

Getting Started with Reflection Journals

Usability Test Plan

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I. Product to Be Tested

Name of the product: Getting Started with Reflection Journals

Specific functions or sections undergoing testing:

- Navigation buttons
- Accessibility functions such as speech to text
- Video playback
- Discussion board functions
- Feedback tools

Goals of the e-learning product

- Allow learners to reflect on learning.
- Allow students to participate in peer-to-peer discussions.

Description of the target learners for the product:

Learners are students in the “Introduction to Research Writing (WR 001)” course. This is a hybrid general education course is for all first-year students. The main goal of the course is to improve their writing skills and prepare for their respective careers.

Context for use:

The module is only a small portion of the overall learning goal, “Learners will demonstrate the use of an online learning tool to help check for proper citation format and APA style implementation.” This module is the beginning section of the overall course content.

Environment for use:

This is course is a hybrid learning course. The module being tested is a prototype of a singular online component of the course. Students can utilize the university computer labs or their own equipment to complete the module.

II. Purpose of Testing

The purpose is to conduct a usability test of the e-learning module, “Getting Started with Reflection Journals.” Being evaluated is whether students can navigate the module, access the video components, and submit a discussion board post. In addition, accessibility components will be evaluated.

Benefits of soliciting user feedback on the design include ensuring that the design is easy

to use, the content is effective in portraying the learning being taught, and that accessibility is addressed properly. That goes to say that all navigation features are in place and that no errors are apparent.

III. Scope of Testing

- Testing on the module will include navigation components, content loading times (videos), discussion board components (text box, reset and submit button), and accessibility functions (text to speech, usability elements, text, white space, etc.)

IV. Test Objectives

The test objectives include:

- Determine whether learners can access the videos.
- Determine whether participants can submit discussion board posts.
- Are accessibility functions operable?
- Can learners complete the without errors and having to back track.

V. Methodology

The test will be conducted in an **in-person, moderated** environment. This will allow participants to utilize university technology tools. This will ensure a fair testing environment and accurate collections of data. This is an **assessment-type** usability test. The test will assess different aspects of the design using a clickable prototype. This will allow the designer to assess the ease of use and effectiveness of the module.

Collection of data will be accessed by surveys and course completion metrics. This will allow the learning designers to see where the areas for modification are, and if there is recorded improvement or module iterations needed.

A. Test Participants

Participants will be limited to students and faculty in the Introduction to Research Writing (WR 001) course at Weaver University. They selection will include 3 future and 3 current English writing students, and 3 course instructors from the course. All survey participants should be able to understand basic instructions, use a computer system (such a mouse and keyboard), and be able to record observations on a notepad.

Participants will be chosen by having new and current students fill out a participation form during a class session or in an email inviting the students to participate.

The survey will ask a variety of questions such as what college the student attends and

what course they are or will be enrolled in. Do so will ensure the integrity of the test and that the test only includes the selected audience group. After the predetermined number of participants have been selected, the survey will close.

B. Participant Preparation

As this is a moderated test session, there will be a moderator to greet the participants. The moderator will explain the testing goals, go over the consent forms, explain the testing process, and be informed of any privacy notices.

After signing the consent forms, participants will be asked to fill out the beginning sections of the usability test survey. This survey will guide the participants as they go through the test. Data collected from the survey includes participant age, gender, education status, and testing environment (where they taking the test).

After the survey, test participants are asked to open the module. No further instructions will be given.

C. Setting

Testing will take place in one of the testing labs that are part of the English department of the college. This allows for test to be moderated and monitored.

D. Equipment

- University computers
- Windows operating system
- Access to the e-learning module
- Any pen/pencil and forms given to the participant.

E. Roles

Moderator – moderates the test session.

Observer – takes notes, observes participants expressions and actions during test. The observer will also focus on tasks being worked on, and any errors seen during the test.

Participant – the user taking the test.

F. Usability Tasks

A scenario is given as such, “You are **students in the Introduction to Research Writing (WR 001)**” course. Your goal is to evaluate the usability of the “Getting Started with Reflection Journals” module as displayed on the screen.

They are informed that this is a hybrid general education course is for all first-year students. The main course goal is explained to them before the test procedures are administrated.

Tasks include:

1. Click the **Get Started** button.
2. Click the **text to speech icon** on each screen.
3. Click the **Previous and Next buttons** on screens that include them.
4. Click the **Play icon** on the video on each of the Reflection Theme screens.
5. Click the **Reset button** on the discussion board text box.
6. Click the **Submit button** on the discussion board text box.
7. Click the **Feedback icon** on the Module Summary screen.

g. Test Procedures

The moderator will inform participants that they are taking the module as “**students in the Introduction to Research Writing (WR 001)**” course. They are informed that this is a hybrid general education course is for all first-year students. The main course goal is explained to them before the test procedures are administrated.

1. The moderator will inform participants of the test process, go over the consent and ask participants to sign the forms, and collects demographic data.
2. The moderator ensures all technology is setup and all the lab computers are running.
3. The moderator directs the participants to open the module by clicking on the associated icon on the screen.
4. Moderator will also inform the participants that the observer will be taking notes, and do not be afraid to “think out loud.”
5. The observer keeps track of all thoughts, actions and interactions taken during the test. He/she will take notes during the test.
6. Participants partake in the test according to the usability tasks.
7. After the test, the participants are surveyed on their thoughts on the experience, and tasks performed. The observer takes any notes.
8. The participants are thanked for their efforts and the lab is closed for safekeeping and record keeping.
9. The moderator and observer make note of any last-minute impressions about the session.

VI. Usability Metrics

The metrics collected during testing included:

Behavioral Metrics	
Errors (critical, noncritical)	Errors including mis-clicks, buttons not working, icons not appearing
Tasks	Can the user complete a task or did the component crash during the task?
Navigation	Do the navigation buttons work?

Attitudinal Metrics	
Ease of Use	How does the user perceive the easiness of using the module?
User Satisfaction	Is the user satisfied with the learning experience?
Appearance	How are the graphics and layout of the module?

Participant subjective metrics also include any comments from the participation surveys and observations made during the test. This also includes any actions recorded, such as body language, facial expressions, and “thinking out loud” notes recorded by the observer.

VII. Usability Performance Goals

Behavioral Metrics

- **Errors** - 100% of tasks should be free of critical errors. 75% of tasks should be free of non-critical errors.
- **Tasks** - Users should be able to complete 100% of all tasks.
- **Navigation** - 100% of all navigation buttons should work according to their intended purpose.

Subjective (Attitudinal) Metrics

- **Ease of Use** - Is the course easy to use? This is a **yes or no** followed by a box for comments.
- **User Satisfaction** - The goal is a 75% rating after all surveys are considered.
- **Appearance** - The graphics visually appealing? Comment box for any issues reported.

VIII. Reporting and Describing Test Results

The initial results will be handed to the design team within 7 academic days at the end of the test. The final report will be available within 10-21 days.

After conducting the usability test, the usability team will organize, analyze, and report on the data collected during the test. Data reporting will include the following:

- **Participant data**, such as college level, age, whether they are student, teacher, etc.
- **Test findings** including task completion data, errors, and participant subjective feedback.
- **Recommendations**

It should be noted that any usability metric tested are subject to further review. Based on the findings of the report, the design team will make modifications or may recommend further testing.

IX. Scoring/Ranking Problem Severity

I have based my score ranking scale on the work of J. Nielsen (1994), titled "Severity Ratings for Usability Problems."

The scale is as follows:

0 – no problem

1 – **Cosmetic problem**: can be fixed whenever.

2 – **Minor usability problem**: low priority fix.

3 – **Major usability problem**: high priority fix.

4 – **Usability catastrophe**: fatal error, course will not run without fix.

Based on the rating scale above I have designed the table below to collect data. Example data is included for **demonstration data only** (does not include data from the module).

Task Number	Description of the Task	Frequency of Issue	Task Rating	Severity
1	Task description	6	1	4
2	Task description	4	2	3
3	Task description	1	3	1

There is a task number, based on the tasks describe above, a description of the issue with the task (such as **button does not work**), frequency of the issue (how many times does the issue occur during the test), the task rating (based on the severity ranking), and the severity ranking, based on the Nielson scale (1994).

Using the data collected, the team will be able to decide which issues get fixed first. For example, a catastrophic level 4 issue would be given a top ranking. Using the chart, the team can best decide how to go about modifying the module.

Works Cited

Nielsen, J. (1994, November 1). *Severity Ratings for Usability Problems*. Nielsen Norman Group. <https://www.nngroup.com/articles/measuring-perceived-usability/>