Microsoft in Education

Microsoft Certified Educator Study Guide

Microsoft

Resources

The Microsoft Certified Educator and Teaching with Technology programs are part of a rich set of professional development, assessment, and measurement resources that Microsoft offers to educators and school leaders. Please visit http://www.pil-network.com to get started.

Details about becoming a Microsoft Certified Educator are available on http://www.microsoft.com/learning/en-us/mce-certification.

The Teaching with Technology portal is located at: http://www.pil-net-work.com/pd/curriculum/twt.

Benefits

- **Third-party skill validation:** The MCE is a valid and reliable measurement of foundational educator Information and Communication Technology (ICT) competencies.
- **Achieve recognized teaching competencies:** Standards are mapped to the UNESCO ICT-CFT, Technology Literacy approach.
- **Free resources:** Self-assessments and a comprehensive eLearning curriculum are available free on the Partners in Learning network.
- **Free exams:** IT Academy members can access the curriculum via their IT Academy portal, and also receive 10 MCE exams free as part of member benefits.
- **Professional title:** After passing the test, you may use the title, "Microsoft Certified Educator" on your IT Academy profile, and other professional correspondence.

Becoming a Microsoft Certified Educator

Passing the Microsoft Certified Educator (MCE) exam demonstrates to parents, administrators, and future employers that you have the skills needed to enhance teaching and learning using the technology tools available to you. This guide explains what the MCE exam is, what it measures, and how you can best prepare yourself to pass this rigorous test.

What is the Microsoft Certified Educator Exam?

The Microsoft Certified Educator (MCE) exam is a valid and reliable assessment of the competencies required to apply technology skills in the context of teaching and learning. For education administrators, MCE represents a way to evaluate educator readiness, and can help measure the effectiveness of professional development engagements.

How will it benefit me?

Educators holding an MCE certification have the competencies needed to apply technology skills to the teaching and learning process, creating a richer learning experience for students, and saving precious time.

A certification that aligns to global educator standards can be a helpful differentiator, whether you are looking for your first teaching position, interested in taking on a leadership role in your school, or discussing your qualifications with parents.

What will the test cover?

The exam does not assess your ability to use specific tools, but addresses global educator learning objectives that measure the ways ICT integration can be used to improve outcomes in six core content areas that align to the UNESCO ICT-Competency Framework for Educators, including:

- Education Policy
- Curriculum & Assessment
- Professional Development
- ICT/Technology Tools
- Pedagogy
- Organization & Administration

Who should take the MCE Exam?

Candidates include individuals preparing to become classroom educators, current educators, faculty of educator training colleges, and other professionals looking to demonstrate that they have the skills needed to effectively integrate technology into teaching and learning.

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What specifically is measured?

Designed to be technology-neutral, the MCE assessment enables educators to demonstrate competency as outlined in the United Nations Educational, Scientific, and Cultural Organization Information and Communications Technology, Competency Framework for Educators (UNESCO ICT-CFT), Technology Literacy Approach. The exam also meets the National Educational Technology Standards for Teducators (NETS-T) published by the International Society for Technology in Education (ISTE).

UNESCO ICT-CFT	Educators should be able to...	Assessment Outcomes
Module 1 UNDERSTANDING ICT IN EDUCATION	TL 1.a Identify key characteristics of classroom practices and specify how these characteristics serve to implement policies	TL1.a Identify the policy goals supported by the ICT-CFT framework TL1.b Identify CFT framework and approaches TL1.c Identify the target student outcomes that result from implementing a CFT-supported learning experience
Module 2 CURRICULUM AND ASSESSMENT	TL.2.a Match specific curriculum standards to particular software packages and computer applications, and describe how these standards are supported by these applications TL.2.b Help students acquire ICT skills within the context of their courses TL.2.c Use ICT to assess students' acquisition of school subject matter knowledge, and to provide students with feedback on their progress using both formative and summative assessments	TL.2.a Given a curriculum goal or standard, incorporate ICT resources, including identifying skills required to implement the resources TL2.b Given a scenario, evaluate and select an ICT instructional resource; predict potential learning outcomes; evaluate validity, purpose, scope, cost considerations, licenses and copyright issues, classroom dynamics, group structure, and pedagogical approaches/models TL2.c Given a scenario, evaluate and select an ICT assessment resource, include formative versus summative approaches, and evaluate scope, cost considerations, and classroom dynamics TL2.d Select an appropriate, computer-based tool to monitor and share student performance data
Module 3 PEDAGOGY	TL.3.a Describe how didactic teaching and ICT can be used to support students' acquisition of school subject matter knowledge TL.3.b Incorporate appropriate ICT activities into lesson plans so as to support students' acquisition of school subject matter knowledge TL.3.c Use presentation software and digital resources to support instruction	TL.3.a Integrate ICT into didactic knowledge acquisition and learning theory models TL.3.b Create learning activities that use ICT resources to support a specific educational outcome TL.3.c Apply ICT resources to "just in time" and spontaneous learning interactions TL.3.d Design presentations that appropriately incorporate ICT resources

What specifically is measured? (cont.)

UNESCO ICT-CFT	Educators should be able to…	Assessment Outcomes
Module 4 ICT	TL.4.a Describe and demonstrate the use of common hardware technologies	TL.4.a Given a specific learning activity, identify the hardware requirements and devices necessary to support the activity
	TL.4.b Describe and demonstrate the basic tasks and uses of word processors, such as text entry, editing text, formatting text, and printing	TL.4bcd Given a scenario, select the most appropriate type of software application, focusing on general features/ functionality, and how to apply it, including traditional productivity tools such as word processing, presentation, graphic, and spreadsheet, and tutorial, organizational, and instructional tools, such as drill and practice, educational, data management, and collaborative
	TL.4.c Describe and demonstrate the purpose and basic features of presentation software and other digital resources	
	TL.4.d Describe the purpose and basic function of graphic software, and use a graphic software package to create a simple graphic display	
	TL.4.e Describe the Internet and the web, elaborate on their uses, describe how a browser works, and use a URL to access a website.	TL.4.e Use the Internet to support learning activities, including identification of level and type of Internet connection required and browser options; identify purposes and possibilities of the Internet; and use a URL to access a website
	TL.4.f Use a search engine to do a keyword Boolean search	TL.4.f Use a search engine and search strategies to support learning activities, including tailoring a search, using Boolean operators, performing a natural language search, and assessing search results
	TL.4.g Create an email account and use it for a sustained series of email correspondence	TL.4.g Create and use a web-based email account
	TL.4.h Describe the function and purpose of tutorial and drill and practice software, and how they support students' acquisition of knowledge of school subjects	TL.4.h Use software to manage and share student and classroom data
	TL.4.i Locate off-the-shelf educational software packages and web resources, evaluate them for their accuracy and alignment with curriculum standards, and match them to the needs of specific students	TL.4.k Use common communication and collaboration technologies to support learning activities
	TL.4.j Use networked record-keeping software to take attendance, submit grades, and maintain student records	
	TL.4.k Use common communication and collaboration technologies, such as text messaging, video conferencing, and web-based collaboration and social environments	

What specifically is measured? (cont.)

UNESCO ICT-CFT	Educators should be able to...	Assessment Outcomes
Module 5 ORGANIZATION AND ADMINISTRATION	TL5.1 Integrate the use of a computer laboratory into ongoing teaching activities TL5.2 Manage the use of supplemental ICT resources with individuals and small groups of students in the regular classroom, so as not to disrupt other instructional activities in the class TL5.3 Identify appropriate and inappropriate social arrangements to use with various technologies	TL5.1 Integrate learning activities into a computer laboratory environment; given a specified lab environment (1:1, 1:many, laptop, mobile device, desktop, mixed), identify appropriate learning activities TL5.2 Manage the use of ICT resources with individuals, small, groups, and whole groups in varied environments TL5.3 Manage logistics and social interactions around ICT resources; given a specific social arrangement scenario, identify appropriate implementation of ICT resources; given a scenario, identify most appropriate teaching strategy
Module 6 EDUCATOR PROFESSIONAL LEARNING	TL6.1 Use ICT resources to enhance productivity TL6.2 Use ICT resources to support the acquisition of subject matter and pedagogical knowledge	TL6.1 Use ICT resources to enhance educator productivity; given a productivity goal, identify an appropriate ICT resource TL6.2 Use ICT resources to support educator professional learning; given a professional development goal, identify an appropriate ICT resource, including distance and virtual learning TL6.3 Identify and manage Internet safety issues, such as cyber-bullying, predators, communication forums, and acceptable use policies

Get Going

1. Access the MCE study materials two ways:
   - Microsoft IT Academy: www.microsoft.com/itacademy
   - Microsoft Partners in Learning Network: www.pil-network.com
2. Take a self-assessment to receive your personalized learning plan
3. Study the courses indicated
4. Review the MCE Study Guide
5. When you are comfortable with the MCE study materials, take the MCE exam*

*Note: There is a cost for the MCE exam, but ITA member schools receive 10 free MCE exam vouchers, so inquire with your school before covering exam fees yourself.

How do I prepare?

Microsoft has created a comprehensive eLearning course, Teaching with Technology (TwT), to help support you in your preparation.

TwT includes a self-assessment to help identify your learning gaps, eLearning content to help you fill those gaps, summative assessments, and a range of learning activities and tutorials to encourage application in the classroom with students.

The TwT course is focused not on measuring expertise with specific tools, but rather on how to apply the right tools to a particular learning objective, or to increase productivity. The TwT self-assessment and summative assessments are good indicators of readiness. Most often, educators who pass the MCE exam have put extensive time into considering the material and how it could be applied to a number of different education contexts.

In addition to using the eLearning curriculum, you could attend a workshop, work with a peer coach or mentor, or observe other educators who are particularly skilled in this area.

Where can I access study material?

The TwT self-assessment, eLearning curriculum, summative assessment, and associated tutorials and resources can be accessed free at http://www.pil-network.com/pd/curriculum/twt.

If your school has an IT Academy membership, you can access the TwT eLearning via the IT Academy site. IT Academy includes an online reporting system and detailed tracking, letting administrators see how educators are progressing in their learning. IT Academy is located at http://www.microsoft.com/itacademy.

How do I know if I'm ready to take the exam?

The TwT self-assessment and summative assessments are good indicators of readiness. Most often, educators who pass the MCE exam have put extensive time into considering the material, and how it could be applied to a number of different education contexts. Find out if you're ready to take the exam by:

1. Taking a self-assessment to identify learning gaps
2. Studying TwT curriculum as needed
3. Taking a summative assessment
4. Applying what you learned
5. Reviewing the skills measured

What will the exam look like?

Each delivery of the exam will contain approximately 50 items. It will contain both case study and multiple choice items. You should allow two hours to take the exam. The case study exam format uses scenarios that simulate how educators might use ICT resources as they prepare for and conduct their classes. Case studies may contain separate sections (e.g., Learning and Teaching Environment, Student Objectives, Professional Development Objectives). Candidates answer several questions based on information provided in the case study.

Is any further assistance available?

There is a TwT Facilitator Guide available to help develop a plan to support educators in their learning journey. Online learning is most effective when combined with face-to-face instruction and communities of practice. Opportunities to practice newly acquired skills with a coach or a mentor will help embed new learning. Download the facilitator guide at http://pilnetwork.blob.core.windows.net/public/Facilitator_Guide.docx to develop a plan for supporting educators in their learning.

Have questions?
Email Contact- PILN@microsoft.com

Sample Questions

The types of questions that appear on the exam will vary, but may include one or more of the following:
- Multiple-choice, single answer
- Multiple-choice, multiple answer
- Best answer
- Extended matching
- Hot area
- Drag-and-drop
- Build list and reorder
- Simulations
- Short answer

The following questions are representative of those that you can expect to see associated with each case study. These items are samples only and will not appear on an actual exam.

Sample 1

Your students have accomplished the learning objectives and submitted their work. You need to show the work to parents at the next parent-teacher conference. You want to display the work in a continuous loop for three hours on a computer screen. Which resource should you use to display the student work?

☐ Word processing software
☐ Web publishing software
☐ Presentation software
☐ Desktop publishing software
☐ Picture editing software

Sample 2

What ICT skills do your students need to develop to meet learning objectives?

☐ How to use a database to store information
☐ How to carry out effective Internet searches
☐ How to download files to a removable storage device
☐ How to edit photos in an image-editing package

Where do I take the exam?

For MCE exams and Microsoft Technology Associate (MTA) exams delivered through academic outlets, register at Certiport.

What if I don't pass?

If you do not pass the exam, prioritize the skills that you should practice by focusing on the content areas where your exam performance was the weakest, and the content areas that have the highest percentage of questions.

When you are ready to retake the exam, schedule an appointment as you normally would. Note that you must pay for each exam you retake, and follow the Microsoft retake policy.

Additional Resources

Microsoft in Education

- Microsoft in Education: http://www.microsoft.com/education
- Microsoft in Education Professional Development:
  www.microsoft.com/education/professionaldevelopment

Partners in Learning Network

Find community, tutorials, and learning activities at www.pil-network.com. For help locating the Microsoft in Education training provider in your area, OR to become a Microsoft in Education training provider, email piltrainer@microsoft.com.

Microsoft IT Academy

If your school has an IT Academy membership, educators can access the eLearning via the Microsoft IT Academy (ITA) member site: www.microsoft.com/itacademy.

IT Academy includes an online reporting system and detailed tracking enabling administrators to see how educators are progressing in their learning. It offers teaching resources, curriculum, online communities, and stored accounts to track educator and student learning.

Courses

Digital Literacy:

> http://www.microsoft.com/about/corporatecitizenship/citizenship/giving/programs/up/digitalliteracy/eng/BasicCurriculum.mspx

Teaching with Technology Overview:

> http://www.pil-network.com/pd/twt/Overview

Level 100, 200, 300, and 400 Workshops:

> http://www.microsoft.com/education/ww/partners-in-learning/Pages/Professional-Development-for-Educators.aspx

Microsoft Certified Educator Exam:
- MCE Portal: http://www.microsoft.com/learning/mce-certification.aspx
- Certiport: www.certiport.com/sales

Innovative School Research Tool

The Innovative School Research Tool measures innovative teaching practices, allowing any school to measure its own innovative teaching practices. Using this tool can be a concrete first step towards building a school-wide language and common vision for innovative teaching.

Used by 2,400 schools in 79 countries, with over 100,000 educators taking the surveys, the tool is free and available in over 30 languages at http://www.pilnetwork.com/Sites/SchoolResearch/Index.

Additional Resources (cont.)

Microsoft Expert Educators

The Microsoft Expert Educator program is an exclusive, one-year program created to recognize global educator visionaries who use technology to create innovative learning environments for their students. Expert Educators work closely with Microsoft to lead innovation in education. They advocate, and share their thoughts on effective use of technology in education with peers and policymakers. They exchange best practices and work together to promote innovation in teaching and learning. Microsoft Expert Educators is located at www.pilnetwork.com/educators/expert.

Microsoft in Education Training Providers

Join our global community of peer coaches and training professionals. You will get access to regular monthly 'Trainer Spotlights', tools, and tutorials, as well the opportunity to collaborate in a monthly theme-based engagement with other trainers. Go to www.piltrainer.com to apply today.

About the UNESCO ICT Competency Framework for Teachers:

The TwT curriculum meets a number of widely recognized teaching standards, including The UNESCO ICT Competency Framework for Educators (UNESCO ICT-CFT), Technology Literacy Approach, and ISTE NETS for Educators. It can also help support educator success, as the US Common Core student standards require a high level of technology integration. Learn more at http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/unesco-ict-competency-framework-for-educators/what-is-the-ict-cft/.