# **Principles of Curriculum Design**

### Draft Syllabus

Instructors: Bob Tucker, Director of the ITT Master/Licensure Program at MESPA and

Kathi Lengel, Education and Technology Specialist at MESPA

#### Course Overview:

The Principles of Curriculum Design is a seven week, 30 hour course designed to teach K - 12 educators how to design activities and units that follow research-based curriculum design principles. They will use the concept of curriculum mapping to make informed curriculum decisions based on school/district initiatives, local and state frameworks, available resources, and students needs. This seven week course will promote student learning by providing teachers with face to face and online opportunities to learn, share and discuss appropriate skills and strategies to differentiate instruction to address the varied learning styles of their students.

#### Audience:

Classroom teachers, Support specialists, Curriculum coordinators, Department heads, Principals, and Assistant superintendents

*Duration*: 7 weeks: 3 days of 3 hours each - in-class activities interspersed with 21 hours of online/out of class activities.

Periods:

Once each period: 1, 2, 3

Delivery:

hybrid model – face to face sessions interspersed with on-line sessions

Graduate Credit

2 credits

### *Objectives*:

At the end of this course, educators will:

- understand research-based models of good curriculum design
- understand best practice models of technology integration
- use curriculum-mapping skills to align local, state, and district standards
- design, share and critique standards-aligned, technology—infused lessons following research-based design principles, NETS standards and 21<sup>st</sup> Century skills
- develop a dissemination plan for sharing their skills back in district

These curriculum design models will incorporate a focus on how informational technology as well as the NETS standards and 21st Century skills can support and extend student skill development as well as develop a deeper understanding of the concepts supporting these skills.

# Course Outline

# **Week 1 Introduction to Curriculum Design (Face to Face)**

- 1. Introductions
  - a. Participants introduce themselves and their backgrounds in education and in technology
  - b. Why this course?
- 2. Course overview and expectations for the participants What are the course activities? What are the protocols for online work?
- 3. Introduction to two research-based approaches to Curriculum Design:
  - Understanding by Design (UbD) a *backward design* process used by educators interested in enhancing student understanding and in designing more effective curriculum and assessments to promote understanding (Wiggins, McTighe),
  - o Differentiated Instruction (DI) a process where a teacher weaves individual student goals and supports into classroom content and instructional strategies while delivering one lesson to the class
- 4. Translating theory to action

Groups apply a research-based approach to problem lesson 'case study' Groups share and critique each others lesson using rubric

5. Preparing for weeks 2 and 3 work

Brief introduction to MassONE

Navigating

Forums

Resources

#### Readings

Tomlinson, Carol A., McTighe, Jay. <u>Integrating Differentiated Instruction & Understanding by Design</u>. Alexandria, VA: ASCD, 2006. Pgs. 1 -37

# Weeks 2 and 3 Introduction to Curriculum Design (on-line)

- 1. Read:
- Developing Curriculum in Essential Schools by Kathleen Cushman
- http://www.essentialschools.org/cs/resources/view/ces\_res/89
- What's Essential? Integrating the Curriculum in Essential Schools by Kathleen Cushman
- http://www.essentialschools.org/cs/resources/view/ces\_res/171

- Asking the Essential Questions: Curriculum Development by Kathleen Cushman
- http://www.essentialschools.org/cs/resources/view/ces\_res/137

Inclusion Research at Work at Boston Arts Academy by Anne Clark <a href="http://www.essentialschools.org/cs/resources/view/ces-res/358">http://www.essentialschools.org/cs/resources/view/ces-res/358</a>

2. Discuss - If curriculum is to reflect the goals of a school and the needs of its students, it makes sense for teachers to develop it themselves. But how might they do it, and when? And is it better to adopt or adapt materials 'off the shelf' or should students and teachers be creating curriculum together? What should students know and be able to do?

After answering these questions, respond to the posting of at least two other participants.

- 3. Watch the video on assessment for understanding: http://www.edutopia.org/php/article.php?id=Art 937#
- 4. Discuss: What measures does you school use to assess student understanding? What role do you think DI might play in assessing the varied abilities of the students? Read and respond to two other participants postings.
- 5. Consider an activity that you would like to create or re-design following some of the research-based teaching strategies introduced so far. Use the on-line form provided to develop your idea. You will be continuing this lesson development in the next face to face class.

# Week 4 Connecting Content and Kids - Designing DI/UbD lessons (face to face)

1. Planning a DI Model lesson

Planning a DI lesson checklist
Planning a DI lesson
Managing a DI Class – the Basics
Using the Equalizer
Anchor Activities
Evaluation Checklist

- 2. Share lessons Give feedback
- 3. Post your model DI lessons on MassONE
- 4. Discussion Final project draft
- 5. Read: *Mapping a Route Toward Differentiated Instruction* by Carol Tomlinson and *Reconcilable Differences? Standards-based Teaching and Differentiation* by Carol Tomlinson

# Weeks 5 and 6 Curriculum Mapping (on-line)

1. Read an introduction to curriculum mapping

http://www.glencoe.com/sec/teachingtoday/educationupclose.phtml/35

Explore the wealth of sample curriculum maps from Heidi Hayes Jacobs and Curriculum Designers:

http://www.curriculumdesigners.com/

Look at one school districts use of curriculum mapping:

http://www.greece.k12.ny.us/instruction/ela/6-12/Curriculum%20Mapping/Index.htm

- 2. Discussion: *After what you have read and learned about Curriculum Mapping, do you think it is worth the time and energy?* Respond to at least two other students' comments.
- 3. Participants consider their draft lesson in the context of a Curriculum Map.

  Use the on-line mapping tool to view and reflect on lesson/standards alignment
- 4. Participants submit draft of a lesson following DI principles.
- 5. Participants review all DI lessons and give feedback on at least two lessons.
- 6. Draft projects are submitted in the discussion area by the end of week 6.

# Week 7 Project sharing (face to face)

- 1. Presentation of DI lessons incorporating online feedback
- 2. Participants share and get feedback on their draft.
- 3. Discussion: How does DI and UbD fit with Curriculum mapping?
- 4. Discussion: Final project complete lesson that follows DI and UbD principles
- 5. Dissemination activity

Discussion of dissemination models Reviewing participant dissemination plans Staying in contact through MassONE Final evaluations

### **Additional Readings:**

Danielson, Charlotte. Frameworks for Teaching. Alexandria, VA: ASCD, 1997

Gregory, Gayle H., Chapman, Carolyn. <u>Differentiated Instructional Strategies: One Size</u> Doesn't Fit All. Thousand Oaks, CA: Corwin Press, 2002.

Tomlinson, Carol A. <u>Differentiating Instruction for Mixed-Ability Classrooms: An ASCD Professional Inquiry Kit</u>. Alexandria, VA: ASCD, 1996.

Tomlinson, Carol A. <u>Fulfilling the Promise of the Differentiated Classroom: Strategies and Tools for Responsive Teaching.</u> Alexandria, VA: ASCD, 2003.

Tomlinson, Carol A. <u>How to Differentiate Instruction in Mixed-Ability Classrooms</u>. Alexandria, VA: ASCD, 2001.

Tomlinson, Carol A., McTighe, Jay. <u>Integrating Differentiated Instruction & Understanding by Design</u>. Alexandria, VA: ASCD, 2006.

#### Web based

**SCANS Report:** http://www.academicinnovations.com/report.html

**Technology Counts: Teaching the Teachers** http://www.edweek.org/sreports/tc/teach/te-n.htm

Essential Questions (Bellingham Schools) http://www.gen.bham.wednet.edu/essenque.htm

Framing Essential Questions (From Now On) http://www.fno.org/sept96/questions.html

Asking Essential Questions http://www.biopoint.com/ibr/askquestion.html

Art of Questioning (Jamie McKenzie) http://questioning.org/

**Exploratorium Institute for Inquiry** http://www.exploratorium.edu/IFI/index.html