TeachME Professional Development

Developing Educational Technology

Opportunity 1: Improving Mastery of Academic Skills

1. Tools and apps that provide new learning activities to help students increase academic proficiency are in high demand, and in particular, teachers are seeking tools to help students practice skills in authentic environments and to:

A. Ensure that students show mastery
B. Give students an opportunity to develop real-life skills
C. Help students take more control of their learning
D. Promote determination, rigor, and critical thinking

Opportunity 2: Developing Skills to Promote Lifelong Learning

2. In addition to intellectual ability, researchers have found that other habits can have just as strong an influence on achievement, and such habits include:

A. Tenacity and perseverance
B. Motivation and flexibility
C. Technology and information literacy
D. Leadership and social skills

Opportunity 3: Increasing Family Engagement

3. Connecting parents of all backgrounds to school communities empowers them to become active, informed advocates for their children throughout their education and is a key element to ensuring student success.

A. True
B. False

Tip: Assessment Types

4. Formative assessments are generally formal and comprehensive and are often used to determine a final grade or ranking.

A. True
B. False

Opportunity 7: Improving Educator Productivity

5. The authors recommend providing teachers with custom productivity tools that will help teachers in each of the following ways EXCEPT:

A. To streamline workflow
B. To personalize instruction
C. To support needs of diverse students
D. To communicate effectively with students

Opportunity 8: Making Learning Accessible to All Students

6. In order to ensure that technology increases the ability for students with differing needs to participate in the same learning activities as their peers, app developers need to address functionality of all apps, create apps that address specific learning needs, and develop tools that:

A. Create opportunity for inclusion of all students
B. Personalize learning to adapt to a variety of learner needs
C. Enable students to communicate their thoughts and ideas
D. Encourage students to be independent members of the school community

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Opportunity 9/10 Closing Gaps

7. Opportunity gaps occur when one identifiable group of students outperforms another by a significant amount, due to limitations that are out of their control.

A. True
B. False

The Design Process: From Idea to Implementation- Disruptive Innovation vs. Incremental Improvement

8. Educational apps and tools that offer marginal and limited improvements on existing practice are referred to as "sustaining innovations," while "disruptive innovations" radically redefine the context, goals, and/or approach based on the foundations of learning science or other leaps of insight.

A. True
B. False

Use Data to Improve Your Design

9. The process of using short feedback loops to define assumptions, create prototypes, and obtain early user feedback, first to validate the need for your app or tool and later to improve its usability and impact, is known as:

A. Reciprocated design
B. Replicated design
C. Iterative design
D. Accentuated design

Stories From the Field: Design Thinking in Education with Design EDU

10. Design thinking is a problem-solving approach used in many industries to develop creative approaches and solutions to problems, and in education it includes knowing students and families, identifying a problem worth solving, rapidly testing potential solutions, gathering feedback, and continuing to double-down on what's working.

A. True
B. False

Design Thinking as a Design Process

11. Which of the following is NOT one of the steps in the Stanford d.schools Design Thinking process?

A. Use empathy and really get to know your user
B. Define the problem your user is having that you want to solve and open up the solution set
C. Prototype and test your solution and iterate
D. Evaluate, brainstorm, and make adjustments

Ensuring Privacy and Protecting Student Data

12. Technology developers need to be transparent with students and families about what will be done with student data, what safeguards are in place to protect the data, and:

A. How the data will impact classroom practices
B. Why the data have educational value
C. If the school and staff have the training needed to keep data safe
D. If the data collection findings have sustainability

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13. Since most schools receive E-rate funds, they are required to educate their students about appropriate online behavior, including communication on social networking websites and in chat rooms, and to build cyberbullying awareness.

A. True
B. False

Networking and Funding-Ed Tech Incubators and Accelerators

14. Incubators and accelerators help speed up the process of creating and distributing a tool or service, and specifically, accelerators bring in an external management team to foster an idea that was developed internally, while incubators provide seed funding and media exposure and take small amounts of equity in return for funding and mentorship.

A. True
B. False

Inside a Typical School District-Key People

15. Generally, school districts have several departments focused on specific areas, such as special education, curriculum and instruction, and IT/technology, and each department can have a say in how technology is used to meet its goals and can influence how funding is allocated to apps and tools.

A. True
B. False

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16. Digital citizenship establishes a set of norms and practices regarding appropriate and responsible technology use, and it requires thinking critically, behaving safely, and participating responsibly online by using a:

A. Whole-community approach
B. Common sense approach
C. Research-based approach

D. Norms-focused approach

Getting Apps and Tools to Users-Ways to Improve Decision Making

17. Recommendations for app developers as they support schools in making decisions about which digital tools and apps to consider include each of the following EXCEPT:

A. Gain union support and secure a place in the budget
B. Do as much contract prework as possible, and review standard contract terms and negotiate modifications early
C. Find a community partner or other external champion who believes in the importance of the app or tool and who has influence on administrators and teachers
D. Price the app or tool strategically as purchases usually need to be competitively bid and approved by the board of education

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Software Interoperability and Open Data

18. One common format for web services in education is the Learning Tools Interoperability (LTI) standard, which allows learning management systems to exchange data with other learning tools and applications approved for use by the school, so students can have a seamless learning experience even if they are using apps created by a different developer.

A. True
B. False

Learning Resource Metadata Initiative

19. The Learning Resource Metadata Initiative (LRMI) was created to describe unique educational elements that are not found in other web searches and to make it easier to publish and discover digital learning resources through the use of:

A. Specific keywords
B. Simple search terms
C. Enhanced operators
D. Common tags

Important Trends in the Education Landscape-Blended Learning

20. In a blended learning environment, part of the learning occurs online and part occurs face to face, and instruction is blended into a seamless, integrated learning experience where learning:

A. Is fostered through independent work
B. Is encouraged through instructor and peer interactions
C. In each environment informs and supports the other
D. Is enhanced by improving overall student outcomes

Individualized, Personalized, and Differentiated Instruction

21. Individualization refers to instruction that is tailored to both learning preferences and specific interests of different learners.

A. True
B. False

Mastery-Based Learning

22. Which of the following is NOT one of the characteristics of mastery-based learning?

A. It is based on the premise that students learn best by mastering a particular learning goal before moving on to new material that builds on that goal
B. In the mastery-learning model, educators design progressions of sequential learning goals that progress from simple knowledge and skills to complex tasks
C. Goals must be personalized so that they are challenging to students but not too frustrating to achieve
D. Teachers in mastery systems evaluate student performance in specific topics and skills though standardized testing

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