| DOMAIN | 4 | 3 | 2 | 1 |
|--------------------------|---|---|--|--|
| Curriculum Connection | Skill(s) reinforced are strongly connected to the targeted skill or concept | Skill(s) reinforced are related to the targeted skill or concept | Skill(s) reinforced are prerequisite or foundation skills for the targeted skill or concept | Skill(s) reinforced in the app are not clearly connected to the targeted skill or concept |
| Authenticity | Targeted skills are practiced in an authentic format/ problem-based learning, environment | Some aspects of the app are presented in an authentic learning, environment | Skills are practiced in a contrived game/simulation format | Skills are practiced in a rote or isolated fashion (e.g,. flashcards) |
| Feedback | Feedback is specific and results in improved student performance | Feedback is specific and results in improved student performance (may include tutorial aids) | Feedback is limited to the correctness of student responses and may allow students to try again | Feedback is limited to the correctness of student responses |
| Differentiation | App offers complete flexibility to alter settings to meet student needs | App offers more than one degree of flexibility to adjust setting,s to meet student needs | App offers limited flexibility to adjust setting,s to meet student needs (e.g: few levels such as easy, medium, hard) | App offers no flexibility to adjust settings to meet. student needs (settings cannot be altered) |
| User Friendliness | Students can launch and navigate within the app independently | Students can launch and navigate within the app independently <i>after</i> demonstration by teacher. | Students can launch and navigate within the app independently <i>after</i> demonstration by teacher. Students require intermittent support. | Students need constant teacher support in order to use the app |
| Student Motivation | Students are highly motivated to use the app and select it as their first choice from a selection of related choices of apps | Students use the app as directed by the teacher | Students view the app as "more schoolwork" and may be off-task when directed by the teacher to use the app | Students avoid the use of the app or complain when use of the app is assigned |
| Publishing | Students work can be published in multiple formats and/or social media sites | Students work can be published in multiple formats and/or social media sites after being, transferred | Students work can be only be published to a computer. | Students work cannot be published. |
| Reporting | Data is available electronically to the student and teacher as a part of the app. | Data is available electronically to student on a summary page and may be screenshot to share with | Data is available electronically to the student, but is not presented on a single summary page. | The app does not contain a summary page. |
| Connectivity | App connects seamlessly to Wi-Fi network | App connects to Wi-Fi network with manual configuration | App requires port change to connect to Wi-Fi network | App unable to connect to Wi-Fi network |

Originally created by Harry Walker – Johns Hopkins University (18/11/2010) Edited with permission, by Kathy Schrock, (25/02/2011) Revised by Greg Alchin (23/10/2011)

| N | Needs assessment and profile Determine current level of performance and desired outcomes. | |
|---|--|--|
| A | Access to content and tools. The technology eliminates barriers that prevent access to information | |
| 2 | Building supports and scaffolds for learner variability. The technology includes scaffolds and supports that account for learner differences | |
| | Leveraging multimedia The technology provides multiple means of expression. | |
| Ξ | Expression and creativity The technology unleashes creative potential and disrupts perceptions of disability. | |

Redefinition - App/device allows for the creation of new tasks, previously inconceivable

Modification - App/device allows for significant task redesign

Augmentation - App/device acts as a direct tool substitute, with functional improvement

Substitution - App/device acts as a direct tool substitute, with no functional change

Apps & Universal Design for Learning



Representation

Recognition networks are the 'what' of learning. How we gather facts and categorize, what we see, hear, and read. Identifying letters, words, or an author's style are recognition tasks. Presenting information & content in different ways enables



Action & Expression

Strategic Networks are the 'how' of learning. How we organize and express our ideas. It involves planning and performing tasks. Writing an essay or solving a math problem are strategic tasks. Differentiating the ways that learners can express what they know,



Engagement

Affective Networks are the 'why' of learning. How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions. Stimulating interest & motivation for learning enables learners to become purposeful

| Taxonomy | Processes | App and Activity | |
|---------------|--|------------------|--|
| Creating | designing, constructing, planning, producing, inventing, devising, making, | | |
| Evaluating | checking, hypothesising, critiquing, experimenting, judging, testing, detecting, | | |
| Analysing | comparing, organising, attributing, outlining, finding, structuring, integrating, deconstructing, | | |
| Applying | implementing, carrying out, using, executing, | | |
| Understanding | interpreting, summarising, inferring, paraphrasing, classifying, comparing, explaining, | | |
| Remembering | recognising, listing, describing, identifying, retrieving, naming, locating, finding, | | |