Differentiated Assessment Strategies: Identifying Learners’ Strengths and Needs

A Distance Learning Graduate Course

Course Syllabus
If I were teaching you how to play golf, I would not determine whether you had met my standards by giving you a multiple-choice test. I would put you out on the golf course to "construct your own responses" in the face of real-world challenges. Similarly, in school we are ultimately less interested in how much information students can acquire than how well they can use it.

Jon Mueller

Do we want to evaluate student problem-posing and problem-solving in mathematics? experimental research in science? speaking, listening, and facilitating a discussion? doing document-based historical inquiry? thoroughly revising a piece of imaginative writing until it "works" for the reader? Then let our assessment be built out of such exemplary intellectual challenges.

Grant Wiggins
Acknowledgements

This course was made possible through the cooperation and contributions of

Dr. Carol Ann Tomlinson
Curry School of Education,
University of Virginia

and the quality administrators, teachers and students at these extraordinary schools:

Procter Elementary School
Independence, Missouri

Callanan Middle School
Des Moines, Iowa

Parkview Middle School
Ankeny, Iowa

Norwalk High School
Norwalk, Iowa

Ronald Reagan Elementary School
Wildomar, California
Rationale

While multiple-choice tests can be valid indicators or predictors of academic performance, too often our tests mislead students and teachers about the kinds of work that should be mastered. Norms are not standards; items are not real problems; right answers are not rationales.

Grant Wiggins

Effective teachers strategically select an appropriate assessment tool for each learning situation. In the same way that a carpenter chooses a hammer to drive a nail and a saw to cut a board, the teacher chooses the right tool for each purpose. Rich data is gathered using a wide variety of instruments. This allows students to show what they know in more than one way. In short, it takes more than one form of assessment, or more than one tool, to gauge individual learning.

What is Differentiated Assessment?

Differentiated assessment is an ongoing process through which teachers gather data before, during, and after instruction from multiple sources to identify learners’ needs and strengths. Students are differentiated in their knowledge and skills. They differ in the ways and speeds at which they process new learning and connect it to prior knowledge and understanding. They also differ in the ways they most effectively demonstrate their progress.

Choosing the Right Tools

The carpenter uses his expertise to choose the right tool for the procedure, the materials, and the task at hand. The same principles apply to teachers and students on a far more sophisticated and consequential level. The teacher who plans instruction to accommodate the differences among students designs or selects the best preassessment tools. This reveals students’ unique knowledge, prior experiences, abilities, learning styles, multiple intelligences, motivations, behaviors, interests, and attitudes. The results are used to strategically customize instructional plans, provide students with multiple ways to show their learning, keep them on the right track, and accelerate their learning journeys.

The Goals of This Course

Our goals for this distance learning course include the following:
- To give teachers differentiated assessment tools, strategies and activities to identify a student’s strengths and needs
- To provide teachers with assessment strategies they can give students to empower them as self-directed learners
- To apply the latest research related to effective assessment techniques
- To present novel assessment tools that provide immediate feedback for teachers and learners
- To provide teachers and learners a variety of assessment tools that are easy to remember and apply
- To emphasize the value of creating a positive learning culture for assessment experiences

Building the Toolbox

Differentiated instruction and assessment go hand in hand. Marzano (2000) clarifies the goals of assessment and instruction as follows:
- Assessment should focus on students’ use of knowledge and complex reasoning rather than their recall of low-level information.
- Instruction must reflect the best of what we know about how learning occurs.

To support this high level of instruction and assessment, the teacher needs a constant stream of assessment data. This course presents differentiated assessment strategies and an overflowing box of tools to assess students before, during, and after learning. These tools are designed to help teachers identify students’ needs or holes in learning when they appear and expedite learning.

The Benefits of Differentiated Assessment Strategies

Students and teachers benefit from differentiated assessment strategies because data gathered from various sources provide a metaphoric mosaic of each student’s readiness for learning specific skills or subjects. The mosaic artwork is complete when each piece is in place to complete a design. Some mosaics are created from a multitude of small pieces, whereas others comprise large puzzle pieces. In a similar way, various pieces of assessment data are needed to form a complete picture of the unique needs of a student.

One standard may require detailed assessment data to complete the whole picture. In another case, a quick observation of students may provide adequate assessment data to use in planning because students need only one or two pieces of the puzzle. If the standard is composed of complete thinking processes, it may require multiple assessments to complete a total, in-depth view of the student. The teacher and student benefit when they work together to make all the pieces fit.

(Adapted from Differentiated Assessment Strategies by Carolyn Chapman and Rita King.)
Course Title
Differentiated Assessment Strategies:
Identifying Learners’ Strengths and Needs

Course Description

"Differentiated Assessment Strategies: Identifying Learners’ Strengths and Needs” is a three semester (five quarter) hour graduate course designed to give K-12 teachers the theory and skills to align assessment practices to meet the diverse needs of learners in today’s classrooms. Participants will engage in various learning activities through which they will learn and implement formal and informal assessment strategies before, during, and after learning.

In addition, participants will show evidence of their understanding of differentiating assessment using sound differentiated instructional practices with a differentiated assessment framework. Participants will demonstrate proficiency in utilizing differentiated assessment tools by designing, implementing, and evaluating lessons and units based on the knowledge and skills learned in this course.

Course Goals

The goals of this course are to have participants develop an understanding of differentiated assessment strategies. By the end of this course participants will be able to: utilize differentiated assessment tools, strategies and activities to identify a student’s strengths and needs; apply the latest research related to effective assessment techniques; effectively utilize a variety of assessment tools that are easy to remember and apply; and create a positive learning culture for assessment experiences.

Course Outline

In the following outline, the term "Course of Study" refers to a study plan that includes required reading, video viewing, worksheets, application assignments and progress reports.

Session #1: Differentiated Assessment Strategies: An Introduction

Objective: To have participants understand the scope and sequence of this
course, to expose them to key concepts, to have them preview course videos and lessons, and have them complete an assessment of their current approach to assessing students’ strengths and needs.

**Assignments and Activities:** Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

**Session #2:** Differentiated Assessment Strategies: Informal Pre-Learning Assessment (Lower Elementary)

Objective: To have participants understand how to use observation and other informal assessment techniques to inventory their students’ learning skills and preferences; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

**Assignments and Activities:** Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

**Session #3:** Differentiated Assessment Strategies: Pre-Learning Assessment Using Questionnaires (Secondary)

Objective: To have participants understand how to use questionnaires and surveys to inventory their students’ learning skills and preferences; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

**Assignments and Activities:** Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

**Session #4:** Differentiated Assessment Strategies: Games and Assessment (High School)

Objective: To have participants understand how games and tournaments can be used to evaluate students’ competency and mastery of a subject; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

**Assignments and Activities:** Required reading in course text, viewing of
Session #5: Differentiated Assessment Strategies: Content Review Games (High School)

Objective: To have participants understand how games and tournaments can be used to review material before a test and provide a measurement of students’ understanding of material; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

Session #6: Differentiated Assessment Strategies: Student Created Review and Tests (Lower Elementary)

Objective: To have participants understand how to use student-created reviews and tests to assess student progress; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

Assignments and Activities: Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

Session #7: Differentiated Assessment Strategies: Student Self-Evaluation (Upper Elementary)

Objective: To have participants understand how to teach students reflection and self-evaluation skills; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

Assignments and Activities: Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

Session #8: Differentiated Assessment Strategies: Student Self-Grading and Tracking (Middle School)

Objective: To have participants understand how to create and use self-grading stations as a means of students’ assessing and tracking their own progress; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

Assignments and Activities: Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.
suggested in the course text and readings.

**Assignments and Activities:** Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

**Session #9: Differentiated Assessment Strategies: Teacher and Student Constructed Rubrics (Lower Elementary)**

Objective: To have participants understand how to use student and teacher created rubrics in authentic assessment; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

**Assignments and Activities:** Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

**Session #10: Differentiated Assessment Strategies: Project-Based Assessment (Middle School)**

Objective: To have participants learn how to use projects to assess students’ understanding of subject content through their application of new knowledge in class projects; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

**Assignments and Activities:** Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

**Session #11: Differentiated Assessment Strategies: Using Portfolios (Kindergarten)**

Objective: To have participants understand how portfolios can be used to successfully track the progress of learners of varying abilities; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

**Assignments and Activities:** Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

**Session #12: Differentiated Assessment Strategies: The Problem-Based Model (High**
School)

Objective: To have participants understand how to use the problem based model of assessment that makes learning more meaningful for students by allowing them to apply their knowledge to the real world; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

Assignments and Activities: Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

Session #13: Differentiated Assessment Strategies: Post Learning Assessment with Choice Boards (Middle School)

Objective: To have participants use choice board assessment strategies that allow students to select a method of assessment that is appropriate to their level of learning.; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

Assignments and Activities: Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

Session #14: Differentiated Assessment Strategies: Assessment Activities with Special Education Students (Middle School)

Objective: To have participants understand how the measurement of student comprehension of a concept can be done in multiple ways in a special education setting; to have participants create, implement, and evaluate a lesson or unit based either on the techniques demonstrated in the video or strategies suggested in the course text and readings.

Assignments and Activities: Required reading in course text, viewing of video, course of study supplementary reading and activities, and setting of a learning goal for the course.

Session #15: Participant Reflection and Planning for Future Use of Course Concepts

Objectives: To have participants reflect on their course experience and on insights gained in the course; to have participants identify those course concepts that most apply to their teaching situations; to have participants
develop a plan for the future use of the knowledge and skills gain in this course.

**Assignments and Activities:** Required reading in course text, review of videos and assignments, discussions with study team, and the creation of a plan for the future use of the knowledge and skills gain in this course.
Participant Characteristics

This course is designed for teachers and administrators in grades kindergarten through twelve. Participants will have a bachelor's degree and a valid teacher credential (if applicable). There are no other prerequisites.

Instructional Materials

Instructional materials for this course include:

a.) Basic text:


b.) Course Media (All videos produced in 2007):

Video: “Differentiated Assessment Strategies: An Introduction”

Video: “Differentiated Assessment Strategies: Instruction and Assessment”

Video: “Differentiated Assessment Strategies: Assessment During Learning”

Video: “Differentiated Assessment Strategies: Self-Assessment and K.W.L.”

Video: “Differentiated Assessment Strategies: Pre-assessment and Planning”

Video: “Differentiated Assessment Strategies: Assessment and Choices”

Video: “Differentiated Assessment Strategies: Performance Assessment”
Video: “Differentiated Assessment Strategies: Assessment After Learning”

Video: “Differentiated Assessment Strategies: Assessment and Centers”

Video: “Differentiated Assessment Strategies: Adjusting Instruction”

Video: “Differentiated Assessment Strategies: Building on Strengths”

Video: “Differentiated Assessment Strategies: Ongoing Assessment”

c.) Course of Study.

This book contains supplemental articles, summaries of course content, pre-video viewing activities, discussion questions, group activities, individual activities, worksheets, classroom application assignments, and learning reports.

d.) Bibliography.

e) Recommended Reading.

f) Internet Resources.
Learning Activities

1. For each of the fifteen (15) sections of this course, participants will complete the following activities:
   a.) Read the assigned chapters of the course text.
   b.) Read supplemental articles in the course of study book.
   c.) Participate in a study/preparation activity with a colleague.
       NOTE: While benefits are greatest when participants take this course as a part of a study team, participants can successfully complete course requirements by working with a friend or colleague who is not enrolled in the course; or, by reflecting upon the material and considering how they might use it in their teaching situations.
   d.) View instructional videos.
   e.) Discuss (see above note) course material in terms of participants’ own students.
   f.) Record summary of discussion activities in progress report
   g.) Design, implement, and evaluate an application of course content in their teaching situation.
       NOTE: If participants are taking this course during the summer or at a time when they do not have access to a classroom, they follow these directions with respect to classroom application projects.
       1. If they choose to design a classroom lesson or activity for their project, they design it for a class that they have had in the past.
       2. Instead of implementing their activity in a classroom, they share their activity design with a colleague and ask for their input.
       3. Based on the input received from their colleagues, they make whatever changes they feel are appropriate to improve their activity design.
   h.) Summarize classroom application design, application experience, and evaluation in progress report.

2. Submit a final paper.
Course Outcomes

As a result of their work in this course, participants will be able to:

1.) Demonstrate the use of differentiated assessment techniques to create lessons that engage students in learning.
2.) Demonstrate proficiency in analyzing and evaluating differentiated assessment approaches used by other teachers.
3.) Demonstrate proficiency in using authentic and performance assessment tools assessing to identify students’ strengths and needs.
4.) Develop, implement, and evaluate various differentiated assessment strategies designed to maximize learning.
5.) Develop a systematic plan to achieve a goal set at the beginning of the course.
6.) Develop and describe an action plan to implement and evaluate their systematic plan.
7.) Evaluate and reflect upon their course experience and plan for the future use of knowledge and skills gained in this course.

Progress Reporting and Assessment

Participant achievement will be measured by a combination of the following:

A. An evaluation of participant's 15 progress reports. (Outcomes 1, 2, 3, and 4.)

   Each progress report will be evaluated for:
   – completeness and quality of responses.
   – accuracy of information.
   – appropriateness of classroom application.
   – quality of reflection.

B. An evaluation of participant's professional paper. (Outcomes 5, 6, and 7.)

   The professional paper will be evaluated for:
   – inclusion of required components.
   – synthesis and analysis of course concepts.
   – presentation in an organized, professional manner.
References and Bibliography


ership, 58, 1.


Internet Resources

Differentiated Assessment Strategies

Creating Rubrics
http://www.teachervision.fen.com/teaching-methods/rubrics/4521.html
    This five-part series explores how one teacher designs, refines, and implements rubrics in a variety of subject areas.

Examples of Rubrics
http://www.uwstout.edu/soe/profdev/rubrics.shtml
    Includes rubrics for cooperative learning, research reports, PowerPoint/oral presentations, multimedia, video, and web projects

Authentic Assessment Toolbox
http://jonathan.mueller.faculty.noctrl.edu/toolbox/
Describes how to create authentic tasks and rubrics for measuring and improving student learning and includes examples created by teachers.

**Differentiated Assessment Resources**

The Case for Authentic Assessment
http://pareonline.net/getvn.asp?v=2&n=2
Grant Wiggins describes the need for authentic assessment. This article from the peer reviewed journal, *Practical, Research, & Evaluation*, provides a foundation of understanding for authentic assessment.

Recommendations for Developing Classroom Performance Assessments and Scoring Rubrics
http://pareonline.net/getvn.asp?v=8&n=14
Barbara Moskal provides a set of recommendations that guide the classroom teacher through the four phases of the classroom assessment process - planning, gathering, interpreting and using.

Creating Rubrics Through Negotiable Contracting and Assessment
http://www.uwstout.edu/soe/profdev/assess.shtml
Andi Stix discusses ways to help students accurately evaluate their strengths and weaknesses and pinpoint where to focus their efforts during learning activities. Includes examples and a bibliography.

The Art of Negotiable Contracting for Assessment
http://www.interactiveclassroom.com/article_06.html
Another article by Andi Stix that describes the nuances of the negotiable contracting implementation process.

Implementing Performance Assessment in the Classroom
http://pareonline.net/getvn.asp?v=6&n=2
Amy Brualdi explains how use of performance assessment will help with the assessment of higher order thinking skills.

Adopting, Adapting, or Developing an Aligned Assessment for Your Lesson
http://www.rmcdenver.com/useguide/assessme/aindex.htm
Lorraine Sherry and the STAR Center Technology Team describe how to use performance standards as the core of assessment development.

Assessment Strategies for Graphic Organizers
http://www.eed.state.ak.us/tls/Frameworks/mathsci/ms5_2as1.htm#graphicorganizers
Presented are examples of Webbing, content/concept maps, what we know/want to know/learned (KWL) charts, hypercard, timelines, flow charts, venn diagrams.
Assessment Strategies
http://www.eed.state.ak.us/tls/Frameworks/langarts/40instru.htm
   Includes student interview, listening, retelling, fishbowl, journals and logs, reflection logs, webbing and mapping, KWL chart, venn diagram, hypercard stack.

Peer Assessment and Peer Evaluation
http://www.uwstout.edu/soe/profdev/assess.shtml
   Includes strategies to hold students mutually accountable on team assignments.

Positive Interdependence, Individual Accountability, Promotive Interaction: Three Pillars of Cooperative Learning
http://www.uwstout.edu/soe/profdev/assess.shtml
   Presented is a discussion of how you might generate cooperative learning activities and promote individual accountability. Includes pitfalls such as avoid grading on a curve.

Group Grades, Are They Pointless?
http://www.kaganonline.com/KaganClub/FreeArticles/GroupGrades.html
   Dr. Spencer Kagan discusses whether group grades are appropriate when the goal is creating positive interdependence and facilitating well functioning teams.

Team Skills Self-Assessment
http://www.uwstout.edu/soe/profdev/assess.shtml
   Provides an example of how to assess strengths and weaknesses in working with or communicating with others.

Electronic Assessment
   Ken Cardwell describes the advantages and disadvantages of online testing and shares free test creation tools. Includes links to many free online testing tools.

Electronic Portfolios
http://electronicportfolios.org/portfolios/aahe2000.html
   Miguel Guhlin, educational technologist provides examples of different types of portfolios. Includes links to quality online resources.

The Electronic Portfolio Development Process
http://electronicportfolios.org/portfolios/aahe2000.html
   Helen C. Barrett, Ph.D. University of Alaska, describes how electronic portfolio development brings together two different processes: multimedia development (assess/decide, design, develop, implement, evaluate) and portfolio development (collection, selection, reflection, projection). Review Dr. Barrett's model of portfolio development and how to create your own electronic portfolio
Create Your Own Electronic Portfolio: Using Off-the-Shelf Software to Showcase Your Own or Student Work
http://electronicportfolios.org/portfolios/iste2k.html
   Helen Barrett describes seven different software and hardware tools to use when creating portfolios.

Teacher as Researcher - A Means to Assess the Effectiveness of Technology in the Classroom
http://gse.gmu.edu/research/tr/
   Diane Painter presents examples of teacher research at Deer Park Elementary. This site provides in depth information on teacher action research. Included numerous examples of action research from all curriculum areas.

Portfolio Trouble-Shooting
http://www.rmcdenver.com/useguide/assessme/portfoli.htm?
   Chart designed by RMC Research Corporation describing challenges when beginning portfolio implementation. What if the portfolio lacks student reflection? What if the portfolio has too many work samples? What if teachers are over-worked and parents are confused or concerned about portfolio assessments? Includes links to Texas State Standards and provides examples from all curriculum areas.

Assessing the Effects of Technology in a Standards-Driven World
http://www.tie.smartlibrary.org/NewInterface/segment.cfm?segment=2277
   Harvey Barnett offers evaluation techniques to show how technology is affecting student learning in ways that can not be measured by standardized tests.