

K-2 Resources to Support Tech Literacy in Young Students



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The Michigan Department of Education has developed K-2 Online Benchmarks Assessments in English Language Arts and Mathematics. This raises questions about how to prepare young students with the skills to learn using technology, as well as take online assessments. How can teachers ensure their students have the knowledge and skills needed to effectively use the computer to learn and measure what they have learned in the classroom? Many K-2 students need more instruction and practice with the computer before they will be ready to participate in the Michigan K-2 Benchmark Assessments. The resources outlined below provide a starting point for teaching computer literacy skills such as how to use a mouse, how to use a keyboard, and basic computer functionality. A few related research articles are also linked to and described. This list is just the beginning of a work in progress document that will identify resources to support computer literacy for young learners. If you know of a great resource that is not on this list, please contact Linda Howley (howleyl@michigan.gov) so it may be added.

Related Articles

1. *Education Week Digital Directions, Virtual Learning for Little Ones Raises Developmental Questions*
 - <http://www.edweek.org/dd/articles/2013/06/12/03younglearners.h06.html>
 - Examples of how to make sure the technologies your elementary students are using are appropriate for their age
2. *National Association for the Education of Young Children (NAEYC) and the Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College, Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8*
 - <http://www.naeyc.org/content/technology-and-young-children>
 - This joint position statement provides guidance for early childhood educators about the use of technology and interactive media in ways that can optimize opportunities for young children's cognitive, social, emotional, physical, and linguistic development.

3. *T.H.E. Journal, 12 Best Practices for Moving Young Learners Forward with Technology*

- <http://thejournal.com/articles/2012/11/07/early-learning-and-technology.aspx>
- Six important questions to ask before choosing apps for early learners and six key principles on technology use for early learning programs.

Website Resources

1. *Internet4Classrooms Pre-K Mouse Skills Resources*

- http://www.internet4classrooms.com/early_childhood/mouse_skills_pre-k.htm
- 51 online resources to help young children learn basic mouse skills
- Free resource

2. *Minimouse.us Mouse Skills Practice Resources*

- <http://minimouse.us/index.html>
- 20 mini-games that encourage students to practice moving the mouse, selecting objects by clicking the mouse, and moving objects across the screen by clicking and dragging
- Free resource

3. *Earobics Game Goo – Buggy Trails*

- <http://www.earobics.com/gamegoo/games/tina2/tina2.html>
- A simple game that involves clicking objects in a specific order
- Free resource

4. *ABCya.com Keyboard Zoo*

- http://www.abcya.com/keyboarding_practice.htm
- Keyboarding Zoo is a fun and educational activity to help early elementary age students learn the keyboard.
- Children are encouraged to use their index or pointer fingers to match letters on the screen to their keyboards.
- Recommended for grades K, 1, and 2
- Free resource

5. *ABCmouse.com for Schools*

- <http://www.abcmouse.com/schools>
- The lessons of the Step-by-Step Learning Path consist of books, puzzles, games, songs, art activities, and/or printables that relate to a specific topic. Each lesson offers students

several different ways to learn, in accordance with the recommendations of early childhood experts

- Free to public schools

6. *KidSmart Guide to Early Learning and Technology for Home and School*

- <http://www.kidsmartearlylearning.org/>
- Interactive step-by-step parent guide on how to use the computer to encourage early learning at home, how to make the computer part of the household routine, and how to make sure that the computer serves the child's needs.
- Interactive step-by-step teacher guide on how to use computers to support early learning in the classroom, how to make computers part of the regular classroom program, and how to make sure the computers serve the needs of all children in the classroom.

Hardware and Software Resources

1. *EasyTech by Learning.com*

- <http://www.learning.com/easytech/>
- Illustrated, animated, guided student tutorials for teaching skills such as:
 - a. Mouse Basics: K-2
 - How to select items on screen
 - How (and why?) to double-click items on screen
 - How to drag-and-drop items on screen
 - b. Introduction to Keyboarding
 - c. Visual Mapping Basics: Grades K-2

2. *Childrens Fun Keyboard and Fun Mouse Combo (FunKeyBoard™ & FunMouse™)*

- http://www.amazon.com/Childrens-Fun-Keyboard-Mouse-Combo/dp/B000VR2OG0/ref=pd_cp_pc_1
- The dazzling red layout and color-coded keys of the FunKeyBoard™ computer keyboard help young children learn their vowels, consonants, numbers and function keys, while the tiny optical FunMouse™ - a computer mouse sized just right for a kid's small hands - will have them clicking and scrolling with better comfort and control.
- Other childrens' mouse versions available on Amazon:
http://www.amazon.com/s/ref=nb_sb_noss?url=search-alias%3Daps&field-keywords=tiny%20mouse%20optical%20kids%20mouse

Instructional Technology Resource Search Websites

1. *Graphite*

- <http://www.graphite.org/>
- Graphite™ is a free service from nonprofit Common Sense Media designed to help preK-12 educators discover, use, and share the best apps, games, websites, and digital curricula for their students by providing unbiased, rigorous ratings and practical insights from our active community of teachers.

2. *Power My Learning*

- <http://powermylearning.org/>
- PowerMyLearning is a free digital learning platform for K-12 students, parents, and educators, developed by the national nonprofit CFY. PowerMyLearning makes thousands of the most compelling publicly available digital learning activities from across the web easily accessible and usable, creating an unbiased, go-to destination.
- A free account introduces a world of valuable resources:
 - a. Thousands of thoroughly vetted online learning activities in all major K-12 subject areas
 - b. Easy-to-find activities tagged by subject, grade, standard, activity type, language support, and more
 - c. Playlist feature to select and sequence activities (like songs in iTunes) and differentiate learning by student or class
 - d. Flexible platform that can help seamlessly thread learning from school to the afterschool center to the home

3. *edshelf*

- www.edshelf.com
- Edshelf is a directory of websites, mobile apps, and desktop programs that are rated and reviewed by parents and educators, for parents and educators. We help you find the right educational tools for your specific needs.

3. *edSurge*

- <https://www.edsurge.com/products/>
- EdSurge helps educators discover the best products for their students and inspires developers to build what educators and learners need. Through their weekly newsletters and their website, they cover the latest innovations in education technology. They are also building a collection of reports on the latest products.