HOTS: Understanding and Remembering Rating (using this rubric, out of 24 possible): 19

Age Group (grade): K-3  4-7 8-10 11-12 College / University 

Presentation App  Gaming App  Android  iOS 

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 4 | 3 | 2 | 1 |
| Relevance (PLOs) | The app’s focus has a strong connection to the purpose for the app and appropriate for the student. The app also connects to one or more PLOs in a subject or over a variety of subjects. | The app’s focus is related to the purpose for the app and mostly appropriate for the student. The app also connects to one or more PLOs in a subject. | Limited connection to thepurpose for the app and may not be appropriate for the student. The app may cover one PLO in any given subject. | Does not connect to thepurpose for the app and not appropriate for the student. The app does not cover any PLOs. |
| Customization | App offers complete flexibility to alter content and settings to meet student needs. If using a presentation app, it allows many different levels of presentations to be created. | App offers some flexibility to alter content and settings to meet student needs. If using a presentation app, it allows some different levels of presentations to be created. | App offers limited flexibility to adjust content and settings to meet student needs. If using a presentation app, it allows few different levels of presentations to be created. | App offers no flexibility to meet student needs. If using a presentation app, it allows one type of presentation to be created. |
| Thinking Skills & Multiple Intelligences (Bloom and Gardner) | App encourages the use of two or more of Bloom’shigher order thinking skills. App may appeal to three or more of Gardner’s multiple intelligences | App encourages the use of one or more of Bloom’shigher order thinking skills. App may appeal to two or more of Gardner’s multiple intelligences | App encourages the use of one or more of Bloom’shigher order thinking skills. App may appeal to one or more of Gardner’s multiple intelligences | App is limited to the use of Bloom’s higher order thinking skills.App may appeal to only one of Gardner’s multiple intelligences. |
| Usability | Student can launch andoperate the app independently. No help is needed once a tutorial is completed (if applicable) | Student needs to have ateacher show or model how to operate the app. Little to no help is needed once a tutorial is completed (if applicable) | Student needs to be cued each time the app is used. Some help is needed once a tutorial is completed (if applicable)  | App is difficult to operate or crashes often. The tutorial is useless and students need a lot of help and guidance from the teacher. (if applicable) |
| Engagement | Student is highly motivated to use the app.App is engaging for students of two or three learning styles. | Student uses the app asdirected by the teacher.App is engaging for students of one or more learning styles. | Student perceives app as“more schoolwork” and may be off-task when directed to use the app.App is engaging for students of one or more learning styles. | Student avoids the use of the app and might complain when its use is required. |

Options (choose one):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 4 | 3 | 2 | 1 |
| Sharing (presentation apps) | Student product is saved in app and can be exported to the teacher or for an audience on a different device. | Student product is available in app butexporting is limited and may require a screenshot. | Student product is not accessible from anyone external to the device – the device must physically be in the teachers hand to see the final project. | No student product is saved, students do not have anything to show for their time spent in the app. |
| Feedback (game apps) | Student is provided specific feedback within the app which allows them to extend their learning. Performance data may be shared with teacher or others by exporting it. | Student is provided feedback within the app that may help to extend their learning. Performance data may be shared with teacher or others using a screenshot. | Student is provided limitedFeedback within the app which does not allow them to extend their learning. Performance data may be shared with teacher or others using a screenshot. | Student is not providedFeedback, if feedback is needed, would come from a teacher or others watching them play the game and guiding them after. |

Additional Comments about the App: See below

Adapted from the Vincent App Rubric for evaluating educational apps found at: <http://static.squarespace.com/static/50eca855e4b0939ae8bb12d9/50ecb58ee4b0b16f176a9e7d/50ecb593e4b0b16f176aa974/1330908312793/Vincent-App-Rubric.pdf>

  **iTunes**  **Google Play**

App Store Rating: 3.5/5 stars Google App Rating: 5/5 stars

Cost: Free. Teachers, check out this site to see a comparison between the free teacher account and the premium upgrade account that is not free. <https://www.buzzmath.com/Schools> (teacher for free account you must supply not only your contact info but also school information)

HOTS (Blooms) - *Understanding and Remembering-* Depending how a teacher chooses to use this app relates to how it fits with Bloom’s taxonomy. It can be used to develop students’ understanding of specific math concepts and/or it can be used for classroom or at home practice to help students solidify what they have been taught. The game is divided into four separate sections titled “Common Core 6th Grade, Common Core 7th Grade and Common Core 8th Grade and NCTM Middle School”.  Under each section there are grade specific learning outcome topics i.e. fractions, geometry, decimals etc.  Under each of these there are topic specific activities, for example, under fractions adding fractions, subtracting fraction.  Each topic specific activity starts with 10 individual practice questions. Students receive immediate feedback to their answer and have the option to retry a question. They move on to the next question when they are ready. Once students have reached 100% accuracy/ mastery they unlock a mission which follows a more challenging problem solving activity.

I chose to download and try out the free app, as a student, as I have been looking for one that will meet the needs of my Math 8 students. I can see myself using NCTM Middle School component of this app, as each concept/topic starts at a grade 6 level and has students progressing to a mastery at a grade 8 level. It would allow me to individualize my students  learning without having to identify, to them, what grade level they are starting at.

Online Reviews:

Fleming, Sandra. ( 2, May, 2013). *BuzzMath Middle School.*Retrieved from  <http://bestappsforkids.com/2013/05/buzzmath-middle-school/>

iLearn Technology Blog. (18, June, 2012). *Buzz Math: Middle School math practice for proficiency.*Retrieved from  <http://ilearntechnology.com/?p=4703>

[Petersen, Julie. (20, September, 2013). *Buzzmath -Common Core Aligned Math App For Middle School-App Review .* Retrieved from http://www.funeducationalapps.com/2013/09/buzzmath-common-core-aligned-math-app-for-middle-school-app-review.html#ixzz2v4H28RZz](http://www.funeducationalapps.com/2013/09/buzzmath-common-core-aligned-math-app-for-middle-school-app-review.html#ixzz2v4H28RZz)

For more indepth information, that includes regular blog posts outlining updates made to BuzzMath as well to read  more reviews, go to: <http://blog.buzzmath.com/>