Mobile Learning Application Evaluation Plan

Final Draft

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MOBILE LEARNING APPLICATION EVALUATION PLAN

This artifact, a mobile learning application (MLA), presents an answer to an authentic learning need. I serve as a program manager in the College of Medicine for a special master's program that is designed to help students improve their chances for medical school admission. While working with applicants in this MS program, I discovered a very common phenomenon among them. Many of them had low Medical College Admission Test (MCAT) scores. The MCAT, required for med school admission, is divided into 4 subsections. Two of the sections are science sections, one section is psychology, and the final and troublesome section is the Critical Analysis & Reasoning section (CARS). Many students performed decently in the science and psychology subsections, but their lower CARS scores adversely affected their overall test score. It was apparent that many students who applied to the MS program were struggling with critical reading skills.

I chose to address this challenging problem with a mobile learning application (MLA) design. Sharples, et.al, (2005) recognized that today's learners are in constant motion, learning across time as they use their schema to connect to past experiences and knowledge, moving from one topic to another, and using their cell phones to answer questions and retrieve information. Classrooms are no longer the only place where people learn. Students today are using their phones to do many things from ordering food, checking on social media, communicating with friends and family, and learning. In fact, 19% are using educational learning apps (Chen, 2015). Whether they are tuned into a podcast, listening to music, or doing their homework, their phones have become an extension for learning. Their cell phones create a personal learning environment (PLE) (Veletsianos, 2010) where the learner "has responsibility for his or her own content. No longer a passive consumer, the learner is now in an ownership role" (p. 186).

Students who want to improve their MCAT score or prepare for the MCAT are self-motivated and driven to study for the test by the desire to do well. I wanted to create a mobile learning application (MLA) for ardent learners to put them in charge of their own learning. Hase & Kenyon, (2017) identified

this strategy of self-determination as heutagogy. Heutagogy is a learner-centered strategy where "the learner is the major agent in their own learning, which occurs as a result of personal experiences" (Hase & Kenyon, p. 112). Since the learner has the desire to learn and knows what they need and want to learn, the instructional designer's responsibility is to provide the tool for the learning task that literally exists in the palm of their hands.

Sharples, et.al., (2005) offer an early framework for theorizing about Mobile Learning design. Unlike learners 50 years ago, today there is a convergence between learning and technology where learning is "personalized, learner centered, situated, collaborative, ubiquitous and lifelong," while technology is also "personal, user centered, mobile, networked, ubiquitous and durable" (p. 5). Mobile devices "function as interactive agents in the process of coming to know for the learner (p. 7). A mobile learning application due to its ubiquitous nature appeared to be the best learning tool to use to help med-school hopefuls, the first persona for this app, improve their critical reading skills and scores. Moreover, the just-in-time connectivity provides opportunities to learn in new ways convenient for the learner (Chen, et.al., 2015). Students could practice their critical thinking skills wherever and whenever they wanted.

I created an MLA that is characterized by three sections: understanding critical thinking, how to develop critical thinking (characteristics) and a practice menu. Knowing that some learners may only want to practice, while others may want to review the characteristics, I broke down each of these sections. I also began to imagine other personas. For example, I thought, "what if I were to have different sections of the practice menu?" There I designed not only a CARS section, but also a section for reading social media with a critical lens for another type of persona who might need support in parsing out real and fake information. In addition, I created a problem-solving skills section and interviewing skills section as I realized that other types of young-adult personas might be interested in my MLA to improve their life-skills.

Evaluation Methodology

The MLA I created is different than a typical consumer mobile application. Bergin (2018) identifies ten ways the learner experience (LX) is different than the user experience (UX) considered by commercial mobile application designers. For example, "Learning science and Human Centered Design can be in conflict" (p. 17). I want to honor the peer reviewed research on a particular design feature, yet I am aware that I will need to consider the preferences and data gained from my own evaluation process. Though I will lean more into LX, I also want to consider UX as I evaluate and revise my MLA. Bergin (2018) likens this balancing decision that a designer makes "more of an art than a science" (p. 17).

The Learning experience (LX) is the "Synthesis of Ideas from Learning Design and User Experience Design" (Ahn, 2019, Fig. 1) Ahn (2019) says that "new learning environments have to both draw from a robust theoretical understanding of learning but also be usable, engaging and impactful for learners to experience" (p.2). Bringing together LD with UX I will focus on four facets for LX (Ahn, 2019). Applied to my artifact, the first facet, "knowledge", is learning how to think critically. This skill is the goal of my MLA. I know the user's "interest," the second facet, is to improve critical thinking skills, but I also hope they develop new ways of seeing themselves and begin to include critical thinker into their "identity," the third facet. I hope as they use this app, they begin to redefine themselves as critical thinkers, who know what "tools," the fourth facet, they need to use to become not only better prepared for high stakes tests but also prepared to be more critical in thinking as a life skill (pp.2-3). The content of this app and the name are intimidating. For some, the subject matter might create negative connotations in the user's mind. Because of this and as well the cognitive load of critical thinking content, I want the UX and LX to not overwhelm the cognitive process. Therefore, I want to find out the answer to the overarching question: Is the extraneous cognitive load low enough considering the heavy intrinsic cognitive load?

Merriënboer & Sweller (2005) conclude that the intrinsic nature of learning may be affected by the extraneous cognitive load. Critical thinking, by nature, creates a heavy intrinsic load; therefore, the extraneous nature (how the material is being presented) must be lower. Effects of my MLA that help to lower the cognitive load included "worked examples" (Merriënboer & Sweller, 2005, p. 151). My Critical Thinking application provides several worked examples; I'm wondering how helpful these examples are for the learner. Does the user want and need these examples? Moreover, two other effects to consider are "split attention" and "redundancy" (p. 151). Each is a result of too much information. Perhaps I should replace the "multiple sources of information" (p. 151) with single information. My learning app explains critical thinking, offers characteristics and an explanation of each characteristic, and then offers practice in 4 areas: Critical Analysis and Reasoning Skills, Reading Social Media, Problem Solving and Interviewing Skills.

The application prototype was based on several personas. Personas help the designer understand their audiences/users of their designs. This is why there are 4 critical thinking practice sections in the learning application which bring up more questions. One of the LX questions would be to see how the user feels about the preliminary information sections (characteristics & understanding critical thinking) or do they think these sections should be designed into one source of information and not separated? From a UX standpoint, I also wonder if the visual features are distracting from the content of the app? How could it be reduced? Finally, this app is meant to be adaptive. How could the prototype be improved if I reduced the topic areas based on four personas to two personas? Then I could focus more on the adaptive features.

Methods and Alignment

During the early years of learning with mobile applications, Traxler (2009) recognized that traditional evaluation methods were not going to work as effectively as with Apps like MLA. The learner experience and the hardware platforms carry the evaluation in a different direction than formal and

sedentary approaches to learning that were used in traditional evaluations for learning. In addition, because of the ever-changing technology, it makes the evaluative task more challenging (Traxler,2009). The evaluation methods need to be aligned to the MLA's unique characteristics. Thus, the evaluation methods I want to use are a combination of the LX, UX and UI (user interface) approaches where I will use a usability test measuring the questions about the content and how it is presented. To do this I will use a questionnaire with subjective as well as objective measures of the UI.

In addition, I will need to keep in mind cognitive load since not only does the interface of the app affect the UX but so does the information. One way to address cognitive load subjectively is to ask participants how much mental effort they put into using my MLA (Skulmowski, & Rey, 2017). However, this will need to be developed further than just a simple question. Since self-evaluation of mental effort is often biased and not reliable, learners from children to adulthood share a metacognitive belief of effort that has revealed their overconfidence (Scheiter et.al., 2020). Effort is a relative construct. Because it is a challenge to establish effort with just a single question, the question may need to be rephrased a couple more times and other questions will need to be asked around effort (Scheiter, et.al., 2020). Scheiter, et.al. (2019) suggest using both qualitative and quantitative measures and considering each user's individual characteristics and then considering how their individual characteristics may affect the way they discriminate tasks. Though I will not be able to set a completely objective experiment with objective measures such as eye tracking and physiological responses while using the application in a research laboratory that has instruments for such measurements, I will be able to increase objectivity with the types of questions I use. Through a questionnaire and a "think-aloud" protocol (Schmidt, et.al, 2020, Sec. 4.7). I hope to measure with objective and subjective methods.

Participants and Procedures

I will evaluate my MLA using 10-12 participants between the ages 18-30 to use the application asynchronously. According to usability researcher, L. Faulkner (2003) "the only clear answer to valid

usability testing is that the test users must be representative of the target population" (p. 382). Having 10 users will increase confidence in the data (Faulker, 2003). Most of the participants will be pre-med students familiar with the MCAT and studying for it. Some of the users will be working or in college and not in the medical field, however. I will choose them from among the pool of students I have worked with over the past few years. I plan to send an email asking if they would participate in a study that would take no more than a half-hour of their time. I will send them a link to the Figma prototype of my MLA embedded in the questionnaire that I will create in Microsoft Forms and ask them to complete it within 10 days. In addition to the email, with a link to the questionnaire, I will also send them an informed consent form to return signed as notification that they are participating.

Among the 10-12 people I will perform a "think-aloud" protocol (Schmidt, et.al, 2020, Sec. 4.7) with 5 of them in addition to giving them a questionnaire (Faudzi, et.al., 2024). With only 14 days to complete the user evaluations, I believe that 5 is a realistic sampling of users to complete the "think-aloud" evaluations (Schmidt, et.al, 2020, Sec. 4.7). The five people will be randomly selected among the pool of individuals I know in this 18-30 age group that may or may not be pre-med. The email that I send these 5 will be written slightly differently than the other evaluators. If they agree to participate with a signed consent form, I will send them a Zoom link for us to meet.

Questionnaire

Faudzi, et.al., (2024) say that it is the UI design that affects cognitive load, and not the content, especially if there is a poor user interface. Remembering what Traxler (2009) said about the ever-evolving technology, the evaluative frameworks and tools used to improve poor UI design and decrease cognitive load for a desktop application do not apply to my MLA. In addition, there are currently no proven tools for measuring extraneous cognitive load with MLA in general (Faudzi, et.al, 2024). Mobile learning apps have unique problems based on the size of screen, lack of tactile feedback, and the focus of attention on the display, making the experience challenging for the user if the design is

poor (Faudzi, et. al., 2024). However, Faudzi,et.al., (2024) recommend reducing tasks and expanding the rating scale to nine points to help increase reliability. Therefore, to measure the user's extraneous cognitive load for the user interface (UI), I am going to adapt Faudzi, et.al. proposed questionnaire. I plan to include, though slightly adapt, the tool presented by Faudzi, et.al, (2024). Areas such as content organization, navigation, signaling/cue, and aesthetic and minimalist design will be used (Faudzi, et.al, 2024, Appendix).

Think Aloud

In addition, the usability test that I hope to use will be the "Think-Aloud User Study" (Schmidt, et.al, 2020, Sec. 4.7). I would like to know what the user is thinking and feeling while they use the MLA prototype so that I can determine what areas are confusing or demanding on their cognitive load. Several of my questions will be answered through the "think-aloud" (Sec. 4.7):

1. Does the user want and need these examples embedded in my MLA?
2. What does the user think about the preliminary information sections (characteristics & understanding critical thinking) of my MLA?
3. What does the user think about the app having 4 different types of practice content? Which would they use and not use and why?
4. What areas are confusing or demanding on their cognitive load?
5. How much mental effort does this app require of them?

In a "think-aloud user study a single participant is tested at any given time. The participant narrates what he or she is doing, feeling, and thinking while looking at a prototype (or fully functional system) or completing a task. This method can seem unnatural for participants, so it is important for the researcher to encourage the participant to continue verbalizing throughout a study session" (Earnshaw, et.al, 2017, sec. Think-aloud user study). I hope to find some insight from listening carefully to what the user says as

they work through the prototype and to ask them some more specific questions as they choose what sections to navigate in the app. Creswell and Gutterman (2019) point out that the advantage of observing someone within the environment of completing a task will allow me to see and hear what they are thinking and feeling within the moment. Using this think-aloud (Schmidt, et.al, 2020, Sec. 4.7) approach, will position me as the "participant observer" (Creswell and Guetterman, 2019, p. 214) to guide the conversation at times and ask clarifying questions. This may help me to determine if I need to reduce the sections or combine the three pivotal sections that spring the user into various parts of the app. By using participants not interested in taking the MCAT, I might also be able to see which of the four practice sections they are drawn into. My MLA has several sections such as critical thinking during job interviews, problem-solving interpersonal relationships, and using critical thinking on social media. Observing the engagement of user interest will help me to determine if I should keep each of the practice areas that I created for the various personas or if I need to minimize the personas and make the app more adaptive.

For the "think-aloud," (Schmidt, et.al, 2020, Sec. 4.7) I will follow the Think-Aloud Plan and use Usability Evaluation Guide Document to take notes for 5 users as they separately think through the app. (See Usability Evaluation Guide Document for more information in the Appendix). And then I will give them the questionnaire. The notes and observations from the "think-aloud" (Schmidt, et.al) will be transferred to a table for more clarity.

Data Analysis

The two types of data analysis I will use are qualitative and quantitative data analysis. In the questionnaire I will use the Likert scale to create a 9-point questionnaire that will provide qualitative and quantitative data based on the questions that are asked.

Faudzi, et. al., (2024) questionnaire is already designed with scoring that ranges from 1-9 scale from strongly disagree to strongly agree (p.17). In addition, I will use "single-item [scoring]" to give me

an analysis that is detailed with each response (Creswell and Guetterman, 2019, p. 175). All the data from the questionnaire will be placed on an excel spreadsheet for further analysis. After preparing and organizing the data, I will use descriptive statistics to help me "summarize the overall trends or tendencies" (p. 182) in my data. Specifically using the measures of central tendency and variability can help me to grasp the central focus of the datasets and serve as a point of reference for informed decision making as I revise my MLA (*Measures of Central Tendency: Everything You Need to Know When Assessing Measures of Central Tendency Skills*, n.d.). Through this data analysis I especially hope to see the parts of my MLA that tend to create extraneous cognitive load for the user.

Using the Qualitative Process of Data Analysis Figure 8.1 (Creswell and Guetterman, 2019, p. 237), I will analyze the data from the 5 think-aloud protocols (Schmidt, et.al, 2020, Sec. 4.7). After getting a general understanding of the data, I will code the data based on description and themes (Creswell andGuetterman, 2019, p. 237) that I see. Codes will mean nothing until I see how they "(inter)relate and contrast with each other" (Lester, et.al., 2020, p. 101). From there I can create categories and then begin to discern themes that are relevant to my research questions.

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Appendices

Sample email

Greetings!

I hope this email finds you doing well. As you may remember, I am in the Master's Instructional Design and Technology Program at the University of Cincinnati. This is my final semester of the program where I am to test an artifact that I've created in the program. The artifact that I am testing is a mobile learning application (MLA) prototype. I'm writing to see if you would be willing to evaluate my MLA prototype? If you are willing to participate, this would take less than a half hour to complete. Here are the steps I am asking you to follow:

1. Open the attached consent form and sign it electronically. You can use the following link if you do not have adobe reader installed: You will need to download the consent form 1st and then you use the link to sign the form. After signing the form, please save it and return it to me via email. This will let me know that you are willing to participate in this evaluation.

2. Once you have signed the form and returned it to me. Please go to the following link to continue: https://forms.office.com/r/Bn63aQadvP

If you have any questions, please send me an email at yarchit@ucmail.uc.edu or a Microsoft Teams chat at (yarchit) if you are on the UC campus.

I very much appreciate your participation. Please complete the above 2 tasks within the next 2 weeks.

If you are unable to participate, please let me know. I understand and will not be offended.

Sincerely yours,

Tracy Yarchi

*Instructional Design and Technology MS Candidate

Program Manager | MSB 4257

University of Cincinnati College of Medicine

Department of **Pharmacology, Physiology, and Neurobiology**

513-558-4188 | Tracy.Yarchi@uc.edu

She/her/hers

Sample Consent Form

The following information is provided to help you decide whether you wish to participate in the present study. You should be aware that you are free to decide not to participate or to withdraw at any time without affecting your relationship with Tracy Yarchi, IDT MS Graduate Student at the University of Cincinnati.

The purpose of this evaluation is to get your feedback on my mobile learning application (MLA). Data will be collected using a brief survey after you review my MLA. The survey data will be the only data collected in the study. Do not hesitate to ask questions about the study before participating or during the study. I would be happy to share the findings with you after the research is completed. Your name will not be associated with the research findings in any way, and only the researcher (Tracy Yarchi) will know your identity.

There are no known risks and/or discomforts associated with this study. The expected benefits associated with your participation are the information about the experiences in reviewing my MLA. Please sign this consent form. You are signing it with full knowledge of the nature and purpose of the procedures. You may save a copy of this signed form. Please use a free electronic signature app. If you do not have one, you may use this link. Please return the signed and dated form to me after signing it. Thank you!

Signature_____ Date_____

Usability Evaluation Guide Document: Think Aloud Plan & Observation

This form is adapted from Process Street's Usability Testing Template. The purpose of the form is to help you prepare for your own usability test. During your test you can use it as an agenda to guide you through the steps of our abbreviated evaluations. The italicized text is there to provide direction and context. Please feel free to delete it as your draft.

<table>
<tr><td rowspan="5">Pre-Evaluation</td><td>Title of Your Artifact & Access Link</td></tr>
<tr><td>Critical Thinking App called: Deep Thinking
https://www.figma.com/proto/ycIgPuqywwobfpx59aUAn8/ORIGINAL-crit.-think.-app.-DUP-4.3(Copy)?node-id=7-42&t=UnwdY1q71SpY8aby-1&starting-point-node-id=7%3A42</td></tr>
<tr><td>Research Question– What you want to evaluate?</td></tr>
<tr><td>•</td></tr>
<tr><td>Test Scenario – How will you evaluate?</td></tr>
<tr><td>• I will observe the user thinking aloud as they use the application from the first screen. I will ask the user to make their thinking visible as they try the app prototype and to state what they understand about what is happening on each screen of the application. I will ask them to comment on what they are thinking and feeling as they go through the prototype and to explain their reasoning with each response. If they do not comment on the logical groupings of the buttons and the pathways of the navigation system, I will ask them to analyze this as well at the end of the interview when we debrief. I will be especially interested in their impression of the menus, symbols and text. I will also be interested in if they get lost in using the app and if they are able to follow the logical flow of the material. Finally, maybe they will think the app is boring. I will be interested in discovering this as well.</td></tr>
<tr><td rowspan="4">During Evaluation</td><td>Record both of your user's names</td></tr>
<tr><td></td></tr>
<tr><td>Welcome and Test Overview</td></tr>
<tr><td>The purpose of this interview is to see how you respond to this mobile application prototype. Because it is a prototype, some things may not work. The name of the prototype application is Deep Thinking. The prototype is designed to help the user develop their critical thinking skills. You will begin on the opening screen and then move through the application describing what you are thinking and feeling on each screen. Your honesty is most important. Do not worry about offending me. I'm especially interested in seeing how you navigate so please make your thinking visible as you navigate from one screen to the next. The data from this test will give valuable insight on what can be improved to make this app better. I</td></tr>
</table>

have some questions for you in the beginning and then when you are finished, I have some final questions for you. Also, I will ask you some questions along the way, but I'm most interested in listening to you. So, do you have any questions before we get started?

Pre-test Questions (if any)

1. Do you use mobile applications? What do you use them for? Which ones do you use? Or is there a reason why you don't use them?
2. What do you like or dislike about mobile applications?
3. Have you ever used mobile learning applications?
4. Have you ever used Figma before? We used this design software in the mobile learning class that I took where this prototype was created. This will lead us into the application prototype

Begin the test

During the think aloud:

1. What is your initial impression of this app?
2. What do you understand from the first screen?
3. What do you think about the second screen?
4. What do you understand the ? Button to mean? Navigate to the question screen. What do you want to do on this screen /which button do you want to go to first? Why?
5. Let's go to the home screen.
6. Where would you like to start? Why?
7. Let's go there and try it out.

If the evaluator is not describing what they understand and why they are choosing a button on the app related to usability, I will ask them to explain why.

Notes and Observations

Use this section (or a separate document) to record your notes and observations during the test. Be sure to record any critical errors, non-critical errors, and time to complete.

Question	*Eval response*	*Observations*	*Notes*
What is your initial impression of this app?			
Where do you think you go to continue?			
What do you understand from the first screen?			

	What do you think about the second screen? *What do you think is missing?*			
	1 What do you understand the (?) to mean? Please Navigate to the question screen. 2 What do you want to do on this screen /which button do you want to go to first? Why? *3*			
	Let's go to the home screen. Where would you instinctively go first *4*			
	Let's go there and try it out. *5*			
	Subjective Metrics			

	Please click on the link and complete the evaluation after the interview: *I will share the following link to be completed after the open-ended questions have been answered:*
	Open Ended Questions
	1. What sections of the app are memorable and why? 2. What parts of the application do you feel were unnecessary? 3. Can you identify and explain any parts of the application that you felt were missing or needed?
	Thank your user and close the evaluation

MOBILE LEARNING APPLICATION EVALUATION PLAN

Questionnaire

	DEMOGRAPHIC QUESTIONS	**YES**	**NO**	**PREFER NOT TO SAY**						
1	Are you pre-med									
2	Have you taken the MCAT or GRE before?									
3	Have you ever used a Mobile Learning Application before									
	CONTENT ORGANIZATION	**STRONGLY DISAGREE MORE**	**STRONGLY DISAGREE**	**DISAGREE MORE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**AGREE MORE**	**STRONGLY AGREE**	**STRONGLY AGREE MORE**
	How is the data organized? If it is organized well, you should have no problem in implementing your task PERFECTLY and in a SHORT PERIOD of time.									
4	I find that the structure of the mobile learning app is organized correctly.									
5	I find incomplete/inconsistent information.									
6	I can see that the related items and information are being grouped and arranged together.									
7	I find pages with excessive number of words.									
8	I can see that the images are organized appropriately.									
9	I think the information displayed in the mobile learning app is not crowded									

	NAVIGATION	STRONGLY DISAGREE MORE	STRONGLY DISAGREE	DISAGREE MORE	DISAGREE	NEUTRAL	AGREE	AGREE MORE	STRONGLY AGREE	STRONGLY AGREE MORE
	How do you move around the MLA? Do you need to scroll up and down many times before you can find the item that you need? If it is easy to navigate the MLA, then you should find the item in MINIMAL SCROLLING.									
10	For me, the navigation process is confusing.									
11	For me, the provided links lead to the correct destination									
12	I find that navigating the app is easy.									
13	I think the scrolling is too long.									
	SIGNALING/CUE	**STRONGLY DISAGREE MORE**	**STRONGLY DISAGREE**	**DISAGREE MORE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**AGREE MORE**	**STRONGLY AGREE**	**STRONGLY AGREE MORE**
	Do you know what button/link to click when implementing your task? Do you know that a text is a link? Or do you just click and see where it goes? If it is clearly signed, then you would NOT accidently CLICK on text that are NOT LINKS.									
14	There is a clue (such as color code, highlights and labels) that tells me what to do.									
15	There is a clue (such as color code, highlights and labels) that tell me where to go.									

16	I can clearly differentiate sections/chapters/activities with the use of colors, highlights, or labels.									
17	I can clearly see the system progress.									
	Aesthetic and Minimalist Design	**STRONGLY DISAGREE MORE**	**STRONGLY DISAGREE**	**DISAGREE MORE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**AGREE MORE**	**STRONGLY AGREE**	**STRONGLY AGREE MORE**
	Is the user interface design easy on the eyes? Or is it irritating?									
18	I find the layout of the mobile learning app is aesthetically pleasing.									
19	I find the layout of the mobile learning app is easy to understand.									
	VISUAL REPRESENTATION - FONT	**STRONGLY DISAGREE MORE**	**STRONGLY DISAGREE**	**DISAGREE MORE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**AGREE MORE**	**STRONGLY AGREE**	**STRONGLY AGREE MORE**
20	The font style is suitable for me to read.									
21	The font style is suitable for me to explore the necessary material.									
22	The font size is suitable for me to read.									
23	The font size is suitable for me to explore the necessary material									
24	To me, reading the font of the app is easy.									
	VISUAL REPRESENTATION - GRAPHICS COMPLEXITY	**STRONGLY DISAGREE MORE**	**STRONGLY DISAGREE**	**DISAGREE MORE**	**DISAGREE**	**NEUTRAL**	**AGREE**	**AGREE MORE**	**STRONGLY AGREE**	**STRONGLY AGREE MORE**

25	There are too many objects in a single page of the app, I need to scroll.									
26	I find that there are long menus with subcategories of links.									
27	I find that there are excessive number of links.									
28	I can see that there is/are irrelevant image/images in the pages.									
29	I can see that there are too many colors used for fonts, headlines, tables, menus and backgrounds.									
30	I found form in the mobile learning app.									
31	To me, understanding the graphics in the app is easy.									

The link below takes you to the live questionnaire:
https://forms.office.com/r/Bn63aQadvP