

Teach more 



Guide to the Innovative Teacher Toolkit

Microsoft®
Partners in Learning

Innovative Teachers



Microsoft



Introduction

Through research and partnership with innovative and award-winning educators and education experts around the world, the Innovative Teacher Toolkit is designed to provide teachers with information about 21st century teaching and learning trends. It provides educators with a wealth of resources to help improve learning outcomes among K-12 students. It is also aligned with major education standards provided by the Partnership for 21st Century Skills, the UNESCO Competency Framework for Teachers, and other project-based learning methodologies.

What is the Innovative Teacher Toolkit?

The Innovative Teacher Toolkit includes an integrated set of whitepapers, lesson plans, and technology resources that help inspire and guide educators. With practical guides for using technology in the classroom, the Toolkit is designed to help improve learning outcomes around key 21st century skills—collaboration, creativity, critical thinking, organization, and assessment.

21st Century Skills

To start, the Toolkit includes a series of whitepapers that address five specific 21st century skill learning outcomes and support systems:

- Creativity
- Critical thinking
- Collaboration
- Assessment
- Organization

The whitepapers illustrate the significant role technology can play to help develop 21st century skills, and bring about positive student outcomes through personalized learning. Each whitepaper includes specific theories, case studies, activities, and resources to help educators deepen their knowledge and inspire their own ideas.

Lessons

To further develop these 21st century skills, the Toolkit includes ready-made lesson plans built around interdisciplinary themes:

- Cultural diversity
- Health
- Human rights
- Our environment
- The media

Each theme includes a collection of lessons for primary school students 5-10 years of age, and for secondary school students 11-16 years of age. These lessons:

- Use Microsoft and third-party technologies to support designated learning outcomes including, but not limited to, the development of research and evaluation skills, communication and collaboration skills, problem-solving skills, and presentation skills
- Link to helpful examples, resources, and Microsoft product how to guides
- Include essential questions and rubrics to assess learning

- Are designed using project-based learning principles to make learning personalized, motivating, collaborative, and—with the use of cool technologies—also a lot of fun!

In addition, the Toolkit includes extended projects created jointly between Microsoft and the International Society for Technology in Education (ISTE). These projects include: teaching and technology integration strategies for teachers, essential conditions for success, using project-based learning with technology, effective learning project implementation, as well as comprehensive classroom projects built around the following themes:

- Discovery
- Environment
- Heroes
- Space

Tools in Practice

These brief documents provide a quick snapshot of a few key Microsoft products used in classrooms around the world:

- Creativity using Microsoft Tools
- Critical Thinking using Photo Story
- Collaboration using Live@Edu
- Assessment using Mouse Mischief
- Organization using OneNote



Teachers strive every day to reach, motivate, and help ensure the success of every student. The more creative the lessons are, the more excited students become, and the more productive time spent in the classroom will be. Well-crafted use of technology can increase learner effectiveness and efficiency, increase learner engagement and satisfaction, and create more positive student attitudes toward learning.

The Innovative Teacher Toolkit empowers educators to make teaching and learning more collaborative, creative,

engaging and inspiring. New technologies require new pedagogies and these classroom lessons provide “hooks” in the curriculum to get the best of both worlds: engaged learning and innovative teaching.

Engage and Inspire Students

The Innovative Teacher Toolkit helps teachers:

- Tap into a variety of student learning styles, interests, and aptitudes
- Engage multiple learning modalities and develop students’ higher order thinking skills
- Plan more immersive, project-based, inquiry-based learning activities
- Foster teamwork and collaboration skills using today’s digital media and networks
- Encourage students to share and get feedback on their ideas and work products
- Inspire student creativity and self-expression
- Enable student learning to take place anytime and anywhere: home, school, or community

The toolkit integrates Microsoft products into engaging learning activities that build 21st century skills in addition to teaching content.

Save Time and Be More Productive

The Innovative Teacher Toolkit can help teachers streamline lesson planning and classroom management by enabling them to:

- Access ready-made lesson activities

- Learn how to build quick and effective learning and teaching resources
- Use integrated tools that work with each other and enable end-to-end activities and projects
- Discover the skills required to be a successful teacher and learner in the 21st century

Partner with a Technology Provider Committed to Education

Microsoft has a long-standing commitment to education and a robust ecosystem of technology and education partners ready to support teachers and schools. Educators can take advantage of:

- The Partners in Learning Network of global educators (**PartnersInLearningNetwork.com**) and Innovative Teachers Forums around the world
- Opportunities for students to use technology for learning, including: DreamSpark (**DreamSpark.com**), Imagine Cup (**ImagineCup.com**), and Microsoft IT Academy (**www.microsoft.com/education/msitacademy**)
- On-going research that is continually bringing new insights and software to education

“My goal in life is to find ways in which children can use technology as a constructive medium to do things they could not do before; to do things at a level of complexity that was previously not accessible to children.”

SEYMOUR PAPERT



Every student and every classroom is different. These lessons were designed to be easily adapted by teachers to meet the specific needs of their students. The Toolkit provides an array of lesson options covering different global themes, and serving different age groups. Also included are visual images and videos to help develop student curiosity, as well as assessment rubrics to provide opportunities for reflection and information about progress toward learning objectives. These resources can be used as-is, or used as a reference for your own customized tools.

Here are some additional tips from our expert educators to make the most of these lessons:

Take into account the “big picture” of your units and school year

Addressing student standards is a priority in most classrooms. The lessons presented here are designed with a big picture in mind and can be used to address many assessment standards. Reflect on the scope of your goals and the specific standards that you might link together within projects such as these. It's important to remember that teaching with technology does not take the place of other teaching opportunities, it enhances them.

Encourage critical thinking skills

Great questioning techniques can lead to opportunities for students to think critically. Group work, project-based learning, considerations for various learning styles and technology-integrated lessons all combine to lend themselves to higher-order thinking.

Celebrate and share your successes

As you implement these projects, make a concerted effort to share your students' work along the way, celebrate your successes and get others involved. Communicating your lesson outcomes to a larger audience generates enthusiasm, builds support, and positively impacts your school as a whole. You could share this with teachers around the world by joining the Partners in Learning Network (www.partnersinlearningnetwork.com).

Have a backup plan

It is always a good idea to have a “Plan B” for lessons that integrate technology. You should always have backup copies of presentations and files. If possible, have a paper copy of electronic presentations. Be prepared to continue with your lesson in an alternate mode should the technology you need become unavailable or unstable before or during your lesson.

Create your own internal “tech support”

Be alert to topics and situations that generate teachable moments. If a certain technology is not working, model troubleshooting up front. But begin to scaffold this support in ways that will eventually provide even more learning opportunities for students. Enabling students to become troubleshooters will provide a dual benefit for your classroom. First, students become more knowledgeable about troubleshooting technical issues, which is an incredibly powerful skill itself. Second, it frees you to direct your energies to other tasks.

Check your websites

In lessons, you have been provided with a number of websites containing information on the learning projects. Be sure to visit all relevant websites prior to the day of the lesson. Website addresses change often and it is important, for time and efficiency, to ensure that you have verified the website you plan to use. Preparation will provide you with enough time to select alternative websites, if necessary.

Demonstrate technology skills

Good teachers model effective uses of learning tools and when working with technology it is no different. Many teachers find it effective to demonstrate to students how to add a website to “Favorites” or how to navigate through directory structures to save files in the appropriate location etc. Practicing these kinds of techniques in front of your students, while explaining to them the steps you're following, helps prevent time-draining technical questions later.

Have fun!

Remember, learning is all about engaging students. The technologies used in the lessons offer opportunities for creativity, collaboration, and also a lot of fun. Students should be encouraged to experiment with the tools and learn by “play.”

More Educator Resources from Microsoft

For more K-12 educator resources, visit www.microsoft.com/teachers.