

# Executive FollowUp

A productivity and organization tool

## Design Problem

How do you provide enough structure to students in the upper high school years and early college years so that students can be successful academically? Is there a way to provide a system that students can actually grow in their ability to manage their time and workload? Can a student, then, turn these skills into success in their academic life and adulthood?

## Section 7: Final Usability Test

### Goals

The goal of this study is to evaluate a prototype for a tool to help high school and early college students improve their ability to manage their time for completion of assignments. By improving students' skills in this area, the hope is that improved grades will follow. This is a usability study that will involve formative questions, observations of tasks and a debrief of the overall effectiveness of the app. The primary result will be qualitative feedback on a prototype that has gone through several iterations to find out if this design will fill the need that has been described. I will be testing 3 participants, 2 students and 1 parent, in 45-minute sessions.

### Overarching goals

- Identify why participants engage or disengage with Executive FollowUp.
- Understand how I can increase the ease of use of Executive FollowUp.
- Explore how to increase users' overall satisfaction with Executive FollowUp

## Detail Goals

- Can a user complete the initial setup of this app in an efficient enough manner that it would not be an obstacle to further use of the app?
- Are the steps that the user has to take to add, edit, delete and view their courses, assignments and preparation time easy to complete?
- Is viewing the data on the desktop convenient and easy enough that users would look at it on a daily basis?

## Participants

Participants included 3 college students, 2 male and 1 female. All described themselves as good students, procrastinators with mediocre planning skills. None took advantage of any outside technology to help plan their work.

## Process

The Usability Test was a one hour Zoom session where the participants shared their screens and a recording was taken. Once the Consent Form and Introduction was complete, I started the test with some pre-test questions. I asked about background and demographics as well as their current approaches to organizing their preparation and study for school work. Finally, some information was gathered on what they know about other technology is available in this area and if they have used it.

The examination of the prototypes was conducted next. Links to two clickable prototypes were sent by email to the user. The first prototype included tasks to register and log in a user and the initial setup of the app. The initial setup included a controlled wizard that required the user to add several courses, assignments and a work plan. Finally, they see the dashboard populated with the information that has been added.

The second prototype was from the perspective of an existing user and the dashboard has now become the central element. In this user flow, all the major tasks that the user may want to complete in an asynchronous manner were examined. These tasks included adding, editing, deleting and viewing their course listing, assignments and work plans.

During all tasks, the user was asked to “talk aloud” to get useful feedback on a variety of areas. These areas included: language, color, formatting and layout of the user interface, the language used, the simplicity of navigation, intuitiveness of the screens and usefulness of the functionality.

Once the evaluation of the prototype was complete, a debrief was conducted that focused on the overall app. Any areas where the user struggled were probed. Other open-ended questions were asked to probe their understanding of the purpose and goals of the app and any functions that they would like to see. Questions, such as, “what is the most useful function in the app?” were asked to determine if we have addressed the critical needs that surfaced during the Needs Finding Study,

The final part of the interview is the administration of the SUS Questionnaire. I sent this in an email link, asked them to print it, fill it out, take a picture and text it to me.

Each user in this final round of testing was compensated for their time.

## Results

From observations, all tasks were completed without any significant confusion. The SUS Questionnaire reflected that the app was intuitive and that there were no issues with navigation, understanding the purpose of the app or individual tasks. No participant reported the need for any outside technical support in order to use the app and none found it cumbersome.

Participants were pleased with the messaging. In particular, there were many positive comments on the deletion confirmation messages as well as the banners within a screen that told the user where they were in the process. Some of the banner messages were not read initially and the titles to the screen pages were all but ignored, in most cases. Participants reported noticing items in the center of the page, graphic images or highlighted text before any titles.

There was some confusion when it came to creating and following the work plans. There were a lot of suggestions about how to shepherd a user through the process of adding a work plan efficiently. Also, there were a lot of suggestions about how to encourage and reinforce adherence to the work plans.

Users liked the recommended preparation time and that it was showing on different screens. They were, at first, confused as to what the real definition of the prep time was. They were not sure if this was a countdown until the due date.

One of the unique elements of the app is the research and intelligence behind the recommended hours of preparation and the timeframe that the user should think of when creating their work plans. This intelligence needs to be well-thought out and backed up by industry studies. There are many opportunities to educate the student on many areas of planning and organization. Making them cognizant of the amount of time they need to study and the timeframe to complete their work is just the first and most critical element of task planning.

## Key findings

- Notifications

All participants asked if there were push notifications to remind them of upcoming prep sessions or classes. I recommend adding an item to the initial progressive wizard setup that asks the user if they would like to receive notifications and give them several options to choose from. Notifications would be banner notifications at the top of their phone screens.

Some of the options could include the following:

- before a class is starting or a prep session is supposed to begin.
- progress toward your total prep plan
- a countdown of some kind to the due date of an assignment

- Recommended prep time

Participants liked seeing the numbers next to the prep session or totals for the day or week but misinterpreted what they meant. Messaging should be developed to educate the user on what the prep time amounts mean and how they were arrived at.

- Recommended prep time timeframe

Some participants understood what the recommended time frames were, but others misinterpreted it. Messaging must be developed to get this point across to users. Furthermore, it should be determined whether the end of the prep time is the actual due date or the date that all the preparation should be completed. This definition needs to be understood by the users. Also, add time in smaller, more realistic increments dropdown.

- Calendar graphic vs. list view when creating prep plans

Participants preferred to see a graphic of the calendar but needed to have the listing of commitments within it. All of them overlooked the dots that were representing events on the calendar. They understood that they signified that something was happening that day but did not know why there were one or more dots. All participants recognized the need to have the list view so they could see where they could fit a prep session into their schedule. I recommend thinking about a way to combine these two views of the events into one type of view that is graphical in nature and easy to understand. This could include a graphical representation of a calendar with only the most critical details showing that would allow the user to make scheduling decisions rapidly.

- Course options

Participants were comfortable typing in the description of their course. However, in order to see the listing of assignments that pertain to a given course, the courses should have a standardized course-type. The types of assignments available to that course-type would be built into the logic of the app. In addition, there could be an admin option under settings, where a user could add additional course types and/or course assignments that pertain to a particular course-type.

- Deletion modals

Participants were happy there was the language, “OK to delete course?” as well as ‘delete course’ on the button (same for assignments and work plans). This highlighted “OK to delete course?” was the first thing that the participant noticed on the modal. This is what triggered the participant to read the copy which had a

description of the consequences of deleting the element. I recommend that the length and format of the copy be carefully reviewed to make sure that the user will be willing to read it before selecting a final delete.

- Completion of work sessions

All participants expressed the desire to “check off/cross off” finished items. In this way, the app could mirror what the participants expressed doing in the real world, checking off items on a pad of paper. One participant expressed interest in having completed items available elsewhere for future reference.

- Progress of prep plan creation

Participants appreciated that they received banners about the status of their prep plan creation. However, in several instances, I noticed that participants overlooked the banners, even though they were in bright colors. It is critical to the success of the student that they complete their prep plans. I recommend evaluating this to make sure that the status messaging and progression are clear and inviting.

- Progress of prep plan completion

There is currently no recognition of the progress through completion of prep plan: Work plan listing: I am done studying? should do something to recognize that you have completed the work plan... cross it off, maybe. One participant suggested “gamifying” the app

- Progress/countdown to due date for an assignment

Participants expressed interest in some way of seeing how close they were to the due date of the assignment at-a-glance. There is, currently, no facility for this. It could be included in a push notification but could also be noted in some way in the app.

- Dashboard

Multiple participants noted that, while they found the information on the Dashboard useful, the listing of commitments was cramped and unclear. One participant suggested a grid of some kind. There may be too many elements showing on the dashboard. Consideration should be given to which elements are critical. Lower priority elements could be hidden until a commitment is tapped on or swiped.

- Other user Interface issues

- Participants did not see the titles of pages at first.
- Participants noted not enough contrast with logo and background on bottom nav
- Participants noted that there was not a strong enough highlight on some elements
- One participant commented that he believed the word ‘commitment’ was a good balance between business and school.
- All participants liked the description input on the add-commitment screen. They appreciated the ability to add preparation details to the assignment.