



Usability tests for the Effusio application, Beta Version, were conducted on five total participants. For the purpose of this report, the identities of the participants will remain confidential.

## Participants

Of the five users tested, three were women and two were men.

The age range of the users falls between early 20s and 35 years of age.

This represents a range of Effusio's target audience. Users in the lower age range—15 to 20—were not included in this test.

## Setting

The five users were tested in person. These tests were done one-on-one in a quiet location. The facilitator script and user tasks were read aloud, and the users were observed as they performed the tasks. Thorough notes were taken to document user interaction.

## Pre-test questions

All users were asked the same two questions. Based on their answers, some were asked three additional questions. The data collected follows.

### Question 1

*How would you rate your comfort level with computers on a scale of 1-5? 5 being very comfortable, and 1 being not very comfortable at all.*

- Two users rated their comfort level at 5
- One rated their comfort level at 4.5
- One rated their comfort level at 4
- One user rated comfort level at 2

### Question 2

*Have you ever used an online drawing tool before?*

- Three users answered “yes”
- Two users answered “no”

### Question 3

*If you have used an online drawing tool, did you enjoy the experience?*

All three users answered “yes.”



#### Question 4

*If you enjoyed the experience, what made it enjoyable?*

Users identified the following aspects of the online drawing tool they used as enjoyable:

- The novelty of working digitally vs. working with traditional media.
- Easy to find stuff.
- Fun to play around with distortions, effects, and manipulations.

#### Question 5

*If you did not enjoy the experience, could you share one of the problems you experienced?*

N/A

## Task 1: Create Account

#### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

All five users rated the ease of this task at a "5."

#### Question 2:

*Do you think anyone else would have difficulty completing this task?*

All users responded that nothing was difficult about the process, and it was mentioned that the process was straightforward.

#### Question 3:

*How do you think this process could be improved to make it easier to use?*

Most users responded that the process did not need to be improved, however the following suggestions were offered:

- Move the Register button closer to the top of the interface (2).
- Change wording from "Register" to "Create Account."
- Make users confirm password choice.

## Task 2: Change Workspace

#### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

- The first participant identified a bug in the code that caused the workspace menu to appear behind the content. This bug has since been fixed in the code.
- For the other four participants, I navigated around the bug to get an unhindered response on ease of use. The four participants rated ease of use at a "5."

#### Question 2:

*Do you think anyone else would have difficulty completing this task?*

The user who identified the bug answered that having the menu obscured by content made the task difficult to complete. The four users



given a modified version of the task to avoid the bug did not report anything difficult about the task.

**Question 3:**

*How do you think this process could be improved to make it easier to use?*

The following suggestions were offered:

- Make the option more prominent.
- Repeat top menu options at the bottom of the interface.
- Add titles to the different workspace design thumbnails.

## Task 3: Create a Mood Board

**Question 1:**

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

- Two participants rated ease of use at a “5.”
- Three participants rated ease of use at a “4.”

**Question 2:**

*Do you think anyone else would have difficulty completing this task?*

The following were identified as potentially causing difficulty for others:

- Having menu options at the bottom may not be familiar to users who aren't familiar with computer programs (Step 3 of Mood Steps).
- Two participants mentioned that users familiar with computers would not find the task difficult.
- One participant said that people unfamiliar with computers would not

know what they were walking into and would need to explore the interface to learn what options were available.

**Question 3:**

*Which step has the potential to be the most difficult or confusing to complete, and why?*

- Two participants said the most difficult part was deciding which mood word to choose (i.e. user decision, not trouble with interface).
- Two participants said the color palette could cause others difficulty since it is different from color choosers they have encountered.
- One participant said the amount of options could be overwhelming for a casual computer user.

**Question 4:**

*How do you think this process could be improved to make it easier to use?*

The following suggestions were offered:

- Give the user more control over Mood Slip design (alignment, more font options).
- Give the user more direction on how to use the color palette, such as an arrow pointing to the palette when mousing over the color tile.
- Give user more direction throughout the process in the form of mouseover prompts similar to the Journal icon mouseover in Step 1.

Facilitator observations:

- Two participants asked for a definition of the term “Mood Board.”
- One participant said, “This is really fun.”

- Two participants tried to scroll through the Word Style menu for more options.
- One participant clicked on the color tile before interacting with the color palette.
- One participant asked, “What is the purpose of the Journal Entry?”
- Four participants chose a preset mood word, one typed in a word.

## Task 4: Add a symbol to board

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

All five users rated the ease of this task at a “5.”

### Question 2:

*Do you think anyone else would have difficulty completing this task?*

All five users responded “No” to this question. Two participants described the process as “very easy.” One described it as “pretty obvious.”

### Question 3:

*How do you think this process could be improved to make it easier to use?*

All five users responded the process did not need to be improved.

## Task 5: Add a shape to the board

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

All five users rated the ease of this task at a “5.”

### Question 2:

*How easy was it to draw your shape? 5 being very easy, 1 being impossible.*

All five users rated the ease of this task at a “5.”

### Question 3:

*Do you think anyone else would have difficulty completing this task?*

Four users responded “No” to this question. Two participants described the process as “very easy.” One described it as “pretty obvious.”

### Question 4:

*How do you think this process could be improved to make it easier to use?*

- Three users responded that the task did not need to be improved.
- One user responded that the crosshair cursor should contrast with the corkboard to a greater extent.
- One user was able to identify a bug with the rectangle tool that resulted from a very specific order of actions. This bug has since been fixed.

## Task 6: Draw on the board

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

Four users rated the ease of this task at a “5.” One user rated ease of use at a “4.”

### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- Two users said it might take some people a minute to realize they need to pick up the pencil to draw.
- One user said people with physical disabilities might have problems drawing with the mouse. This user suggested that the use of a graphic tablet as an input device would improve the experience.

### Question 3:

*How do you think this process could be improved to make it easier to use?*

- Two users suggested having the pencil automatically “picked up” when the drawing tool is accessed.
- One user suggested giving people more drawing options/effects.

Facilitator observations/notes:

- One user attempted to draw without first picking up the pencil.
- One user tried to drag the pencil to the drawing area instead of clicking on it.

- One user said the pencil image was much nicer than the standard circle or crosshair mouse chaser normally found in drawing applications.

## Task 7: Add text to board

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

Four users rated the ease of this task at a “5.” One user rated ease of use at a “4.”

### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- One user said that the font style names might not be meaningful to people who are unfamiliar with them.
- One user said choosing a font first was confusing and there should be a default (Note: there is a default, but this user was clicking around the interface and didn’t notice the default). The same user said some people might be confused on how to change text color.
- One user said it’s possible that a user could choose a text color that is very similar to the board color, and wouldn’t be able to see the text.

### Question 3:

*How do you think this process could be improved to make it easier to use?*

- One user suggested using the actual font names (Arial, Georgia, etc) instead of referring to them by font style.



- One user suggested including a method to change the text once it is added to the board.
- One user suggested putting a white background on the text input that disappears when the text is deselected.

Facilitator observations/notes:

- One user hit the return key after inputting the text and seemed surprised that it didn't deselect.
- One user caused an unexpected behavior by clicking on top of a board object to add text. This unexpected behavior has since been fixed.
- One user attempted to drag to draw a text input box instead of clicking on the board.

## Task 8: Create a composition

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

All five users rated the ease of this task at a "5."

### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- One user said when the rectangle tool was selected, it didn't look selected.

- One user said she couldn't figure out how to change the Mood Slip contents (Note: they can't be changed from the board in current version).
- One user said he didn't realize sizing of text was done on the board.

### Question 3:

*When creating your design, was there an object transformation you wanted to use that wasn't available?*

- One user wanted the ability to edit the Mood Slip from the board.
- One user wanted the following features: ability to edit text from the board, a "bring to front" menu option (note: selecting an object automatically brings it to the front), warp feature for all objects on the board instead of just word slips.
- One user said he didn't realize sizing of text was done on the board.

### Question 4:

*How do you think this process could be improved to make it easier to use?*

- One user suggested having the color revert to the default black instead of keeping user choice.
- One user suggested having the circular tool draw as an oval instead of a circle.

Facilitator observations/notes:

- One user saved and closed her board without being prompted to do so.
- One user used the delete key to remove an object from the composition.



- One user said the application reminded her of Kid Pix. This is actually a piece of software currently used by art therapists.
- One user accessed undo and redo.
- One user accessed the right click contextual menu.
- One user accessed the Help view unprompted and said the video tutorials were a good idea.

## Task 9: Create a journal entry

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

Four users rated the ease of this task at a “5.” One user rated ease of use at a “4.”

### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- Two users said that the journal icon tended to blend in with the board and could be overlooked.
- One user said she expected to be able to turn the pages of the journal.
- Two users said having tool panels open at the same time as the journal view made things confusing.

### Question 3:

*How do you think this process could be improved to make it easier to use?*

- One user suggested more contrast on the journal icon.

- One user suggested allowing the creation of more than one journal page.
- One user suggested automatically closing tool panels when the journal view is accessed.
- One user suggested closing tool panels automatically after a set period of inactivity.

Facilitator observations/notes:

- One user hit the return key after inputting the text and seemed surprised that it didn't update the journal.
- One user tried to change the font of the journal text with the Text tool panel.

## Task 10: Listen to music

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

Four users rated the ease of this task at a “5.” One user rated ease of use at a “3.5.”

### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- One user said the radio icon tended to blend in with the board and could be overlooked.



- One user wondered if the younger generation would recognize the visual of an “old school radio.”
- One user said an overlapping tool panel hid the icon too much and could cause users to overlook it.

#### Question 3:

*How do you think this process could be improved to make it easier to use?*

- One user suggested moving the radio icon higher in the interface to avoid tool panel overlap.
- One user suggested adding more contrast to the radio icon.
- One user suggested giving users the option to upload their own music, or at least provide more songs to choose from.
- One user suggested providing a quick jump from player to music view.

#### Question 4:

*Were any of the music player controls difficult to understand? If so, how could they be improved?*

All five users said the music player controls were easy to understand and did not need improvement.

#### Question 5:

*Were there any features you wished the music player had? If so, what features?*

- Four users said “no.”
- One user suggested giving the option to fast-forward through parts of an individual song.

#### Question 6:

*Do you think the style of music fit the name of the playlist (relaxation/stimulation)? Why or why not?*

- Four users said “yes.” One clarified to say the stimulation playlist was okay once the first song kicked in, but was slow at first.
- One user said “no,” elaborating to say the stimulation playlist was too relaxing.

#### Question 7:

*How do you think the music feature as a whole could be improved?*

All five users said they had already answered this question in their other responses.

Facilitator observations/notes:

- The large number of post-task questions for this task seemed to tire out the users. I noted that all seemed eager to move to the next task after the first three questions.

## Task II: Save board

#### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

All five users rated the ease of this task at a “5.”



### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- Four users answered “no.”
- One user said people not familiar with computers could have difficulty.

### Question 3:

*How do you think this process could be improved to make it easier to use?*

- One user suggested placing a save button directly on the board instead of within a menu.
- Four users said the process was fine as is and did not need improvement.

Facilitator observations/notes:

- One user looked for the Save option in the Edit menu first. This user recovered without intervention and found it in the File menu.
- One user said the Save option was “where it should be.” One user called the placement “perfect.”

## Task 12: Download board

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

- Three users rated ease of use at a “5.”
- One user rated ease of use at a “4.”
- One user rated ease of use at a “3.”

### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- Three users answered “no.”
- One user said people might not understand why the board should be downloaded since it is saved to the system.
- One user said people unfamiliar with computers might have difficulty.

### Question 3:

*How do you think this process could be improved to make it easier to use?*

- One user suggested adding the Download option to the right click menu or giving option directly from the board instead of in a menu.
- One user suggested relabeling the option as “Save As...”

Facilitator observations/notes:

- The user with the least amount of computer experience seemed very confused as to why anyone would want to download the board.
- The user who first checked the right click menu recovered without intervention.

## Task 13: Close board

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

- Four users rated ease of use at a “5.”
- One user chose logout instead of close.



### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- Four users answered “no.”
- One user said people familiar with desktop applications would probably look for an “x” icon to close the board.

### Question 3:

*How do you think this process could be improved to make it easier to use?*

- Two users suggested adding an “x” icon directly on the board for close.
- One user suggested prompting the user to save if there have been changes to the board (Note: this functionality exists, but user had not changed the board since save).

Facilitator observations/notes:

N/A

## Task 14: Log Out

### Question 1:

*How easy was this task to complete on a scale of 1-5? 5 being very easy, 1 being impossible.*

- Four users rated ease of use at a “5.”
- The user who logged out in the last task did not complete this step.

### Question 2:

*Do you think anyone else would have difficulty completing this task?*

- The four users who completed this task answered “no.”

### Question 3:

*How do you think this process could be improved to make it easier to use?*

- The four users who completed this task said no improvements were necessary.

Facilitator observations/notes:

N/A

## Post-test Questions

### Question 1:

*Overall, how would you rate the ease of use of the Effusio prototype?*

*Rate this on a scale of 1-5: 5 being very easy to use and 1 being impossible to use.*

- Three users rated overall ease of use at a “5.”
- One rated overall ease of use at a “4.8.”
- One rated overall ease of use at a “4.”

### Question 2:

*Which task did you find the easiest to complete?*

- Three users said all tasks were very easy.



- One user said adding symbols and shapes.
- One user said drawing and adding objects.

**Question 3:**

*Which task has the potential to be the most difficult for users to complete?*

- One user said Register was slightly confusing.
- One user said creating a Journal Entry.
- One user said finding the Music icon.
- One user said closing the board.
- One user declined to answer.

**Question 4:**

*Which task has the potential to be most confusing to users?*

- One user suggested that having to drag a word slip to the drop target instead of just clicking on it could be confusing (Mood Step 2).
- One user said the inability to edit Mood Slips from the board.
- Three users felt they had already answered this question in the last response or declined to answer.

## Facilitator Notes/Observations: Overall Test

- The user who reported the least amount of experience with computers seemed to report less issues than more experienced computer users.
- Users who reported more experience with computers (particularly design/word processing applications) seemed to expect more tool options, and expected available tools to follow existing conventions.
- Users who reported more computer experience seemed more apt to click around and explore the interface outside of the task directions.
- One user in particular explored the interface to a large extent outside of directed tasks. She often apologized that she was deviating from the test. I allowed her to continue exploration for a short time in order to gain more information about her use of the application.