

IPI-Technology Application Descriptions

Draft 4-8-12

1. Word Processing –

Technology applications used for the *production* (including composition, editing, formatting, and possibly printing) of any sort of printable material. Examples include Microsoft Word, Microsoft Works, Apple iWork Pages, WordPerfect, OpenOffice.org Writer, Google Docs.

2. Mathematical Computations –

Technology applications used to *perform* basic mathematical operations. This can range from devices featuring simple functions (+, -, x, ÷) to sophisticated graphing computations. This application can include the use of calculators or calculator-like computations via other devices such as computers, cell phones, the Internet. It also includes the use of *spreadsheets* to organize and analyze data in rows and columns within worksheets. The data in each cell can be uniquely defined and the relationship between cells can be specifically determined using formulas for calculation. Examples include Microsoft Excel, Microsoft Works, Apple iWork Numbers, Quattro Pro, OpenOffice.org Calc, NeoOffice, Google Docs.

3. Media Development –

Technology applications used in the *collection, manipulation, or creation* of media. This includes applications for collecting, editing, and designing photo, video, and audio digital data. Presentation application examples include Microsoft PowerPoint, Apple iWork Keynote, OpenOffice.org Impress, NeoOffice, Google Docs. Photo/video editing application examples include Adobe Photoshop, Microsoft Office PhotoDraw, Google Docs, Windows Movie Maker, iMovie, Final Cut, Adobe Premier. Audio application examples include AVS Audio Editor, Adobe Audition, Wavosaur, Audacity. Media design examples include two and three dimensional media design processes in applications such as Adobe Illustrator, Microsoft Publisher, CorelDRAW, iStudio Publisher, OpenOffice.org Draw, 3D Studio Max, Google SketchUp, Blender, Synfig Studio. This application also includes the use of applications for collecting digital media with digital cameras and audio recorders as well as methods for translating non-digital visual and audio media into digital formats.

4. Web-Based Information Search –

Technology applications that utilize the *World Wide Web to search and gather information*. Examples include use of Google, Yahoo, Ask Jeeves, Bing to seek existing information and Skype or other forms of interactive media to interview or interact with resources to collect fluid information or opinions.

5. Web-Based User Collaboration –

Technology applications that *support collaboration and sharing of user-generated content*. Web-based applications that facilitate creating, collaborating, editing and sharing user-generated content online. Web 2.0 tools include social networking sites, blogs, Wikis, video sharing sites, cloud computing, interactive applications, etc. Examples of social networking sites include Edmodo, Google+, LinkedIn, Facebook, Myspace. Examples of blog sites include Edublog.com, Blogspot.com. Wiki examples include Google Sites, Wikispaces.com. Video-sharing site examples include Teacher Tube, You Tube. Cloud computing examples include Google Docs, Dropbox, Prezi. Interactive application examples include Read-Write-Think.org interactive tools, Into the Book.

6. Classroom Interactive Media –

Technology applications that support *interactive* learning between teacher and student, student and student, and/or other resource persons *within* the classroom. This commonly includes applications supporting hand-held questions-response systems and/or computer-based large screen projection units driven via desktop computer or on-screen touch response. Examples include interactive use of clickers, SMARTBoards, Promethean Boards.

7. Commercially Developed Learning Materials –

Technology applications (materials) *produced by organizations or publishers* that support curriculum, instruction, or assessment. This includes purchased technology materials such as electronic textbooks, computer games and videos designed to support learning. Also included are subscription-based services on the Internet such as reading supplements, current issues/news, multi-media video streaming and supplemental resources linked to purchased curriculum materials. Examples: Discovery Streaming, Brainpop, Reading A-Z and electronic encyclopedias. This can also include free web-based educational resources created to support instruction. Examples include Fun School, Spelling City, National Library of Virtual Manipulatives, Math Playground.

8. Teacher/Staff Developed Learning Materials –

Technology applications (materials) *produced by the students' teacher or teachers* that support curriculum, instruction, or assessment. Examples include teacher required and supplemental materials such as readings, presentations, tutorials, videos, podcasts, and games designed/developed by the students' teacher(s). The materials may have been designed and developed by curriculum committees, district support staff, or other educators directly responsible for providing support materials to the district's classrooms.

9. Student Technology Development –

Technology applications that support *student development of other technology applications*. This includes designing, writing, testing, debugging, and maintaining programming language code. Examples include learning and using languages such as JavaScript, Basic and Visual Basic, HTML.

The IPI-T process for coding and studying student engagement during the use of technology is in the final stages of refinement. Please note that this 4-8-12 draft is a working draft. The developers will continue to refine the technology descriptions and the data collection protocols throughout the Field Test so a final version of the process is ready for implementation no later than the fall of 2012.

If you currently use the IPI in your school you might consider participating in the Field Test this spring (2012). Participation in the field test will necessitate successful completion of a three-hour IPI-T Workshop. The Workshop is open ONLY to individual who have completed the basic IPI Level I Workshop and achieved a reliability score of .80 or higher at the conclusion of that workshop. The purpose of the IPI-T Workshop is to certify those individuals to use the IPI-T supplement during their use of the basic IPI Process. Several schools and currently certified data collectors from those schools will be selected to participate this spring in the Field Test. If you would like to apply to participate in the Field Test, contact Jerry Valentine at ValentineJ@missouri.edu.