



Ways of Knowing: Multiple Intelligences and Technology

A Surfaquarium Online Course

Work with Walter and other like-minded educators in exploring and mastering the powerful possibilities for technology in your classroom!

Overview

Ways of Knowing: Multiple Intelligences and Technology is a rigorous ten week online course which brings together current research on the brain, instructional design, learning theory and technology to present a sound theoretical and practical framework for integrating technology in to the curriculum.

The course is built to foster a community of online learners in which each student brings his or her professional experience to the course and builds new understandings and skills based on interaction with classmates and course content.

Each week students will complete course readings, participate in online discussion based on those readings, and complete assignments which build towards a course project for the course: a ready-to-implement lesson, unit of project which integrates multiple intelligences theory and instructional technology into instruction.

The course is designed so that participants can successfully complete the course for 40 seat hours of professional development credit.



Course Text

McKenzie, Walter. Multiple Intelligences and Instructional Technology: A Manual for Every Mind. Eugene, Oregon: ISTE, 2002. ISBN 1-56484-192-8. <http://surfaquarium.com/MI/book1.htm>



Recommended Reading

Armstrong, Thomas. Multiple Intelligences in the Classroom (2nd edition). Alexandria, Virginia: Association for Supervision and Curriculum Development., 2000. ISBN 0-87120-376-6.

Gardner, Howard. The Disciplined Mind: Beyond Facts and Standardized Tests, the K-12 Education That Every Child Deserves. New York: Simon & Schuster, 2000. ISBN 0-14029-624-7.

Gardner, Howard. Frames of Mind: The Theory of Multiple Intelligences. New York: Basic Books, 1993. ISBN 0-46502-510-2.

Gardner, Howard. Intelligence Reframed: Multiple Intelligences in the 21st Century. New York: Basic Books, 2000. ISBN 0-46502-611-7.

Gardner, Howard. Multiple Intelligences: Theory into Practice. New York: Basic Books, 1993. ISBN 0-46501-822-X.

Gardner, Howard. The Unschooled Mind: How Children Think and How Schools Should Teach. New York: Basic Books, 1993. ISBN 0-46508-896-1.

McKenzie, Walter. Standards-based Lessons for Tech-Savvy Students: A Multiple Intelligences Approach. Worthington, Ohio: Linworth ,2004. ISBN 1-58683-125-9.

Communication

Learning in an online environment is different from learning in a face-to-face classroom. Student interaction will occur through online discussion and electronic mail with classmates and the course mentor. Participation in these discussions is critical in successfully completing the course.



Syllabus

Week 1 – A New Theory Comes of Age

Objectives:

Learners will

1. appreciate the historic context of multiple intelligences theory
2. identify specific information skills in the 21st century job market
3. correlate 21st century job skills to the intelligences

Topics

- A Learner's Search for Meaning
- Information Age Skills
- Correlating the Intelligences
- Web-based Resources
- Discussion
- Assignment



Week 2 – Thinking About Multiple Intelligences

Objectives:

Learners will

1. describe the characteristics of each intelligence
2. complete a multiple intelligences inventory with their class
3. explore the relationships between the intelligences

Topics

- An Intelligence Survey
- Relationships between the Intelligences
- Intelligence Domains
- Planning Using the Wheel of Domains
- Web-based Resources
- Discussion
- Assignment



Week 3 – Technology in a Multiple Intelligences Context

Objectives:

Learners will

1. analyze national technology standards
2. consider the industrial technologies in instruction
3. compare the digital technologies in instruction

Topics

- National Technology Standards
- Industrial Technologies
- Digital Technologies
- Web-based Resources
- Discussion
- Assignment



Week 4 – Making Technology Work for You

Objectives:

Learners will

1. apply tenets of information literacy in utilizing technology
2. consider the implications for media selection in successful instruction
3. employ sound instructional design elements in media selection

Topics

- All Children Can Learn
- Choose Your Tools
- Planning for Success
- Web-based Resources
- Discussion
- Assignment



Week 5 – Software Stimulates Specific Intelligences

Objectives:

Learners will

1. sort software by commonly accepted categories
2. complete an inventory of available school software
3. use the PEP chart to integrate software titles into effective instruction

Topics

- Know Your Software
- An MI Software Inventory
- Software Recommendations by Intelligences
- The PEP Chart: Aligning Technology with Instruction
- Web-based Resources
- Discussion
- Assignment



Week 6 – Infusing MI & IT into Existing Lessons

Objectives:

Learners will

1. use the POMAT tool to identify MI strengths and deficits in an existing lesson
2. refer to the Wheel of Domains in creating a balanced lesson
3. revise an existing lesson to effectively use technology to accommodate at least three intelligences

Topics

- Validating Your Teaching
- The POMAT Tool: Building on Your Strengths
- Spinning the Wheel of Domains
- Web-based Resources
- Discussion
- Assignment



Week 7 – Crafting New Instruction

Objectives:

Learners will

1. practice mapping intelligences to objectives and technologies
2. consider an MI lesson template for creating new instruction
3. examine an MI unit template for developing new instruction

Topics

- Seeing the Big Picture
- An MI & IT Lesson Template
- An MI & IT Unit Template
- Web-based Resources
- Discussion
- Assignment



Week 8 – Rethinking Your Classroom

Objectives:

Learners will

1. discuss the role of technology in the traditional classroom
2. explore the possibilities for technology in a 21st century classroom
3. internalize the steps of professional growth to fully implement multiple intelligences and instructional technology into the classroom

Topics

- Learning with Fresh Eyes
- The Story of Jamie
- Empowering Yourself
- Web-based Resources
- Discussion
- Assignment



Week 9 – MI, IT & the Internet

Objectives:

Learners will

1. describe the many facets of the Internet
2. investigate online collaboration for instruction
3. consider an MI project template for building new instruction

Topics

- Exploring the Internet
- Online Collaboration
- An MI & IT Project Template
- Web-based Resources
- Discussion
- Assignment



Week 10 – Bringing it All Together

Objectives:

Learners will

1. explain the instruction-assessment cycle of effective teaching
2. use the OPP chart to align instruction with assessment
3. explore various assessment tools for measuring student learning
4. submit their course project for feedback and final evaluation

Topics

- Getting the Results You Want
- The OPP Chart: Aligning Assessment and Instruction
- Constructing Powerful Rubrics
- Building Digital Portfolios
- Looking to the Future
- Web-based Resources
- Discussion
- Assignment



Project

For the course Project, you will create an original lesson, unit or project which integrate multiple intelligences and instructional technology to successfully achieve your stated instructional objectives. The course project may evolve from an existing lesson, unit or project or be a completely new creation.

Your course project should include:

- Title
- Subject(s)
- Standards addressed
- Instructional objectives with the intelligences and technologies which map to each objective
- A timeline for implementation
- A PEP Chart to show how this lesson, unit or project aligns with the curriculum
- Materials and/or Resources with the intelligences they address
- Step by step procedure with the intelligences stimulated by each step
- A plan for assessment with the intelligences that are accommodated
- An OPP Chart which shows how your assessment plan lines up with your objectives
- A paragraph summary of how well your lesson, unit or project balances on the Wheel of Domains

The course project is due two weeks after the conclusion of Week 10 of the course. It will be evaluated based on the standards established in the course rubric (below).



Assessment

Participation

	Unsatisfactory	Satisfactory	Exemplary
Quality	Learner offers cursory responses which do not satisfactorily address the discussion questions posed.	Learner offers substantive responses which evidence an understanding of the course content. Learner responses to classmate's ideas and feedback add to the quality of the course discussion for everyone involved.	Learner offers substantive responses which build on previous understandings and make connections to personal experiences which enrich understanding of course content. Learner responses refer to and build upon course readings, concepts and skills. Learner responses to classmate's ideas and feedback add to the quality of the course discussion for everyone involved. Learner demonstrates critical thinking by incorporating classmate feedback in course project.
Completion	Learner completes fewer than 80% of the course discussions and assignments.	Learner completes at least 80% of the course discussions and assignments.	Learner completes 100% of the course discussions and assignments.

Project

	Unsatisfactory	Satisfactory	Exemplary
Standards	Standards are not stated for the lesson, unit or project.	Standards are stated for the lesson, unit or project.	Standards are stated for the lesson, unit or project which integrate three or more subject areas of the curriculum.
Objectives	Objectives are not stated for this lesson, unit or project, or the objectives stated do not align well with the identified standards and intelligences.	Objectives are stated for this lesson, unit or project which align well with the identified standards and intelligences.	Objectives are clearly stated for this lesson, unit or project which align well with the identified standards and intelligences and promote higher level thinking.
Timeline	A timeline for implementation of the lesson, unit or project is not evident.	A timeline for implementation of the lesson, unit or project is explicitly stated.	A timeline for implementation of the lesson, unit or project is explicitly stated and includes consideration for teacher preparation, technology utilization and performance tasks.
PEP Chart	A PEP Chart for this lesson, unit or project is not evident.	A PEP Chart for this lesson, unit or project is provided.	A PEP Chart for this lesson, unit or project is provided which maps a close alignment between the lesson, unit or project and the curriculum.
Materials and Resources	A listing of materials and/or resources for this lesson, unit or project is not evident or is incomplete.	A listing of materials and/or resources for this lesson, unit or project is provided and complete.	A listing of materials and/or resources for this lesson, unit or project is provided, complete and aligned with the identified objectives and intelligences.

Procedure	A step-by-step procedure for this lesson, unit or project is not evident or is incomplete.	A step-by-step procedure for this lesson, unit or project is evident, sequential and complete.	A step-by-step procedure for this lesson, unit or project is evident, sequential, complete and provides for extension activities for higher functioning students.
Assessment	An assessment strategy for this lesson, unit or project is not evident or is incomplete.	An assessment strategy for this lesson, unit or project is provided for and includes specific criteria, exemplars and a rating scale.	An assessment strategy for this lesson, unit or project is provided for and includes specific criteria, exemplars, a rating scale, and a ready-to-use tool to implement the assessment strategy.
OPP Chart	An OPP Chart for this lesson, unit or project is not evident.	An OPP Chart for this lesson, unit or project is provided.	An OPP Chart for this lesson, unit or project is provided which maps a close alignment between the objectives, procedure and student work product.
Wheel of Domains	There is insufficient evidence that the lesson, unit or project is balanced on the Wheel of Domains.	The lesson, unit or project is balanced on the Wheel of Domains.	The lesson, unit or project is balanced on the Wheel of Domains and an alternate plan is offered to target a specific domain.

Registration

CoP registration is reasonably priced for educators at \$100.00 for an entire year, allowing you to take as many CoPs as you would like during that time.. Upon successful completion of the CoP each participant will receive a certificate for 40 seat hours of classwork. This course does not offer graduate credits.

To register, complete the online form at
<http://surfaquarium.com/CoP/register.htm>

You may by credit card online or mail your payment to:

Walter McKenzie
PO Box 52
Merrimac, MA 01860

