

INTEL® TRANSFORMING LEARNING



Digital Learning Fundamentals

Syllabus

Course Description

The core Intel® Transforming Learning Course: Digital Learning Fundamentals is ten to twenty hours of face-to-face professional development focused on integration of digital tools to promote student communication, collaboration, creativity, and critical thinking. Several extension activities and optional modules provide additional topics and hands-on experiences that support teachers' needs and interests. Participants complete activities through which they learn important concepts and apply their learning to develop resources and strategies for effective use of digital tools within and beyond the classroom.

Course Orientation

The Orientation module introduces participants to the features and structure of the course. Participants can review this in advance of the training or at the beginning of the face-to-face course.

Module 1: Going Digital

Going Digital provides an overview of how classrooms can better meet the needs of 21st century learners. Teachers build their own confidence with technology as they are introduced to ways technology can be integrated into the classroom to make learning meaningful, relevant, and engaging.

Module 2: Digital Communication and Collaboration

With digital tools often at students' fingertips, the learning experience becomes more dynamic, productive, and motivating for students. In this module, participants develop ideas for integrating digital tools to promote student communication and collaboration.

In this module, participants:

- Learn ways that digital communication connects students, teachers, and community members while encouraging collaboration.
- Understand how digital collaboration can enhance learning opportunities for students.
- Explore how digital tools help develop skills such as persuasion, creative expression, and critical thinking.
- Create activities for their classrooms using digital communication and collaboration tools.

Lessons

Lesson 1: Student Communication

Participants learn about the importance of student communication while exploring several digital tools to facilitate student communication, such as graphic organizers, online discussions, publishing, and oral communication.

Lesson 2: Collaborative Communication

Participants learn about the relationship between communication and collaboration and explore several digital tools for collaborative writing and enhancing parent and community collaboration.

Module 3: Creativity in the Digital Age

Educators, business leaders, and politicians all recognize the importance of creativity in the 21st century. In the past, creativity was most often associated with the arts, but now it is recognized as essential to all disciplines and important to solving pressing problems. This module explores how technology can help students develop creativity skills.

In Module 3, participants:

- Identify the skills and dispositions that are necessary for creative thinking.
- Learn about the kind of classroom environment that promotes and develops creativity.
- Explore how to use technology in ways that foster student creativity.
- Plan an activity or strategy to encourage creativity in your classroom.

Lessons

Lesson 1: Creativity Across the Curriculum

Participants learn about classroom environments that promote creativity, while exploring instructional strategies to help students develop creative-thinking skills.

Lesson 2: Creativity and Digital Learning

Participants take a closer look at how technology can support student creativity with tools to manage learning and encourage experimentation, innovation, and creativity.

Module 4: Critical Thinking in the Digital Age

The challenge of the 21st century is to decide what readily available information is the right information for a specific purpose, and then to use that information constructively to make decisions, solve problems, and innovate. This is called critical thinking. In this module, participants learn the skills involved in thinking critically with and about technology.

In Module 4, participants:

- Learn how to enhance students' critical thinking through instruction.
- Learn strategies for improving students' critical thinking through teacher and student questions.
- Create resources using technology tools to help students think critically in the digital age.

Lessons

Lesson 1: Teaching and Learning Critical Thinking

Participants learn how technology can support students as they develop reasoning, decision making, and problem-solving skills.

Lesson 2: Questioning to Promote Critical Thinking

Participants develop questioning strategies to improve students' questioning skills. Technology offers avenues for incorporating questioning and giving teachers an opportunity to observe students' thinking as they work.

Optional Modules

Mobile Phones in the Classroom

Mobile phones can enhance student productivity, communication, and engagement while allowing learning to occur anywhere and anytime.

In this module, participants:

- Understand the benefits of using mobile phones in schools.
- Develop activity ideas for mobile phones to meet learning objectives and grow 21st century skills.
- Explore strategies to overcome challenges and manage mobile phone use in the classroom.

Cyber Safety and Online Responsibility

Even though many students are using multiple digital tools in their daily lives, it does not mean they are digital citizens skilled in navigating digital space safely and using technology ethically. Teachers are in the unique position to guide students along the path to becoming responsible users of technology.

In this module, participants:

- Explore the basic steps students need to know to be safe online.
- Examine prevalent online responsibility topics including cyber bullying.
- Use online resources to develop ideas for incorporating cyber safety and online responsibility into the curriculum.

Independent Digital Learners

Technology in educational settings demonstrates significant potential for increasing student productivity and enhancing student learning. At the same time, problems with technology can be a barrier to student success. Many of these issues are related to skills necessary for independent learning, particularly learning with and about technology.

In this module, participants:

- Explore technology tools that can help students foster their independence and productivity.
- Examine technology-learning strategies and troubleshooting techniques to help students become independent users of technology.
- Apply new learning to develop resources and lessons to use with students.

Technology Supported Arguments

A good argument in favor of or opposed to a premise, conclusion, hypothesis, or opinion requires the whole spectrum of critical-thinking skills and is an essential part of applying the learning of any subject area to real life. Technology tools and apps can help students prepare arguments and develop argumentation skills.

In this module, participants:

- Learn the basic components of an argument as well as strategies for teaching and assessing argumentation.
- Explore how technology can help students create and organize better arguments in all subject areas.
- Design a lesson that requires students to develop an argument in a digital format.