HW2: Analysis of a Learning Environment

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**Abstract:** For this analysis I studied the online learning technology created for children to learn Quran. This is a website called kidsquranreading.com. The contents of this website and the learning design includes specific learning objectives, which is to facilitate the teaching of the Quran, including correct pronunciation of the Arabic language, as well as a specific structuring of content that breaks down the information to be learned into manageable chunks. This website takes on a blended learning type of instructional method as it offers ways for the user to learn through both material available on the website itself and online video calls with accessible tutors. Interacting with the website itself presents certain challenges as the website mostly advertises courses that require a paid subscription, although there is much free content available including PDFs of the Quran, Quran translation, Quran with tajweed (reciting the Quran in the correct way), Duas (supplication for help from Allah), and other Islamic knowledge. One major con noticed was the lack of material available for demographics looking to begin learning Arabic, as most of what is available on the website is solely focused on Quran learning.

# 1. Introduction

This online technology comes in the form of a website available to anyone on the internet. Its name, kidsquranreading.com, accurately describes the use and intended audience that this technology was created for. This website is aimed and marketed towards young children beginning the study of the Quran, but due to its introductory nature, it could also be used by other demographics such as people newly converted to Islam and those at an introductory level in Arabic. The official intended audience for this technology is children.

The main learning objective with this website is to teach young children the Quran and the correct way to recite it. Additional learning objectives include being able to make Duas, as well as gain knowledge on Islam in general (e.g., How to pray, pillars of Islam, the 99 names of Allah).

A screenshot of a book

Description automatically generatedThe users would be getting feedback from the tutor and/or teacher who they signed up to take a class with, and this would come in the form of constructive criticism on how they can improve their Quran recitation and pronunciation of Arabic. In this way they would be practicing the main learning objective a lot.

This is how the page of the website displays the parts of the Quran as a PDF.

A screenshot of a book

Description automatically generatedA close-up of a text

Description automatically generated This is how the page of the website that displays different Islamic facts looks.

This is how the website displays the Quran classes they have available with the option for a 3 day free trial.

# 2. Design Features and Theory of Change

The key design features of the website as a whole is to expose the user to everything related to Islam, including things unrelated to learning to read and recite Quran. These features can be found everywhere on the website, specifically in the menu bar at the top that when selected drop down to a list of different options to choose from. This ranges from general information on how to perform prayer to information on hadiths (which are sayings and teachings from the prophet Muhammad PBUH that are an essential part of Islam). Due to the nature of what is offered on the website, there are no available assessments that work as gauges for the user’s progress, as discussed in “Measuring Learning” (Ch.3 Diamond et. al, 2009). This could be considered a design flaw of the website since it focuses on learning for kids and beginners but has no easy to access assessments to determine at what scale or pace the user is learning. As a source for information, everything is presented in an organized and easy to access manner.

The part of the website that focuses on assessment would be the classes the user would have to sign up and pay for. The type of assessment done during these tutoring classes falls under formative assessment, as there would be a constant cycle of feedback from the instructor and implementation of said feedback for the student. The type of feedback given to the student is crucial for the learning process and is very constructive for a demographic that would be prone to many errors (Ch.3 Diamond et. al, 2009). This creates the necessity for expert teachers who are familiar and masters in this topic (Ch.6 , Bransford et. al, 1999), as learning how to read and pronounce Arabic, specifically the Quran, can be a very daunting and a process filled with trial-and-error. Having a human tutor also allows for better tracking of progress and determining of which areas the user would need to focus on in order to improve, under the guidance of the teacher and the materials available to the student on the website.

# 3. Methods

I used multiple members from my group in this class in order to observe how another person interacts with this technology. I had asked these people beforehand and coordinated a time to meet in order for us to have ample time to sit down and for me to pay close attention to the ways in which they explored and used this new environment. First, I gave them a brief overview of what the website was about and the type of information that would be available on it in order for them to know what they were supposed to be looking for. I also clarified the demographic intended to be using this learning technology as well. Additionally, I asked them to think out loud in order for me to determine what their initial reactions are as that is necessary to understand the impression this technology is leaving on the users.

I decided to record information on how long it took them to become acquainted and familiar with where all the resources of the website could be found. Since the demographic for this technology is mostly children, it’s essential for the design of the website to be easy to figure out and not confusing. I also made sure to make quick observations on whether their first impressions of the design and layout of the website were negative or positive. Using the comments they made throughout their interaction with the technology, I was able to determine how intuitive the platform is and how engaging it is for the users. As this technology was made with children as the main user group, this becomes more relevant. I made note of where in the site they would get confused, as that could indicate areas of the design that may fall short for the intended demographic.

I specifically chose people who are Muslim and have prior experience navigating Quran learning technologies, as they would have a better understanding of what works better for a new Quran learner. Due to this, I was able to assess the effectiveness of the platform in fulfilling its learning objectives, and whether there are areas in the design that should be amended in order to increase effectiveness.

# 4. Findings

I believe that this specific learning technology is an example of a recurring issue many Quran learning technologies and platforms face. Additionally, me and the participants chosen to interact with the technology noticed further issues specific to this technology.

Off the bat, interacting with this platform was not the best experience as the user interface was very bland and boring, and definitely not what one would expect from a learning environment aimed toward children. I would consider that to be an important first impression that was left on me as well as on my group members that explored the website for the first time. The design of the website was effective in containing all the necessary information needed for new Quran learners, but the layout and design of the website fell short in regard to leaving a good impression on users accessing the platform for the first time.

A positive impression left on everyone who looked through the website was that the knowledge contained within the website was useful for a person hoping to learn more about the Quran and Islam. It failed in the presentation of this information to the user, which is critical when learning any new topic. I believe there could be improvements in order to fully succeed in implementing the learning objectives of this platform.

Something I liked about the design of this learning technology, and which I noticed most everyone also thought to be a good idea, was the use of a tutoring service in order to teach Quran. As people who have also gone through the difficult process of learning to read and recite Quran, we found appreciation in the implementation of a human teacher, because sometimes that is the most effective and only possible way for a person to master such difficult topics. When learning how to become familiar with a new, and usually completely foreign, language, there is sometimes no better way to go about actually learning it. Quran recitation also has many important details that only a person very familiar with the topic would be able to teach.

# 5. Discussion

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| **Learner-Centered** | This platform does not succeed much in implementing this perspective, as most of the user interface design is not fit or appropriate for the major demographic meant to be using this technology. The graphics and design of the website in general is not one that you would expect to find in an online learning environment marketed towards kids and could potentially come off as boring if a member of the target demographic where to interact with it. The content itself is also not presented in a way that could be particularly helpful or effective for the target demographic even though the content itself is accurate and helpful for the learning process in general. |
| **Knowledge-Centered** | This platform succeeded remarkably with this perspective, as much of the material available encourages real understanding of what is being learned instead of simple memorization. This paves the way for a student to be able to implement truly effective learning habits through the process of understanding the material they are supposed to be learning and the many different aspects that are relevant to it. |
| **Assessment-Centered** | In regard to the online tutoring services available for a fee, this learning technology succeeds in creating an environment in which feedback is provided to the student to facilitate better understanding and learning. This process of feedback and implementation of feedback makes it possible to create a learning environment tailored towards each student’s progress.  In other ways, this technology also fails in this aspect as there are no available assessments or progress checks on the main website and during the process of accessing the material for learning. This makes it harder to determine whether true learning is happening as the user becomes more familiar and exposed to the material they are supposed to be learning. |
| **Community-Centered** | This platform offers the user with the opportunity to connect with professionals in the field of Islam which offers advantages when a person is a new learner with close to no prior experience or knowledge on the subject matter. This tutoring aspect can be very helpful specifically to the demographic that would use this platform, as they would probably need as much help and feedback during their learning process as possible. |

This platform is helpful in certain aspects and to a certain demographic but perhaps not for the intended demographic. One of the only helpful and effective aspects of this technology would be the online tutoring services and the amount of material and information available to the new learner. The design of the website and the way the information is presented falls short of what is expected from an online learning technology created for children and new learners. The lack of assessments available to the user is also an issue, especially when the learning objectives are to become familiar with a topic that is usually very difficult to grasp and understand.

# 6. Conclusion

I learned the ways in which a technology with the aim of teaching can fail in implementing its main learning objectives. I noticed all the ways in which factors like layout and design can work to deter learning or make it ineffective. All the ways in which this platform design is wrong is helpful for our final project as we will be aware of what to avoid when designing. This is relevant especially when catering towards a specific demographic that may need particular functions and design aspects in order to facilitate a successful learning process. Since our initial plan is to cater towards children and beginners, the aspects from this online learning technology, both bad and good, can be very helpful for us when working on our project.

# 7. References

Bransford, J. D., Brown, A. L., & Cocking, R. R. (1999). The design of learning environments. *How people learn: Brain, mind, experience, and school*, 119-142.

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