

Intel® Teach Program Essentials Course

Copyright © 2008 Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Education Initiative, and the Intel Teach Program are trademarks of Intel Corporation in the U.S. and other countries. *Other names and brands may be claimed as the property of others.

Version 10.1

Welcome to the Intel® Teach Program Essentials Course.

Thanks to teachers like you, over 5 million educators worldwide have made technology learning more compelling and more relevant.

Dedicated teachers nurture the innovative potential in young people, preparing them to step into a world where an understanding of technology can help shape their success. Like you, Intel is passionate about education, because we know it is the foundation for innovation and opportunity. So, on behalf of Intel, I want to thank you for your participation in this course.

Since 1999, the Intel Teach Program has helped educators in more than 45 countries. Our programs are built by educators, for educators, and they combine best practices with the power of technology. Young people today are entering a global economy where they'll be challenged to analyze information, collaborate, and communicate their ideas using an ever-changing array of technology. As part of our network of teachers, you can help prepare your students to succeed in this competitive environment.

Innovation involves taking calculated risks but yields big rewards. Your participation in the Intel Teach Program brings that same spirit to the classroom, where we know your students will be the true winners.

Best regards,

A handwritten signature in black ink, appearing to read "Paul Otellini". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Paul Otellini
Chief Executive Officer
Intel Corporation



Curriculum Introduction

The goal of the Intel® Teach Essentials Course is to help classroom teachers develop student-centered learning through technology integration and project-based approaches. The training consists of 32 hours of hands-on instruction to be delivered via eight curricular modules.

The themes of the Intel Teach Essentials Course include:

- Using technology effectively in the classroom to promote 21st century skills
- Identifying ways students and teachers can use technology to enhance learning through research, communication, collaboration, and productivity strategies and tools
- Providing hands-on learning and the creation of curricular units and assessments, which address state and national academic and technology standards
- Facilitating student-centered classrooms that encourage student self-direction and higher-order thinking
- Collaborating with colleagues to improve instruction by problem solving and participating in peer reviews of units

For additional information about the Intel Teach Essentials Course, visit our Web site at www.intel.com/education/teach/us or send an e-mail message to teacher.training@intel.com.



Table of Contents

Module 1: Teaching with Projects

Activity 1: Getting Started	1.01
Activity 2: Examining Good Instructional Design	1.12
Activity 3: Looking at Projects	1.19
Activity 4: Planning a Publication to Explain Projects	1.22
Activity 5: Creating My Publication	1.25
Activity 6: Reflecting on My Learning	1.27
Planning Ahead: Beginning the Planning Process	1.29
References	1.32
Module Summary	1.33

Module 2: Planning My Unit

Activity 1: Addressing Standards	2.01
Activity 2: Developing Curriculum-Framing Questions to Engage Students	2.05
Activity 3: Considering Multiple Methods of Assessment	2.10
Activity 4: Creating an Assessment to Gauge Student Needs	2.15
Activity 5: Creating a Presentation about My Unit	2.20
Activity 6: Reflecting on My Learning	2.25
Planning Ahead: Broadening My Understanding of Essential Questions	2.26
References	2.30
Module Summary	2.31

Module 3: Making Connections

Pair and Share: Presenting My Unit Portfolio	3.01
Pedagogical Practices: Meeting Standards in a Student-Centered Classroom	3.03
Activity 1: Targeting 21st Century Skills	3.04
Activity 2: Modeling and Teaching Legal and Ethical Practice Related to Technology Use	3.05
Activity 3: Using the Internet for Research	3.07
Activity 4: Communicating with the World through the Internet	3.10
Activity 5: Considering Web-based Collaborative Learning	3.14
Activity 6: Reflecting on My Learning	3.18
Planning Ahead: Incorporating the Internet	3.19
References	3.19
Module Summary	3.20

Module 4: Creating Samples of Learning

Pair and Share: Incorporating the Internet into Units 4.01

Pedagogical Practices: Helping Students Adapt to a Project-Based,
Student-Centered Classroom 4.02

Activity 1: Examining Student Samples 4.03

Activity 2: Planning My Student Sample 4.05

Activity 3: Looking at Learning from a Student Perspective 4.11

Activity 4: Revisiting My Unit Plan 4.14

Activity 5: Reflecting on My Learning 4.15

Planning Ahead: Reflecting on My Student Sample 4.16

References 4.17

Module Summary 4.18

Module 5: Assessing Student Projects

Pair and Share: Using Feedback to Improve My Student Sample. 5.01

Pedagogical Practices: Involving Students in the Assessment Process 5.03

Activity 1: Examining Assessment Strategies 5.05

Activity 2: Creating Student Assessments 5.08

Activity 3: Revisiting My Student Sample and Unit Plan 5.15

Activity 4: Reflecting on My Learning 5.17

Planning Ahead: Reviewing My Student Sample and Assessment 5.18

References 5.19

Module Summary 5.20

Module 6: Planning for Student Success

Pair and Share: Sharing Student Samples and Assessments 6.01

Activity 1: Creating Accommodations for All Learners 6.02

Activity 2: Supporting Student Self-Direction 6.05

Pedagogical Practices: Supporting the Diverse Needs of Learners 6.08

Activity 3: Creating Support Materials to Facilitate Student Success 6.10

Activity 4: Revisiting My Unit Plan 6.14

Activity 5: Reflecting on My Learning 6.15

Planning Ahead: Pre-Planning Facilitation Materials 6.16

References 6.21

Module Summary 6.22

Module 7: Facilitating with Technology

Pedagogical Practices: Using Questioning to Promote Higher-Order Thinking and Engage Students	7.01
Activity 1: Designing Facilitation Resources	7.04
Activity 2: Implementing a Successful Project	7.07
Activity 3: Reflecting on My Unit as a Whole	7.10
Planning Ahead Activity 1: Revising My Unit Portfolio	7.11
Planning Ahead Activity 2: Reflecting on Professional Development	7.12
References	7.13
Module Summary	7.14

Module 8: Showcasing Unit Portfolios

Activity 1: Completing Your Portfolio	8.01
Activity 2: Planning a Showcase	8.02
Activity 3: Showcasing My Unit Portfolio	8.05
Activity 4: Evaluating the Course	8.07
Activity 5: Concluding the Course	8.08
Module Summary	8.10

Appendix

Course Assessments	Appendix A
Assessment Plan Checklist	A.01
Curriculum-Framing Questions Rubric	A.02
Gauging Student Needs Checklist	A.03
Portfolio Checklist	A.04
Portfolio Rubric	A.05
Project Characteristics Checklist	A.07
Standards and Objectives Rubric	A.08
Unit Plan Checklist	A.09
Index	Appendix B

Use of this Curriculum and Companion CD

In the Intel Teach Essentials Course curriculum manual, icons help to guide you throughout the activities. A glossary of educational and technical terms is also available on the Curriculum Resource CD.



Save your work



View the Intel® Education *Help Guide* for technical instructions



View resources on the Curriculum Resource CD



View resources on the Web



Note helpful hint, idea, classroom tip, or warning



Discuss or share with your colleagues

The Curriculum Resource CD is an integral part of the curriculum and is used throughout the unit creation process. Files can be accessed through the CD Index or directly through its folder structure. Directions for use are available in the Intel Education *Help Guide*.

All material, unless otherwise stated, are the property of the Intel® Corporation and are subject to copyright. Unless explicitly authorized, reproduction is not permitted except for use with one's own K-12 students. Unauthorized modification, copying, transmission, and broadcasting is prohibited. This curriculum and its companion CD may not be sold or otherwise distributed for profit.

Login Information

You may want to use this page to write down the login information you will be using during this course. This may make it easier for you to reference this information as you proceed through the course modules and use the Web resources with your students.

Tagging/Bookmarking Site

URL: _____

Log in: _____

Password: _____

Blogging Site

My blog URL: _____

Log in: _____

Password: _____

Student sample URL (if needed): _____

Log in: _____

Password: _____

Wiki Site

Course wiki URL: _____

Log in: _____

Password: _____

Student sample or facilitation wiki URL (if needed): _____

Log in: _____

Password: _____

Online Collaborative Web Site

URL: _____

Log in: _____

Password: _____

Intel® Education Teacher Workspace (for *Assessing Projects*)

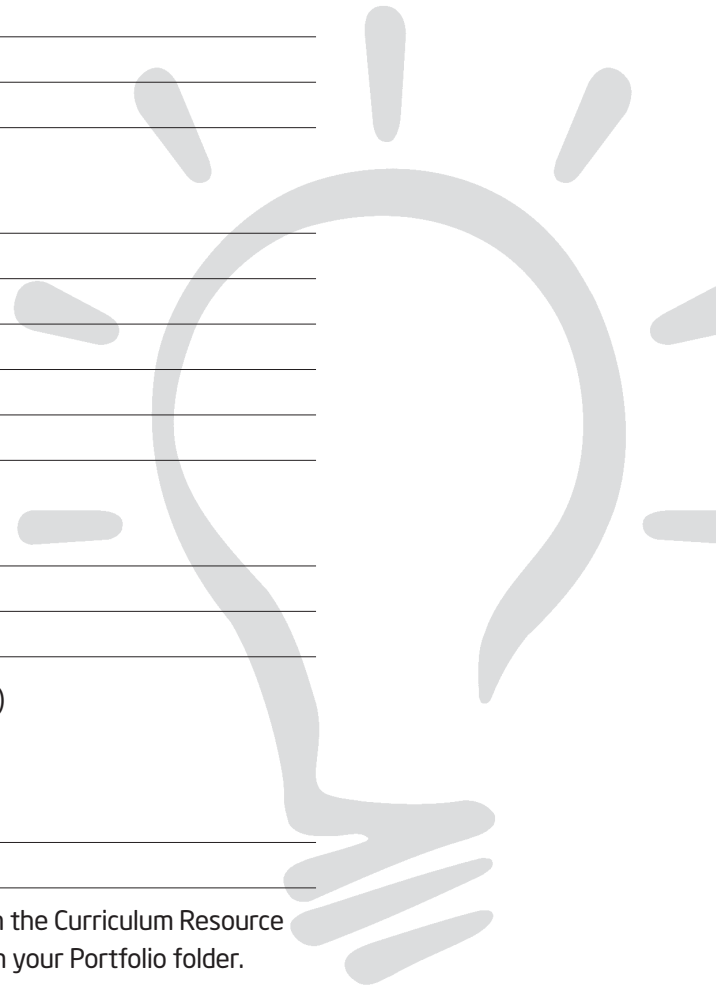
URL: www.intel.com/education/AssessingProjects

(Click **Enter** and navigate to the teacher workspace login.)

Teacher ID: _____

Password: _____

Note: This page is available in the *About This Course* folder on the Curriculum Resource CD so that your login information can be saved electronically in your Portfolio folder.



[illegible]