

## Augmented Reality (AR) Device/App Evaluation Rubric

	<b>4 Exceeding Expectations</b>	<b>3 Meeting Expectations</b>	<b>2 Somewhat Meeting Expectations</b>	<b>1 Not Yet Meeting Expectations</b>	<b>Rationale</b>	<b>Notes</b>
<b>Students: Demographics</b>	The AR device/app is able to meet all the needs of learners with various and diverse technological skills	The AR device/app is able to meet the needs of most learners with diverse technological skills	The AR device/app is somewhat able to meet the needs of some learners with diverse technological skills but some will be left to struggle	The AR device/app does not take into account the different learning needs of students with diverse technological backgrounds	All students learn differently and it is also important to acknowledge that they will use the AR device/app with different amounts of experience. Learners from different countries/cultures will also have even more variance in technological skills	
<b>Students: Access</b>	The AR device/app has functionality for all students regardless of mobile device and type of user Internet access	The AR device/app has functionality for all students regardless of mobile device and user Internet access, except there is no mobile capability	The AR device/app has some functionality for all students regardless of user Internet access, however some mobile devices may not be supported or there may or may not be mobile capability	The AR device/app has a limited range of users who can use it based upon type of mobile device, user access and/or high speed capability only	Students will be accessing the AR device/app using a variety of mobile devices and living in a variety of financial situations. The AR device/app should account for these variances.	

<p><b>Students: Learning Styles</b></p>	<p>The AR device/app takes into account all types of learning styles and does not favour some over others. A variety of media is able to be used</p>	<p>The AR device/app takes into account all types of learning styles, but may be limited in the variety of media available for use</p>	<p>The AR device/app is limited in supporting different learning styles, but a variety of media is available for use</p>	<p>The AR device/app is limited in supporting different learning styles and may be limited in the variety of media available for use</p>	<p>All learners are unique and there is literature to support that they learn better in some ways over others (e.g. visual vs. auditory). The rich variety of media that is available in this technological age can help support different learning styles.</p>	
<p><b>Students: Health</b></p>	<p>The AR device/app has disclosed/published any and all health concerns relating to usage of their product. There are no health risks to the user.</p>	<p>The AR device/app has disclosed/published any and all health concerns relating to usage of their product. Health risks to the user are within reasonable limits.</p>	<p>The AR device/app has disclosed/published any and all health concerns relating to usage of their product. There are some health concerns that might not enable all users to use the product safely.</p>	<p>The AR device/app has not disclosed/published any and all health concerns relating to usage of their product OR there are health concerns that will not allow for safe usage of the product.</p>	<p>AR is a relatively new technology in which there are limited studies on how its use can adversely affect the user's health. Health issues to consider are vision, neurological, developmental, and physical harm from negligent use.</p>	
<p><b>Ease of Use: Computer/Informational Literacy</b></p>	<p>Instructors and students will recognize all affordances to make full use of the AR device/app without learning</p>	<p>Instructors and students will recognize enough affordances to make use of the AR device/app without much</p>	<p>The AR device/app has some aspects that are familiar to most users, but will require some learning time by</p>	<p>The AR device/app has a steep learning curve for students and instructors on how to use it to its full capacity</p>	<p>If instructors and most importantly students are required to learn new skills in order to use the AR device/app, then</p>	

		learning. However, there are some features that will require future learning	both instructors and students		this will take valuable time away from teaching the curriculum	
<b>Ease of Use: Orientation</b>	Within 20 minutes of use, students will be able to function effectively in the AR device/app environment	Within 20 minutes of use, students will be able to function effectively in the AR device/app environment, however some supplied informational videos are included	Within 40 minutes of use, students will be able to function effectively in the AR device/app environment, however some supplied informational videos are included	It will take over 60 minutes of use for students to be comfortable in the AR device/app environment. Informational videos are not supplied to help speed up the process	According to Bates (2014), students should be able to feel comfortable within 20 minutes of logging in to any media or software environment in order to familiarize themselves	
<b>Ease of Use: Interface Design</b>	The AR device/app's interface is highly intuitive for all users which takes into account learning styles and disabilities, software functionality and graphic design	The AR device/app's interface is highly intuitive for most users, but does not take into account learning styles and disabilities. However, software functionality and graphic design are sound	The AR device/app's interface is lacking in 1-2 areas regarding learning styles and disabilities, software functionality and graphic design	The AR device/app's interface has not taken into account learning styles and disabilities, and has major issues with software functionality and/or crude graphic design	The concept of design is crucial when designing a AR device/app. Developers need to take into account how humans respond to various affordances, learning disability adaptations, how the software performs on a daily basis, and how up-to-date it appears with its graphic design	

<p><b>Ease of Use: Reliability</b></p>	<p>The AR device/app software is fully tested, not prone to crashes and is stable. 24/7 support is available for instructors and students</p>	<p>The AR device/app software is new and could be prone to crashes. 24/7 support is available for instructors and students</p>	<p>The AR device/app software is fully tested, not prone to crashes and is stable. However, support falls outside of peak operating periods for students</p>	<p>The AR device/app software is new and could be prone to crashes. 24/7 support is either not available or hours of support fall outside peak operating period for students</p>	<p>Having a stable AR device/app is crucial to prevent student frustration and ease of access. Help support should be available during the hours that most students would be using the AR device/app</p>	
<p><b>Cost: Uses minimal hours to author content (if applicable)</b></p>	<p>The AR device/app system is intuitive and allows instructors to author content efficiently</p>	<p>The AR device/app system is intuitive and allows instructors to author content easily</p>	<p>The AR device/app system is intuitive and allows instructors to author content with minor difficulties</p>	<p>The AR device/app system is intuitive and allows instructors to author content with some difficulties</p>	<p>One financial cost is that of the instructors/designers time for creating educational content</p>	
<p><b>Cost: Uses minimal hours to update course media and/or curriculum</b></p>	<p>The AR device/app system is efficient and makes it easy to update relevant course media and/or curriculum</p>	<p>The AR device/app system allows for easy updates to course media and/or curriculum</p>	<p>The AR device/app system makes it relatively easy to update media and/or curriculum</p>	<p>The AR device/app system does not allow for easy updates</p>	<p>Having a device/app that allows for easy and efficient updates reduces the amount of time needed by the instructor to keep the course current and relevant</p>	
<p><b>Cost: Includes all media necessary for design</b></p>	<p>The AR device/app contains all the necessary plug-</p>	<p>The AR device/app contains many necessary plug-</p>	<p>The AR device/app contains most of the necessary</p>	<p>The AR device/app contains some of the necessary</p>	<p>Investigate the different types of media that work with the AR</p>	

	ins <sup>1</sup> and authoring tools needed to provide high quality educational media	ins <sup>1</sup> and authoring tools needed to provide high quality educational media	plug-ins <sup>1</sup> and authoring tools needed to provide high quality educational media	plug-ins <sup>1</sup> and/or authoring tools needed to provide high quality educational media	device/app to decide if it is all inclusive or if you will need to purchase other programs	
<b>Cost: features vs financial cost</b>	The financial cost of the AR device/app system provides exceptional value	The financial cost of the AR device/app system provides good value	The financial cost of the AR device/app system provides some value	The financial cost of the AR device/app system provides little value	For your purposes, does the AR device/app system provide an appropriate numbers of features for the cost of running the system	
<b>Teaching Function and Media Selection: Media Functions</b>	The AR device/app has an extensive range of media and/or plug-ins <sup>1</sup> available	The AR device/app has a good range of media and/or plug-ins <sup>1</sup> available	The AR device/app has a range of media and/or plug-ins <sup>1</sup> available	The AR device/app has some media and/or plug-ins <sup>1</sup> available	To be functional in many different instructional scenarios the AR device/app should have multiple types of media available	
<b>Teaching Function and Media Selection: Instruction methods</b>	The AR device/app is appropriate for all types of instruction methodology that will be used by instructors	The AR device/app is appropriate for most types of instruction methodology that will be used by instructors	The AR device/app allows for many types of instruction methodology that will be used by instructors	The AR device/app does not allow for the types of instruction methodology that will be used by instructors	The system should allow for different types of instruction so that it is useful to many different kinds of instructors	
<b>Teaching Function and Media</b>	The AR device/app enhances course	The AR device/app allows course or lesson	The AR device/app contributes to	The AR device/app contributes to	The AR device/app should allow designers	

<sup>1</sup> A plug-in is an additional piece software that adds different features to a program. Plug-ins work to enhance the customization of the software.

<b>Selection: Media and teaching design</b>	or lesson design that is thoughtful and creative	design be creative and educational	educational course or lesson design	minimal course or lesson design elements	and instructors to follow the best practices for enhancing course/lesson design	
<b>Teaching Function and Media Selection: Teaching skills</b>	The AR device/app promotes the development of skills needed for successful learning	The AR device/app provides the opportunity to develop the skills needed for successful learning	The AR device/app provides some level of skills development for successful learning	The AR device/app does not promote skills development for successful learning	The AR device/app should also help learners develop the skills needed to be successful in the field	
<b>Interactivity: Tools</b>	The AR device/app promotes interactivity between students, groups and instructors with a wide variety of tools.	The AR device/app has tools for supporting interactivity between students, groups and instructors.	The AR device/app has limited tools for supporting interactivity between students, groups and instructors.	The AR device/app does not have tools that promote interactivity between students, groups and instructors.	An AR device/app should engage the learners in discussions using a variety of methods.	
<b>Interactivity: Collaboration and feedback</b>	The AR device/app facilitates a large amount of student interaction, collaboration and instructor feedback in a variety of ways.	The AR device/app facilitates student interaction, collaboration and instructor feedback.	The AR device/app facilitates minimal interaction, collaboration and instructor feedback.	The AR device/app does not facilitate student interaction, collaboration and instructor feedback.	It is important that an AR device/app provide an opportunity for students and instructors to give and receive feedback. This increases the quality of interactions.	

<p><b>Organizational: Implementation time</b></p>	<p>The AR device/app technical support department provides training and to the instructors. The AR device/app is user friendly and intuitive to use.</p>	<p>The AR device/app technical support department provides training instructors.</p>	<p>The AR device/app technical support department provides limited training to the instructors.</p>	<p>The AR device/app technical support department does not provide training to the instructors.</p>	<p>Instructors have a limited time to spend on learning and implementing a new AR device/app.</p>	
<p><b>Organizational: Technical support</b></p>	<p>The AR device/app provides technical support to its users. Students and instructors can receive technical assistance in a timely manner.</p>	<p>The AR device/app provides technical support to its users. Students and instructors can receive technical assistance.</p>	<p>The AR device/app provides limited technical support to its users. Students and instructors may receive technical assistance for a limited time only.</p>	<p>The AR device/app does not provides technical support to its users.</p>	<p>The organization using the AR device/app and the instructors do not have the time or the budget to handle IT issues for instructors and students.</p>	
<p><b>Networking</b></p>	<p>The AR device/app allows and encourages engagement and interaction with external connections such as subject specialists or professionals. Social media is effectively integrated into the framework of the device/app.</p>	<p>The AR device/app allows interaction with external connections. Social media usage is integrated into the framework of the device/app.</p>	<p>The AR device/app allows for limited interaction with external connections. Social media is minimally integrated into the device/app.</p>	<p>The AR device/app does not allow for interaction with external connections. Social media is not integrated into the device/app</p>	<p>The level at which students engage with subject specialists and professionals in the field can be beneficial to their overall success with the topic they are studying.</p>	

<p><b>Security: Storage of Information (if applicable)</b></p>	<p>If the AR device/app stores information, it is stored on a secure server. It provides a secure, private, and controlled environment and access is by password only.</p>	<p>If the AR device/app stores information, it is on secure servers.</p>	<p>If the AR device/app stores some information, it is on secure servers but also uses “the cloud” as well.</p>	<p>If the AR device/app stores information, it is all stored “on the cloud”. It is not a secure, private device/app. Information can potentially be accessed by governments.</p>	<p>When student information is held outside of the user’s home nation, the potential for student information and communications could be shared</p>	
<p><b>Privacy: Policies and guidelines</b></p>	<p>The AR device/app has strict policies and guidelines in place that protect the privacy of students and staff.</p>	<p>The AR device/app has policies and guidelines in place that protect the privacy of students and staff.</p>	<p>The AR device/app has limited policies and guidelines in place to protect the privacy of students and staff.</p>	<p>The AR device/app has no policies or guidelines in place to protect the privacy of students and staff.</p>	<p>Detailed policies and guidelines on privacy must be in place when students and staff are utilizing various sites outside of the AR device/app, such as social media sites.</p>	

**References:**

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