# George Mason University College of Education and Human Development Program: Elementary Education

#### **EDCI 545 – Assessment and Differentiation**

Spring 2010, Wednesdays 4:30-7:10 PM, Innovation 205	3 Credit Hours, Sec. 001
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#### **Course Description**

This course provides a research-based introduction to differentiated instruction for children in grades K-6. The emphasis in this course is on the assessment of learners and differentiation of instruction to meet the needs of all learners. *Prerequisites: Admission to the program, and taken in program sequence.* 

#### **Relationship to Program Goals and Professional Organizations**

This course addresses the following GSE priorities: research-based practice and diversity. It is designed as an integral component of the new Elementary Program for teachers of grades K-6, and meets new state and national guidelines and standards including Interstate New Teacher Assessment and Support Consortium (INTASC) and International Society for Technology in Education, (ISTE). This course will build closely upon themes addressed throughout the program.

#### **Student Outcomes**

- 1. Students will be able to discuss current, validated research underlying the theory, principles, and practices of differentiated instruction.
- 2. Students will be able to identify and explain the core principles of differentiated instruction and the ways in which these principles inform and guide all aspects of instructional implementation.
- 3. Students will be able to apply the core principles of differentiation when planning and assessing lessons.
- 4. Students will be able to discuss the interdependent relationship between assessment and instruction in a learning environment.
- 5. Students will be able to identify formal and informal assessment tools to collect data on the readiness, interests, and learning profiles of students as the basis for differentiation before and during instruction.
- 6. Students will be able to identify and discuss strategies for assessment and grading in a differentiated classroom.
- 7. Students will be able to generalize course content to reflect how the multicultural, special needs, gifted students and other diverse populations within classrooms have their needs met via the application of the skills, strategies, and knowledge of this course.

#### **Nature of Course Delivery**

This course includes multiple instructional strategies. Individual session formats will vary and may include lecture, small group/ large group discussion, hands-on, interactive work, student presentations, and cooperative learning.

#### **Standards**

#### **INTASC**

- 3 Diverse Learners
- 7 Planning
- 8 Assessment

#### **ISTE NETS for Teachers**

#### 2. Design and Develop Digital-Age Learning Experiences and Assessments

Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:

- a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity.
- develop technology-enriched learning environments that enable all students to pursue
- b. their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress.
- c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources.
  - provide students with multiple and varied formative and summative assessments aligned
- d. with content and technology standards and use resulting data to inform learning and teaching.

#### 5. Engage in Professional Growth and Leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:

- a. participate in local and global learning communities to explore creative applications of technology to improve student learning.
  - exhibit leadership by demonstrating a vision of technology infusion, participating in
- b. shared decision making and community building, and developing the leadership and technology skills of others.
- c. evaluate and reflect on current research and professional practice on a regular basis to

- make effective use of existing and emerging digital tools and resources in support of student learning.
- d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community.

#### **Required Texts**

- Airasian, P. W. and Russell, M. (2008). *Classroom assessment concepts and applications* (6<sup>th</sup> ed.). NY: McGraw Hill.
- Smith, G. and Throne, S. (2007). *Differentiating instruction with technology in K-5 classrooms*. Eugene, OR: International Society for Technology in Education.
- Tomlinson, C. A. (2005). *How to differentiate instruction in mixed ability classrooms* (2<sup>nd</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

#### **Required Articles**

- Chappuis, S. & Stiggins, R. J. (2002). Classroom assessment for learning. *Educational Leadership*, 60(1), 40-43.
- Lord, L., Hurley, & Rule, A. (Eds.) (2003). Activities for differentiated instruction addressing all levels of Bloom's Taxonomy and eight multiple intelligences. ERIC Document Reproduction No. ED475517. Available at <a href="http://eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?nfpb=truee&&ERICExtSearch\_SearchValue\_0=ED475517&ERICExtSearch\_SearchType\_0=ericaceno&accno=ED475517">http://eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?\_nfpb=truee&&ERICExtSearch\_SearchValue\_0=ED475517&ERICExtSearch\_SearchType\_0=ericaceno&accno=ED475517</a>
- Munk, D. D. & Bursuck, W. D. (2003). Grading students with disabilities. *Educational Leadership*, 61(2), 38-43.
- Schomoker, M. (2008/2009). Measuring what matters. Educational Leadership, 66(4), 70-74.
- Short, D. & Echevarria, J. (2005). Teacher skills to support English language learners. *Educational Leadership*, 62(4), 8-13.
- Willard-Holt, C. (2003). Raising expectations for the gifted. *Educational Leadership*, 61(2), 72-75.
- Wormeli, R. (2005). Busting Myths about Differentiated Instruction. Principal Leadership. Available at <a href="http://www.rivervalley.k12.oh.us/6139201015195456977/lib/6139201015195456977/\_files/BustingMythsaboutDl.pdf">http://www.rivervalley.k12.oh.us/6139201015195456977/lib/6139201015195456977/\_files/BustingMythsaboutDl.pdf</a>.

Other articles to be provided.

#### **Assignments:**

ALL ASSIGNMENTS SHOULD BE SUBMITTED ELECTRONICLY BY THE DUE DATE. Assignments that contain multiple grammar and spelling errors and/or typos will be returned, without grading, to be edited by the student.

#### **Learning Profile and Interest Inventory**

15%

Students will write a self case study. They will outline their own learning styles including strengths and weaknesses as well as their own interests.

#### **Evaluation**

Profile will be evaluated for completion, outline of interests, strengths and weaknesses as well as coherence of writing and mechanics.

#### **Modifying Lesson Plan**

15%

Students will create a lesson plan with assessment modifications. Given an existing plan and a description of the learners for whom the lesson is intended, students will revise the lesson differentiating content, process, product, learning environment and assessment, where appropriate. The lesson plan will show what grade level learners will know/do and then the modifications for struggling students and advanced learners will be provided. A rationale for the modifications is provided and is supported by course readings and class discussions.

#### **Evaluation**

The lesson plan will be evaluated based on: consistency with instructional methods taught in the course; appropriate rationale provided; specification of differentiation; appropriate match between assessment of learning and learning objectives. Work will also be evaluated for ability to apply knowledge gained in readings and in class; coherence of writing; and mechanics.

#### **Designing a Differentiation Task**

15%

Students will design a task or lesson and will use one of the following strategies to demonstrate knowledge of differentiation:

Tic-Tac-Toe Board

Cubing

**ThinkDots** 

R.A.F.T.

#### **Evaluation**

The Differentiation Task will be evaluated for completion, appropriate use of the strategy, evidence of differentiation, feasibility of implementation, and coherence of writing and mechanics.

#### **Situated Task (Course Performance-Based Assessment)**

30%

Students will be choose two special needs K-6 students (i.e. ESL, Learning Disability, ADHD, Aspergar's Syndrome, Autistic, Other types of disabilities, Gifted)

- 1. Gather information about the students and their special needs. You will create interview questions for the students and available experts. The interview will be a casual conversation that takes no longer than five minutes depending upon developmental level of the child. Talk to school specialists and experts in the field if they are willing. Further your research by reading text materials and online information. Find out what strategies work will for these students. If you do not have direct access to students, then find out what strategies tend to work well for students with this special need. You will write a description of the students, outlining their special need and research based plans for lesson adaptations for special needs, citing research to support plans.
- 2. Research indicates that curriculum alignment of the intended, implemented, and attained curriculum leads to increases in student learning. You will outline the unit (~ 1 week) being taught for this project and your <u>plan for adaptations</u> in instruction and assessment for special needs students. The unit overview (~ 2 pages) will consist of:

- Description of Students in Class In a very brief overview, describe the audience for which the unit of study is designed.
- Theme This is the topic for the unit of study.
- Unit Objective This is the overall objective for this theme/unit.
- Sub-objectives

List 2-5 sub-objectives for the unit.

- Standards of Learning for VA Public Schools
  List approximately 3 standards from the Standards of Learning that this unit addresses. Also include the code for each standard.
- Assessment Plan Overview
   Summarize the multiple forms of assessment that will be embedded in the unit. There should be clear connections among the unit objectives, sub-objectives, and what is assessed.
   Describe how the students' learning will be assessed both formally (graded) and informally (not graded).
- Adapted Activities Include a brief description of where the adapted activities that you have developed fit into the unit. Adaptations for the unit will be described in the individual student case studies.

#### **Technology Presentations**

15%

Students will choose a website, software program, or a technology product to share with classmates. Attention should be paid to how it can be used to differentiate instruction and/or conduct assessments. Programs and websites discussed in the Smith and Thorne book may be used.

Class Participation 10%

Students will be evaluated on their level of class participation. Attention will be paid to their level of interaction in discussions of the readings, group work, online postings, and other learning activities. A rubric will be provided and students will have an opportunity to self-assess their level of participation.

## SCORING RUBRIC FOR PBA –Differentiated lesson and assessment rubric

Criteria	<b>Exceeds Requirements</b>	<b>Meets Requirements</b>	Needs Improvement	Weight
	(A)	$(\mathbf{A} -, \mathbf{B} +)$	( <b>B</b> , <b>C</b> )	
	5 Points	2-4 Points	1 Point	
Objectives INTASC Standard 7	The objectives clearly state what students will do during the unit. The objectives clearly state the content/essential understandings of the unit. The objectives are tied to	The majority of the objectives state what students will do during the unit. The majority of the objectives are tied to state/national standards. The majority of the	No objectives are stated or inappropriate objectives are used. Objectives are not distinguishable from state/national standards. Few of the objectives are	x .05 =
	state/national standards. The objectives are tied to the assessment.	objectives are tied to assessment and it is clear how the objectives are assessed.	tied to the assessment. It is not clear how objectives will be assessed.	
Materials INTASC Standard 7	A list of materials used during the unit is provided. A copy of the materials is included with the unit. A variety of materials are used in each unit (manipulatives, technology, etc.). Appropriate materials are selected for the concepts being taught. The lessons do not <i>overuse</i> worksheets.  Materials are differentiated, where appropriate.	A partial list of materials used is provided. A copy of some of the materials is provided. There is a lack of variety of materials used. Most of the materials are appropriate for the concepts being taught, but some need more modifications.	No list of materials is provided or materials chosen are not appropriate for the concepts being taught. The materials chosen do not reflect differentiation. The lessons <i>overuse</i> worksheets. Materials are not differentiated.	x .05 =
Description of Students INTASC Standard 7	The description of both students is substantive. Information includes, grade level, age, information regarding special needs, and any additional information that is available. Definition of special needs is well-developed and contains suggestions of ideas that may help the child learn. These ideas are supported by the research, interviews with the child (if available) and teachers, and class discussions.	The description of one student is substantive. Information includes, grade level, age, information regarding special needs, and any additional information that is available. Definition of special needs is well-developed and contains suggestions of ideas that may help the child learn. These ideas are supported by the research, interviews with the child (if available) and teachers, and class discussions. Information on the other student is not as well developed.	The description of both students is not well developed and/or the information is not supported by the research.	x .25 =
Procedure INTASC Standard 7	The unit plan is substantive in length, breadth, and depth. The procedures thoroughly and completely outline what the teacher will do during the lessons; How did you present the lesson/unit? The procedures thoroughly and completely outline what the students will do during the lessons. Estimated times for each phase are provided in	The unit plan is adequate in length, breadth, and depth. The majority of the procedures outline what the teacher will do during the lessons, but parts are vague and unclear. The majority of the procedures outline what students will do during the lessons, but parts are vague and	The unit plan is not adequate in length, breadth, or depth. It is not clear what the teacher will do during the lessons. It is not clear what the students will do during the lessons. Estimated times are not provided. No questions or content the teacher uses during the lessons	x .20 =

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	parentheses. The procedures are in a bulleted list, approximately 1-2 pages in length. Any questions or content the teacher uses during the lessons are included in the procedures. The procedures include an introduction for activating prior knowledge. The procedures include a plan for closing the unit and checking for understanding.	unclear. Estimated times are provided, but seem unreasonable (either too short or too long). There is a lack of teacher questions. The procedures include either an introduction for activating prior knowledge or a plan for closing the unit and checking for understanding, but not both.	are included in the procedures. The procedures do not include an introduction for activating prior knowledge or a plan for closing the lessons and checking for understanding.	
Differentiation Gearing up and gearing down INTASC Standard 3	A list of adaptations for the two students is included. Specific information must be provided on the individual students and the accommodations made for those children. Differentiation goes beyond student interest. The differentiation is appropriate for the learning needs of the students.	A list of adaptations for at least students is included. Specific information must be provided on the individual student and the accommodations made for this child. Differentiation focuses mostly on student interest. The differentiation is appropriate for the learning needs of the student.	A list of adaptations for the two students is not included. There is no evidence of differentiation or the preservice teacher relies on specialists to handle the differentiation (i.e. ESL teacher, Special Education teacher). The differentiation is not appropriate for the needs of the students.	x .35 =
Assessment / Work Samples INTASC Standard 8	The assessment rubric used during the unit is described in approximately ½ -1 pages. The description of the assessment is clear enough that another person could conduct the assessment. The assessment describes what the teacher does to assess the students. The assessment describes in detail what the students do to demonstrate their understanding of the concept. A variety of formal and informal assessment is differentiated to meet the needs of the two students.	The assessment rubric is used is included, but not discussed. The description of the assessment is a little vague, but could be implemented by another. The assessment describes what the students will do, but there is a lack of detail provided. A variety of formal or informal assessments are used, but not both. The assessment is differentiated to meet the needs of one of the students.	No assessment rubric is included. The description of the assessment is unclear. Another person could not implement the assessment. The assessment does not match with the lessons or objectives. It is not clear what the students will do to demonstrate their understanding. The assessment is not differentiated to meet the needs of the two students.	x .30 =

## **Learning Profile and Interest Inventory Rubric**

Criteria	<b>Meets Requirements</b>	Meets Partial	Needs Improvement
	(3 points)	Requirements	(1 point)
		(2 points)	
Completion	All key elements are	All key elements are	One or more key
	included and covered	included, but some are	elements are missing
	in-depth.	covered in-depth	or no key elements are
		while others are not	covered in-depth.
		well developed.	
Interests	Interests are well	Interests are defined.	Interests are not well
	defined. It is clear	Although tied to	defined. They are not
	how these interests	learning style, it is not	tied back to learning
	impacted learning	clear how these	styles or the
	style.	interests impacted	connection is not well
		learning.	developed.
Strengths	Three or more	One or two strengths No strengths ar	
	strengths are	are discussed and	discussed or they are
	discussed. These are	connected back to	not connected back to
	connected back to	learning style.	learning styles.
	learning style.		
Weaknesses	Three or more	One or two	No weaknesses are
	weaknesses are	weaknesses are	discussed or they are
	discussed. These are	discussed and	not connected back to
	connected back to	connected back to	learning styles.
	learning style.	learning style.	
Learning Styles	Learning style is	Learning style is	Learning style is
	clearly defined and	defined and somewhat	vague and not clearly
	supported by all of the	supported by parts of	defined. It is not well
	various aspects of the	the paper.	supported by the rest
	paper.		of the paper.

### **Modifying Lesson Plans Rubric**

Criteria	Meets Requirements	Meets Partial	Needs Improvement
	(3 Points)	Requirements	(1 Points)
		(2 Point)	
Consistency	Lesson Plan demonstrates consistency with instructional methods taught in the course. The differentiation strategy used is clearly stated and used appropriately.	Lesson Plan demonstrates some consistency with instructional methods taught in the course. The differentiation strategy is used appropriately, but not named or named incorrectly.	Lesson Plan does not demonstrate consistency with instructional methods taught in the course. It is not clear what differentiation strategy is being used. It is not explained well and not
			named.
Rationale	Rationale for modifications is clear and compelling. It is supported by three or more course readings. The rationale explains why the strategy is needed and why this is good teaching.	Rationale is clear, but not very convincing. It is supported one or two course readings. The rationale explains why the strategy is needed, but not why this is good teaching.	Rationale is not clear or convincing. It is not supported by any course readings. The rationale does not explain why the strategy is needed or why this is good teaching.
Specification of	There is evidence of	There is evidence of	There is no evidence of
Differentiation	differentiation of two or more of the following areas: content, process, product, and learning environment. The differentiation is appropriate.	differentiation of one of the following areas: content, process, product, and learning environment. The differentiation is appropriate.	differentiation of any of the following areas: content, process, product, and learning environment or the differentiation provided is not appropriate.
Assessment Plan	The assessment plan is appropriate for the learning objectives. They are well matched. The assessment plan is appropriately differentiated for various learners.	The assessment plan is appropriate for some of the learning objectives, but not all. The assessment plan is differentiated for some learners, but not all.	The assessment plan is not appropriate for the learning objectives. The assessment plan is not appropriately differentiated for various learners.
Apply Knowledge	There is extensive evidence that the student is able to apply knowledge gained in readings and in class.	There is some evidence that the student is able to apply knowledge gained in readings and in class.	There is no evidence that the student is able to apply knowledge gained in readings and in class.

## **Designing a Differentiation Task Rubric**

Criteria	Meets Requirements (3 Points)	Meets Partial Requirements (2 Point)	Needs Improvement (1 Points)
Completion	All aspects of the task are included.	One of the task items is missing.	More than one item of the task is missing.
Appropriateness	The various aspects of the task are appropriate and activities are compatible with each other. Students are doing the same quantity of work no matter which activity they chose.	Majority of the aspects of the task are appropriate. Activities are compatible for the most part. However, one of the activities requires less work than the others.	Few or none of the aspects of the task are appropriate. Activities are not compatible. Two or more of the activities require less work.
Feasibility of Implementation	The task as outlined is easy to implement. It needs no modifications.	The task as outlined could be implemented, but it will need some minor modifications.	The task as outlined is not easy to implement. It will need major modifications.
Evidence of Differentiation	There is clear evidence of differentiation. The task demonstrates thoughtful consideration of the different elements and learning needs of students.	There is some evidence of differentiation. The task demonstrates consideration of the learning needs of the students.	There is no evidence of differentiation. The learning needs of the students were not considered.
Spelling and Mechanics	There are no spelling, grammar, or punctuation errors. This could be handed to students as is.	There is one error. It will need to be corrected before handing it to students.	There are two or more errors. This should be proofread and corrected before handing to students.

## **Grading Scale**

A = 94-100%B = 80-86% A- = 90-93% B- = 77-79% B+ = 87-89%C = 70-76%

## COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT STATEMENT OF EXPECTATIONS:

The Graduate School of Education (GSE) expects that all students abide by the following:

Students are expected to exhibit professional behavior and dispositions. See gse.gmu.edu for a listing of these dispositions.

Students must follow the guidelines of the University Honor Code. See <a href="http://www.gmu.edu/catalog/apolicies/#TOC\_H12">http://www.gmu.edu/catalog/apolicies/#TOC\_H12</a> for the full honor code.

Students must agree to abide by the university policy for Responsible Use of Computing. See <a href="http://mail.gmu.edu">http://mail.gmu.edu</a> and click on Responsible Use of Computing at the bottom of the screen.

Students with disabilities who seek accommodations in a course must be registered with the GMU Disability Resource Center (DRC) and inform the instructor, in writing, at the beginning of the semester. See <a href="https://www.gmu.edu/student/drc">www.gmu.edu/student/drc</a> or call 703-993-2474 to access the DRC.

#### **Course Schedule:**

Date	Topics/Learning Experiences	Assignments
1/20	Introduction to differentiated instruction	Reading: Tomlinson Ch. 1 & 2
	Principles of differentiated instruction	Wormeli article
1/27	Theoretical/Research Background for	Reading: Tomlinson Ch. 3 & 4
	Differentiated Instruction	Smith and Thorne Ch. 4
	Bloom's Taxonomy	
	Multiple Intelligences	
2/3	Essentials of a differentiated instruction	Reading: Tomlinson Ch.5, 6 & 7
	learning environment	Smith and Thorne Ch. 2
	The learner-centered classroom	
2/10	Strategies for working with English as a Second	Reading: Smith and Thorne Ch. 7
	Language (ESL) learners	Munk article
	Technology Presentation	Willard-Holt article
2/17	Strategies for working with Special Needs	Reading: Tomlinson Ch. 8, 9, & 10
	students	Smith and Thorne Ch. 6
	Assistive technology	
2/24	Differentiating Content	Reading: Tomlinson Ch. 11, 12
	Meeting student needs with varied depth and	Lord article
	complexity of content	
	<b>Due: Learning Profile and Interest</b>	
	Inventory	
3/3	Differentiating Process	Reading: Tomlinson Ch. 13 & 14
	Flexible grouping, varying pace, interest-based	
	Learning	
	Technology Presentation	
3/10	No Class – Spring Break	

3/17	Differentiating Product	Reading: Airasian Ch. 1 & 2
	Demonstrating understanding through varied	Short article
	means and media	
3/24	Introduction to Assessment	Reading: Airasian Ch 5 & 10
	The Purpose of Assessment	_
	<b>Due: Designing a Differentiation Task</b>	
3/31	No Class – SITE Conference	Reading: Airasian Ch 3 & 4
		Chappuis article
4/7	Implications of High Stakes Testing	Reading: Airasian Ch. 6 & 7
	Connecting Assessment and Instruction	
	Technology Presentation	
4/14	Assessment Evidence	Reading: Airasian Ch 8 & 9
	Understanding and Selecting Assessment Tasks	Schomker Article
	Designing Assessment Tasks	
	<b>Due: Modifying Lesson Plan</b>	
4/21	Teacher-made Tests	Reading: Airasian Ch 11 &
	Performance Assessments	Appendix D
4/28	Grading	Smith and Thorne Ch. 9
	Technology Presentation	
5/5	Linking Differentiation and Assessment	
	Putting it all together	
	Due: Situated Task	