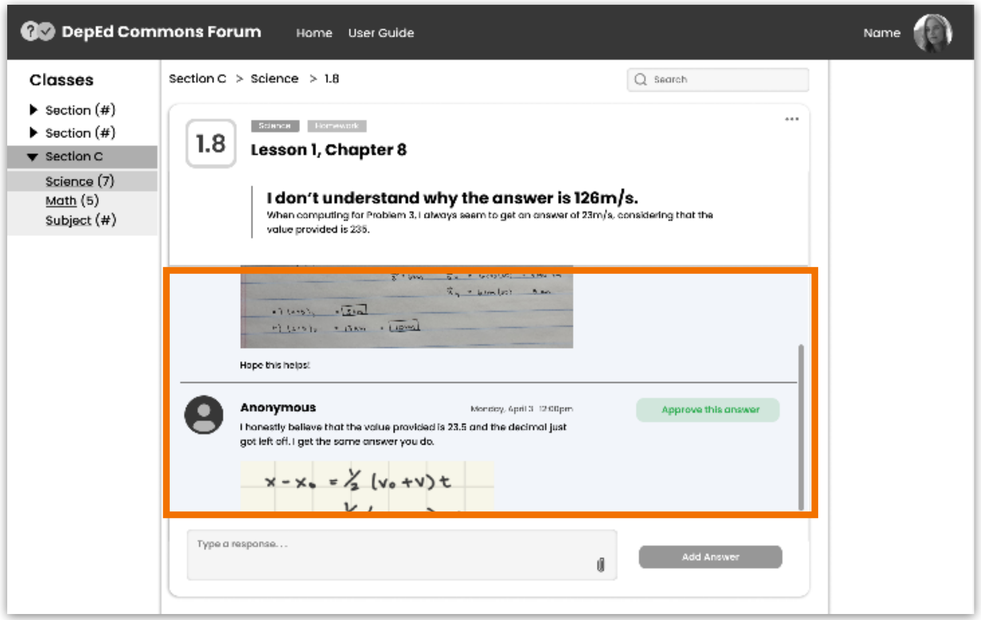


2) Place components strategically.

This is a more efficient use of space…



than this.



More Lessons...

3) For usability tests make the tester's role clear.

4) For more permanent actions, confirmations are essential, but for more subtle actions, you can give it a break depending on context.

5) It's 100% normal to pivot according to your research when your research challenges your biases.