

# GEORGE MASON UNIVERSITY COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT DIVISION of EDUCATIONAL PSYCHOLOGY, RESEARCH METHODS AND EDUCATION POLICY

# EDEP 592 Data-Driven Decision-Making: Development of Assessments

In partial fulfillment of requirements leading to the Certificate in Data-Driven Decision-Making

Credits: 3

Semester & Year: Summer 2012

**Dates:** From July 2, 2012 to August 3, 2012

**Meeting Time/Days:** Monday, Wednesday, & Friday 3:45 p.m. to 6:50 p.m.

Location: Thompson Hall, Room L018

**PROFESSOR(S):** Lori C. Bland, Ph.D.

Name: Lori C. Bland, Ph.D. Office phone: 703-993-5047

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# **COURSE DESCRIPTION:**

This course focuses on strategies to design assessments for students and schools with a particular emphasis on developing and using assessment methods to inform instructional decisions.

# NATURE OF COURSE DELIVERY:

A variety of learning approaches will be used to engage students in classroom learning, including lecture, whole and small group discussion. The primary mode will be problem-based learning. Class participants will identify specific areas of learner need within their job position or interest area. Problem-selection will focus on the inferences the class participants would like to make about learning. Class participants will develop assessments focused on the identified needs. Class participants will have the opportunity to work in groups or individually to complete inclass and homework assignments. Mini-lectures will generally open each instructional period to



set the focus for the class session. While the mini-lectures are relevant to specific chapters in the required textbook, they are not taken exclusively from this source. The final segment of the class period will be devoted to small group discussions of the current literature on educational assessment or small group or individual work sessions designed to provide hands-on experiences with assessment methods or decision-making.

# **LEARNER OUTCOMES:**

This course is the second course in the series in pursuit of the Data-Driven Decision-Making (3DM) Certificate. The first purpose for this course in the certificate series is to inform educators of the important role of classroom, school, or district-developed assessments in the context of current school reform initiatives (and policies) at the federal, state and local levels. The second purpose is to improve educators understanding, skills, and dispositions related to ensuring the measures they develop adhere to professional standards. As such, the course will facilitate each educator's reaching a level high of competence and professional-level understanding of assessment design practices used in making decisions related to continuous improvement in learning. As a result of this course, the educators will be able to:

- Understand how data-driven decision-making is implied or made explicit in federal statutes and state assessment programs, particularly for the state where employed, and the impact on expected standards for educator performance.
- Understand and explain the cognitive bases for learning and their connections to various forms of assessments of learning.
- Understand the purposes for different types of assessments at the classroom, school, or system level, and be able to select and administer the appropriate assessment for the intended purpose.
- Understand the conceptual framework underlying classroom, school, or system level assessment data, and use the framework to design assessments and scoring methods that will allow educators to draw valid inferences from the assessment data.
- Interpret, explain, and use classroom, school, or system level assessment data to make decisions about learning and teaching.
- Analyze a state test blueprint and released assessment in terms of the cognitive demands, determine the appropriate inferences that can be drawn from the data, and discuss how classroom, school, or district assessment can be used to support learning of standards.
- Apply multiple learning hierarchies (e.g., Bloom, Krathwohl) to assessment of student progress.
- Design classroom-based tests that meet professional standards for sound assessment and testing.
- Explain the relationship between classroom, school, and district assessment to high stakes testing and student, teacher, and school accountability.
- Explain the relationship between learning, testing, and issues of social justice.



# PROFESSIONAL STANDARDS

The goal of the course is to facilitate each educator's reaching a level high of competence and professional-level understanding of assessment design practices used in making decisions related to continuous improvement in student learning. Learner outcomes are consistent with the Educational Psychology Program standards:

- Educators will demonstrate an understanding of principles and theories of learning, cognition, motivation, and development as they apply to a wide variety of contemporary assessment contexts.
- Educators will use their knowledge, skills, and dispositions to apply principles and theories of learning, cognition, motivation, and development to analyze and develop instruction based on sound assessment principles.
- Educators will demonstrate an understanding of the basic concepts, principles, techniques, approaches, and ethical issues involved in educational assessment.

# **Student Outcomes and Relationship to Professional Standards**

The student outcomes are informed by the Standards for Teacher Competence in Educational Assessment of Students (AFT, NCME, NEA, 1990), the Standards for Competence in Student Assessment (AASA, NAESP, NASSP, NCME, 1990), the Standards for Educational and Psychological Testing (AERA, NCME, & APA, 1999), and the InTASC Model Core Teaching Standards (CCSSO, 2011) guide the course content and emphasis for reaching the learning objectives.

Those standards deemed most relevant to addressing the learning targets for the course are those that state that *educators will have the knowledge, skill and disposition to:* 

- 1. Apply basic principles of sound assessment practices for addressing specific educational needs.
- 2. Distinguish between the nature and uses for norm-referenced and criterion-referenced tests.
- 3. Select assessment methods appropriate for instructional decisions.
- 4. Develop assessment methods appropriate for instructional decisions.
- 5. Administer, score, and interpret the results of both externally-produced and teacher-produced assessment instruments.
- 6. Use assessment results in instructional planning, teaching, developing curriculum, and school improvement.
- 7. Recognize and appropriately act against unethical, illegal, and otherwise, appropriate assessment methods and uses of assessment information.
- 8. Recognize the implications of educational assessments for social justice in schools.
- 9. Discern critical issues related to the role of the design of assessments for school accountability and high stakes testing.



- 10. Gather evidence from multiple sources of data to draw valid inferences about student learning.
- 11. The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

# **REQUIRED TEXTS:**

- Ainsworth, L. & Viegut, D. (2006). Common formative assessments: How to connect standards-based instruction and assessment. Thousand Oaks, CA: Corwin Press.
- Dean, C. B., Hubbell, E. R., Pitler, H., & Stone, B. (2012). *Classroom instruction that works:* Research-based strategies for increasing student achievement. 2<sup>nd</sup> Ed. Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R. J., Pickering, D., & McTighe, J. (1993). Assessing student outcomes: Performance assessment using the Dimensions of Learning model. Alexandria, VA: Association for the Supervision and Curriculum Development.
- Chappuis, J., Stiggins, R., Chappuis, S., and Arter, J. (2012). *Classroom assessment for student learning: Doing it right using it well.* 2<sup>nd</sup> Ed. Boston: Pearson.

# **RECOMMENDED TEXTS:**

While these texts are not required, they are helpful.

- Anderson L. W. (2003). *Classroom assessment: Enhancing the quality of teacher decision making*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of educational objectives. New York: Longman.
- Arter, J., & McTighe, J. (2001). Scoring rubrics in the classroom: Using performance criteria for assessing and improving student performance. Thousand Oaks, CA: Corwin.
- Popham, W. J. (2011). Classroom assessment: What teachers need to know. Boston: Pearson.

# **ADDITIONAL READINGS:**

Additional readings can be found on the indicated website, Blackboard, or will be distributed by the instructor in class.



- Jordan, W. J. (2010). Defining equity: Multiple perspectives to analyze the performance of the diverse learner. *Review of Research in Education*, *34*(1), 142-178. doi: 10.3102/0091732X09352898
- Kirpes, A. L. & Price, C. (2009). Demystifying assessments: Understanding the test development process in large-scale assessments. *Edge*, January/February, 4 (3), 3-19. http://edd.wikispaces.com/file/view/edgev4n3+Price+Kirpes.pdf
- Nitko, A.J. (2007). *Using Mental Measurement Yearbook Review and other materials to evaluate a test*. Retrieved June 28, 2012 at: <a href="http://www.unl.edu/buros/bimm/html/lesson02.html">http://www.unl.edu/buros/bimm/html/lesson02.html</a>
- Plake, B. S., Buckendahl, C. W., & Impara, J. C. (2004). *Classroom-based assessment system for science: A model*. Washington, DC: National Academy of Sciences. <a href="http://www7.nationalacademies.org/bota/Classroom-basedAssment.pdf">http://www7.nationalacademies.org/bota/Classroom-basedAssment.pdf</a>
- Southwest Regional Development Laboratory. (2011). *Reading assessment database-overview*. Retrieved from http://www.sedl.org/reading/rad/.
- Virginia Department of Education. (April 28, 2011). *Board of Education Agenda Item*. Richmond, VA: Author. Retrieved from <a href="http://www.doe.virginia.gov/boe/meetings/2011/04\_apr/agenda\_items/item\_l.pdf">http://www.doe.virginia.gov/boe/meetings/2011/04\_apr/agenda\_items/item\_l.pdf</a>

## **Additional text-based resources:**

- American Association of School Administrators. (1997). *Competency standards in student assessment for educational administrators*. Retrieved June 28, 2012 at: http://www.unl.edu/buros/bimm/html/article4.html
- American Psychological Association. (2009). *Publication manual of the American Psychological Association*. (6th Ed.). Washington, DC: Author.
- American Federation of Teachers, National Council on Measurement in Education & National Education Association. (1990). *Standards for teacher competence in educational assessment of students*. Retrieved June 28, 2012 at: <a href="http://www.unl.edu/buros/bimm/html/article3.html">http://www.unl.edu/buros/bimm/html/article3.html</a>



# WEBSITE RESOURCES

Buros Center for Testing, including the Mental Measurements Yearbook <a href="http://www.unl.edu/buros/">http://www.unl.edu/buros/</a>

Multimedia Educational Resources for Learning and Online Teaching (MERLOT) <a href="http://www.merlot.org/merlot/materials.htm?keywords=Rubrics">http://www.merlot.org/merlot/materials.htm?keywords=Rubrics</a>

National Center for Fair and Open Testing (Fair Test) <a href="https://www.fairtest.org">www.fairtest.org</a>

National Center for Education Statistics <a href="http://nces.ed.gov">http://nces.ed.gov</a>

National Research Center on Evaluation, Standards, and Student Testing (CRESST), <a href="http://www.cse.ucla.edu/">http://www.cse.ucla.edu/</a>

**TeacherVision** 

http://www.teachervision.fen.com/teaching-methods/educational-testing/4170.html.

Virginia Department of Education http://www.doe.virginia.gov/testing/index.shtml

Wisconsin Center for Education Research <a href="http://www.wcer.wisc.edu/">http://www.wcer.wisc.edu/</a>

# COURSE REQUIREMENTS, PERFORMANCE-BASED ASSESSMENT, AND EVALUATION CRITERIA:

# A. Requirements

Students are expected to:

- attend all class sessions on time. [If an emergency prevents you from attending class, please call or e-mail the instructor in advance preferably, but as soon as possible.]
- participate meaningfully in class discussion
- contribute to group discussions and assignments
- submit all of the assignments on time. I will deduct 5% of the total grade for every day the assignment is late without a documented medical issue or emergency situation.
- reference the assigned readings within the body of the text, and complete a reference list at the end of the assignment according to the *Publication Manual of the American Psychological Association*, 6<sup>th</sup> Edition (APA, 2009) for items 2-7 below.



#### **B.** Performance-based assessments

All of the student products specified under course requirements will require performance-based assessments guided by scoring criteria, such as rubrics.

- 1. Class participation (20 points). Because of the importance of lecture and class discussions to students' learning experience, I expect each student to come to class on time and participate in class discussions. Additionally, assigned readings are to be completed before class. Attendance, punctuality, preparation, and active contribution to small and large group discussions and individual, small, or large group activities are essential. All in class assignments are to be completed by the end of class, or by the start of the next class period. These elements reflect the professional attitude implied in the course goals. If you miss a class, you are responsible for completing all assignments and readings by the next class.
- 2. Reflective Analysis Paper (20 points). Class participants will prepare a brief report about an area of instruction that is perceived to be in need of improvement. The paper will describe the nature of the problem, past attempts to resolve it, and reflections related to the underlying causal factors. Moreover, the paper will briefly describe the types of data currently used for assessing and monitoring student learning. The paper should be 6-8 pages in length. For current educators, this paper should focus on an issue that you would like to resolve. For students who may not be in an educational setting, you may research an issue using state or national data.
- **3. Assessment Proposal (30 points).** Class participants will develop a brief work proposal to develop assessments identified in the reflective analysis as in need of improvement. The proposal should provide a plan for developing, administering, and using the data for two (2) different assessment methods to address the problem. As a component of the plan for development, you will need to include the test blueprints and a plan to conduct a pilot test of the assessments. The plan should indicate how the assessments will be implemented in the schools.
- **4. Assessment Development (100 points total).** Using the assessment plan, class participants will develop and pilot test two (2) assessments based on sound principles of assessment construction. The parameters and points associated to each parameter include the following:
  - a. You must have one selected response assessment that includes at least 20 items and answer key and scoring scale. On the selected response assignment, you must include 5 binary items, 5 matching items, and 10 multiple choice items. You must include the answer key. With your answer key, you need to indicate how many points each question is worth and the total number of points associated with the test. (50 points)



- b. You must have one constructed response assessment that includes at least 5 items. Each item must use one of the scoring scales discussed in class (checklist, scoring scale, task list, holistic rubric, and analytical rubric). Each item must have a different scale. The scale must be appropriate to the item. Each item must also include the desired response or an exemplary response if more than one response is acceptable. (50 points)
- c. You will submit a draft of each assessment and an answer key or scoring scale for review. I will review the assessment and return the draft by the next class so that you can make the necessary changes for the pilot test. You need to keep the draft with my comments and submit the draft with my comments when you submit the final product. Each draft is worth 10 of the 50 points.
- d. Each assessment will require a pilot test, including making changes to the assessment based on what you learned from the pilot test. You will need to submit the test-takers answer sheets, the data from the pilot test, your questions to test-takers about the pilot test with the responses to your questions, and an analysis of the data and comments in relation to the draft. This combined information is worth 20 of the 50 points.
- e. You will submit the following products on the due date for each assessment: the draft with my comments, data from the pilot test, and the final copy of the assessment after making corrections from my comments and the pilot test. The final assessment is worth 20 of the 50 points. I will deduct 50 points for any missing components previously turned in if "c and d" from above are not resubmitted with the final product. You need to provide evidence of growth to me in the assessment. Therefore, I need your draft and the pilot test information with the final product to determine the growth in the assessment and your thinking about assessment.
- 5. Portfolio (20 points). You will complete a portfolio comprised of in-class work, homework, performance-based assessments, and commentary, reflections, or essays about the included work. The portfolio provides evidence across the array of products submitted about your unfolding learning of course content, your thoughts on the connections among the various learning activities as related to the your intended improvements in learning for the students, and an exhibition of your final products. The products included in your portfolio will "tell the story" about how you developed and will use assessment to augment decisions related to the student learning issues from your reflective paper.
- **6. Oral Presentation** (**10 points**). You will present your portfolio during the final class.



# C. Criteria for Evaluation

There are 200 total points for the course, distributed across the assignments and classroom discussion expectations.

# D. Grading scale

| Grade  | Points Earned       |
|--------|---------------------|
| Earned |                     |
| A+     | 195-200 points      |
| A      | 190-194 points      |
| A -    | 184-189 points      |
| B+     | 178-183 points      |
| В      | 172-177 points      |
| B-     | 166-171 points      |
| С      | 140-165 points      |
| F      | 139 or fewer points |

# COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT

# Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <a href="http://academicintegrity.gmu.edu/honorcode/">http://academicintegrity.gmu.edu/honorcode/</a>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <a href="http://ods.gmu.edu/">http://ods.gmu.edu/</a>].
- Students must follow the university policy for Responsible Use of Computing [See <a href="http://universitypolicy.gmu.edu/1301gen.html">http://universitypolicy.gmu.edu/1301gen.html</a>].
- Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.



# Campus Resources

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <a href="http://caps.gmu.edu/">http://caps.gmu.edu/</a>].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>].
- For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See <a href="http://gse.gmu.edu/">http://gse.gmu.edu/</a>].

#### **CLASS SCHEDULE**

#### **Overview**

The class is divided into five (5) themes, generally corresponding to the 5 weeks of class. Each week focuses on a set of inter-related topics as follows:

- Week 1: Principles of student-centered assessment for DDDM
- Week 2: Assessment Processes and Standards for DDDM
- Week 3: Assessment Products Gathering Selected-response Information for DDDM
- Week 4: Assessment Products Gathering Constructed response Information for DDDM
- Week 5: Assessment Use and Communication within the Context of DDDM



# CLASS SCHEDULE

| Session | Date    | Topic/Learning Experiences  | Readings and Assignments   |
|---------|---------|---|--|
|         | Theme   | 21: Principles of Student-centered Assessment for   | or Data-Driven Decision-Making   |
| 1       | 7/2, M  | Purpose and Context of Educational<br>Assessment for DDDM   | BB: VDOE Teacher Performance Standards<br>Ainsworth & Viegut (2006), Chapter 1 |
|         | 7/4, W  | Holiday – No Class  |  |
| 2       | 7/6, F  | Learning, Cognition and Assessment: Deconstructing Subject Matter Constructs  | Classroom Instruction that Works   |
|         |         | Theme 2: Assessment Processes and Sta   | andards for DDDM   |
| 3       | 7/9, M  | <ul> <li>Standards and General Assessment<br/>Principles: Validity, Reliability, Fairness</li> <li>Quantitative and Qualitative Assessment:<br/>Assumptions, Meaning, and Adequacy</li> </ul> | Ainsworth & Viegut (2006), Chapter 2  Reflective Analysis Paper Due            |
| 4       | 7/11, W | DDDM, Pacing, Monitoring, and Feedback  | Chappuis, et al. (2012), Chapters 2, 3, & 4                                    |
| 5       | 7/13, F | The Test Development Process and Test<br>Blueprints to Guide Decision-Making  | Assessing Student Outcomes   |
|         | Them    | e 3: Assessment Products – Gathering Selected F   | Response Information for DDDM  |
| 6       | 7/16, M | <ul> <li>Types of Assessments</li> <li>Development of Selected Response Items</li> </ul>  | Chappuis, et al. (2012), Chapter 5  Assessment Proposal Due                    |
| 7       | 7/18, W | Conducting "Instructional Walk-Throughs":<br>Criteria for Evaluating Curriculum,<br>Instruction, and Assessment Using Data  | Ainsworth & Viegut (2006), Chapters 3-6 Selected-response Assessment Draft Due |
| 8       | 7/20, F | Using Technology  | In class   |



| Session | Date    | Topic/Learning Experiences   | Readings and Assignments                   |
|---------|---------|--|--|
|         | Theme 4 | 1: Assessment Products – Gathering Constructed                           | d Response Information for DDDM            |
| 9       | 7/23, M | Knowledge, Understanding, and Skills:<br>Constructed Response Assessment | Chappuis, et al. (2012), Chapters 6 & 7    |
|         |         |  | Selected-response Final Due                |
| 10      | 7/25, W | Scoring Constructed Response Assessments                                 | Chappuis, et al. (2012), Chapter 8         |
|         |         |  | Constructed-response Draft Due             |
| 11      | 7/27, F | Measuring Growth: Portfolios   | Chappuis, et al. (2012), Chapter 11        |
|         |         |  | <b>Draft Scoring Scales Due</b>            |
|         |         |  |  |
|         |         | Theme 5: Assessment Use and Communication w                              | · ·  |
| 12      | 7/30, M | Using Assessment Results to Make   | Ainsworth & Viegut (2006), Chapters 7 &    |
|         |         | Educational and Accountability Decisions                                 | 8, teachers and administrators             |
|         |         | Analyzing Data   |  |
|         |         | <ul> <li>Barriers and solutions to DDDM</li> </ul>                       | Ainsworth & Viegut (2006), Chapters 9 &    |
|         |         | implementation   | 10, administrators only                    |
|         |         |  | Constructed-response Final Due             |
| 13      | 8/1, W  | Effective Communication using DDDM                                       | Chappuis, et al. (2012), Chapters 9, 10, & |
|         |         | Grading and Reporting  | 12   |
| 14      | 8/3, F  | The Change Process and Developing a                                      | Portfolio and Oral Presentations Due       |
|         |         | DDDM Culture for Continuous Educational Improvement                      |  |



# Sample Rubrics: Attendance & Participation

Student participation is imperative to student learning and a successful class. The following rubric outlines how student participation scores will be determined in this course. All students are expected to demonstrate specific characteristics and actions throughout the semester. The quality and quantity of these actions will determine the points assigned for participation.

# **Students are expected to:**

- a) Be punctual, present (in mind and body), and well prepared for class.
- b) Participate fully in class activities and assignments take an active part in small and large group discussions (without dominating the conversations) and pay attention to class lectures.
- c) Make insightful comments, which are informed by required readings and demonstrate reflection on those readings. Specifically, students should come to class with questions, comments, and thoughts on the current readings.
- d) Treat class activities, group discussions, and class discussions as important components of the course, showing respect for fellow classmates and the course material.
- e) Complete individual and group class activities within the time allotted, ensuring full participation of all group members. Submit class activities to the instructor at the end of class.

# Each of the 5 criteria will be assessed on a 4-point scale.

- 4 = Student *consistently* demonstrated the criterion throughout the semester.
- 3 = Student *frequently* demonstrated the criterion throughout the semester.
- 2 = Student *intermittently* demonstrated the criterion throughout the semester.
- 1 = Student *rarely* demonstrated the criterion throughout the semester.
- 0 = Student *did not* demonstrate the criterion throughout the semester.

The participation grade will be calculated as the sum of points for each criterion.



Appendix A

# **Assessment Proposal Rubric**

| Criteria   | Outstanding (4)  | Competent (3)  | Minimal (2)   | Unsatisfactory (1)  |
|--|--|--|---|---|
| Introduction Include a synthesis of the most important elements describing the problem from the Reflection Paper | The introduction provides a clear and complete synthesis of background of the problem. No extraneous text is included. | The introduction may have minor issues with clarity or extraneous text. The introduction is mostly complete, but may lack a piece of key information about the background of the problem.  | The introduction has several issues with clarity and/or extraneous text. The introduction is incomplete, lacking more than one piece of key information about the background of the problem.  | The introduction is unclear and/or too brief to completely communicate information about the background of the problem.               |
| Statement of the<br>Assessment Problem   |  |  |   |   |
| • Identify the learning problem  | The description of the learning problem is clear and complete. No extraneous text is included.                         | The description of the learning problem may have minor issues with clarity or extraneous text. The description is mostly complete, but may lack a piece of key information about the learning problem. More than one example is used to explain the problem, but they are lacking in | The description of the learning problem has several issues with clarity and/or extraneous text. The description is incomplete, lacking more than one piece of key information about the learning problem. One example is provided, with some details. The example | The description of the learning problem is unclear and/or too brief to completely communicate information about the learning problem. |



| Criteria  | Outstanding   | Competent  | Minimal   | Unsatisfactory  |
|---|---|--|---|---|
|   | (4)   | (3)  | (2)   | (1)   |
|   |   | details or clarity.  | may not be clear.   |   |
| Provide a context for<br>the problem<br>including student<br>demographics and<br>learning level | The description of the context is clear with no extraneous text. The context is complete including available demographics and learning level.   | The description of the context may have minor issues with clarity or extraneous text. The context is mostly complete, but may lack key information about either the demographics or the learning level.  | The description of the context has several issues with clarity and/or extraneous text. The context is incomplete, lacking more than one piece of key information about either the demographics or learning level. Or, the context may lack minor information from both the demographics and learning level. | The description of the context is unclear and/or too brief to completely communicate information about the learning level. Multiple key pieces of information are missing from both the demographics or learning level. Or, either the demographics or learning level is missing. |
| Analyze the problem<br>within the subject<br>matter   | Analysis of the problem fully addresses learning issues related to the subject matter knowledge, understanding, skills, and dispositions. The analysis fully addresses learning issues related to cognitive complexity within the subject. More than one example is used to clearly explain the | Analysis of the problem adequately addresses learning issues related to the subject matter knowledge, understanding, skills, and dispositions. The analysis adequately addresses learning issues related to cognitive complexity within the subject. The examples may be missing details | Analysis is limited, with only one example, or there may be many examples, but they lack many details impacting clarity. The analysis has several inaccuracies or misunderstandings related to the subject matter and cognitive complexity.   | Analysis is barely complete or lacks examples. The analysis is inaccurate with major misunderstandings related to the subject matter and cognitive complexity.  |



| Criteria                  | Outstanding (4)  | Competent (3)  | Minimal (2)  | Unsatisfactory (1)   |
|---------------------------|--|--|--|--|
|                           | problem. The analysis is accurate, with no misunderstandings.  | impacting clarity. The analysis may have minor inaccuracies or misunderstandings.  | (2)  | (1)  |
| • Learning Targets (LTs)  | LTs unambiguously and comprehensively are described in measurable terms  | LTs are described in measurable terms with minor omissions or with minor issues in clarity.  | Some of the LTs are described in measurable terms with major omissions or ambiguity.   | LTs are not described in measurable terms.   |
| • Justification(s)        | A clear, well-reasoned, comprehensive, and persuasive argument is provided for the importance of the problem. Evidence from the literature and examples from the classroom are provided. | The argument is persuasive, but has minor issues with the reasoning, or may be unclear. There are minor examples where evidence from the literature may not be complete, or may not directly relate to the problem. Classroom examples may be general, lacking specific details directly related to the problem. | The argument is general, and the reasoning for the importance may be unclear. The argument includes information from the literature and examples from the classroom, but the writing lacks specific connections to the literature or the classroom, or the examples are missing. | The argument is missing. Examples from the literature and/or classroom may be provided, but without reasoning to explain the importance of the problem. Or, there may be statements about the importance of the problem without examples from the literature or classroom. |
| Proposed     Applications | The proposed plan for implementation is easily executable, clear, and complete.  | The proposed plan for implementation has minor issues related to execution, clarity, or  | The proposed plan<br>appears to be executable,<br>however more than one<br>step is missing, steps are  | The proposed plan does<br>not appear to be<br>executable. Multiple<br>steps are missing,   |



| Criteria   | Outstanding  | Competent  | Minimal  | Unsatisfactory   |
|--|--|--|--|--|
|  | (4)  | (3) missing details.   | unclear, and details are missing.  | (1) unclear, lacking details.  |
| Proposed Methods and<br>Procedures                         |  |  |  |  |
| • Assessment Blueprint                                     | A clear and complete narrative and graphic display of the assessment blueprint is provided. It clearly delineates the learning targets into content and cognitive dimensions. The blueprint is well-organized. | The narrative and graphic display of the assessment blueprint is provided, but may have minor issues with clarity or completion. It delineates the learning targets into content and cognitive dimensions, but there may be minor issues with clarity or completion. There may be minor issues with organization of the blueprint. | The narrative and/or graphic display have a major omission or major issues with clarity. The delineation of the content or cognitive dimensions of the learning targets is unclear or incomplete. The blueprint has a major issue with the organization. | The narrative and/or graphic display are omitted. Or, there is no delineation of the content or cognitive dimensions of the learning targets. The blueprint has more than one major issue with organization. |
| Assessment     Construction     (procedures and resources) | The description of all steps to be taken to construct the assessments is clear and complete and includes relevant resources.   | The description of most of the steps to be taken to construct the assessments is clear. There may be minor issues details or a step missing within the description. Relevant   | The description has a major issue related to clarity or missing steps. One or two resources may not be relevant or may be incomplete.  | The description has multiple issues with clarity and/or many steps are missing. Most of the resources are not relevant, or resources are missing.  |



| Criteria  | Outstanding (4)  | Competent (3)  | Minimal (2)   | Unsatisfactory (1)   |
|---|--|--|---|--|
|   | ,  | resources may be incomplete.   |   |  |
| <b>Quality Assurance</b>  |  |  |   |  |
| Peer Review   | The peer review procedure is clearly described and complete.   | The peer review procedure is described with minor issues related to clarity, or a step may be missing.   | The peer review procedure is described. A major step may be missing or unclear.   | The peer review procedure is unclear and/or is missing more than one step.   |
| Pilot Test  | The pilot test procedure is clearly described and complete.  | The pilot test procedure is described with minor issues related to clarity, or a step may be missing.  | The pilot test procedure is described. A major step may be missing or unclear.  | The pilot test procedure is unclear and/or is missing more than one step.  |
| APA Style  Use APA writing style, formatting, including citations within text and references. | Writing is concise, coherent, well-organized, and with correct APA style. Citations and references are correct and complete. | Writing lacks some clarity or has minor organizational problems affecting the overall coherence, and/or there are some errors in APA style, citations, or references. There may also be a small number of missing citations or references. | Writing has multiple problems with clarity, coherence, and organization. There are many errors in APA style, citations, and/or references. Multiple references are missing or incomplete. | Writing lacks clarity, coherence, many errors, and/or no use of APA style. Citations and references are minimal or absent. |



# APPENDIX B

# GENERAL GUIDELINES TO WRITTEN ASSIGNMENTS

All course projects should be typed, double-spaced, and include a cover page. Include an abstract (250 works maximum) that provides a synopsis of the content, such as purpose, procedures, findings and conclusions. In terms of general style, the format provided in the sixth edition of **Publication Manual of the American Psychological Association** (American Psychological Association, 2009) should be followed. Students should pay close attention to:

- Margins
- Headings/Subheadings
- Writing Style
- **■**Citations in the Text
- **■**Reference Page

The *cover page* should include the title of the assignment, the standard course requirement statement, your name, date, and institutional affiliation information.

You should make a copy of your projects before submitting them to the instructor.

Submit assignments as a paper copy in class and via e-mail.



#### APPENDIX C

# **Standards for Teacher Competence in Educational Assessment of Students**

# 1. Teachers should be skilled in choosing assessment methods appropriate for instructional decisions.

Skills in choosing appropriate, useful, administratively convenient, technically adequate, and fair assessment methods are prerequisite to good use of information to support instructional decisions. Teachers need to be well acquainted with the kinds of information provided by a broad range of assessment alternatives and their strengths and weaknesses. In particular, they should be familiar with criteria for evaluating and selecting assessment methods in light of instructional plans.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to use the concepts of assessment error and validity when developing or selecting their approaches to classroom assessment of students. They will understand how valid assessment data can support instructional activities such as providing appropriate feedback to students, diagnosing group and individual learning needs, planning for individualized educational programs, motivating students, and evaluating instructional procedures. They will understand how invalid information can affect instructional decisions about students. They will also be able to use and evaluate assessment options available to them, considering among other things, the cultural, social, economic, and language backgrounds of students. They will be aware that different assessment approaches can be incompatible with certain instructional goals and may affect quite differently on their teaching.

Teachers will know, for each assessment approach they use, its appropriateness for making decisions about their pupils. Moreover, teachers will know of where to find information about and/or reviews of various assessment methods. Assessment options are diverse and include text- and curriculum-embedded questions and tests, standardized criterion-referenced and norm-referenced tests, oral questioning, spontaneous and structured performance assessments, portfolios, exhibitions, demonstrations, rating scales, writing samples, paper-and-pencil tests, seatwork and homework, peer- and self-assessments, student records, observations, questionnaires, interviews, projects, products, and others' opinions.

# 2. Teachers should be skilled in developing assessment methods appropriate for instructional decisions.



While teachers often use published or other external assessment tools, the bulk of the assessment information they use for decision-making comes from approaches they create and implement. Indeed, the assessment demands of the classroom go well beyond readily available instruments.

Teachers who meet this standard will have the conceptual and application skills that follow. Teachers will be skilled in planning the collection of information that facilitates the decisions they will make. They will know and follow appropriate principles for developing and using assessment methods in their teaching, avoiding common pitfalls in student assessment. Such techniques may include several of the options listed at the end of the first standard. The teacher will select the techniques which are appropriate to the intent of the teacher's instruction.

Teachers meeting this standard will also be skilled in using student data to analyze the quality of each assessment technique they use. Since most teachers do not have access to assessment specialists, they must be prepared to do these analyses themselves.

# 3. The teacher should be skilled in administering, scoring and interpreting the results of both externally-produced and teacher-produced assessment methods.

It is not enough that teachers are able to select and develop good assessment methods; they must also be able to apply them properly. Teachers should be skilled in administering, scoring, and interpreting results from diverse assessment methods.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be skilled in interpreting informal and formal teacher-produced assessment results, including pupils' performances in class and on homework assignments. Teachers will be able to use guides for scoring essay questions and projects, stencils for scoring response-choice questions, and scales for rating performance assessments. They will be able to use these in ways that produce consistent results.

Teachers will be able to administer standardized achievement tests and be able to interpret the commonly reported scores: percentile ranks, percentile band scores, standard scores, and grade equivalents. They will have a conceptual understanding of the summary indexes commonly reported with assessment results: measures of central tendency, dispersion, relationships, reliability, and errors of measurement.



Teachers will be able to apply these concepts of score and summary indices in ways that enhance their use of the assessments that they develop. They will be able to analyze assessment results to identify pupils' strengths and errors. If they get inconsistent results, they will seek other explanations for the discrepancy or other data to attempt to resolve the uncertainty before arriving at a decision. They will be able to use assessment methods in ways that encourage students' educational development and that do not inappropriately increase students' anxiety levels.

# 4. Teachers should be skilled in using assessment results when making decisions about individual students, planning teaching, developing curriculum, and school improvement.

Assessment results are used to make educational decisions at several levels: in the classroom about students, in the community about a school and a school district, and in society, generally, about the purposes and outcomes of the educational enterprise. Teachers play a vital role when participating in decision-making at each of these levels and must be able to use assessment results effectively.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to use accumulated assessment information to organize a sound instructional plan for facilitating students' educational development. When using assessment results to plan and/or evaluate instruction and curriculum, teachers will interpret the results correctly and avoid common misinterpretations, such as basing decisions on scores that lack curriculum validity. They will be informed about the results of local, regional, state, and national assessments and about their appropriate use for pupil, classroom, school, district, state, and national educational improvement.

# 5. Teachers should be skilled in developing valid pupil grading procedures which use pupil assessments.

Grading students is an important part of professional practice for teachers. Grading is defined as indicating both a student's level of performance and a teacher's valuing of that performance. The principles for using assessments to obtain valid grades are known and teachers should employ them.

Teachers who meet this standard will have the conceptual and application skills that follow. They will be able to devise, implement, and explain a procedure for developing grades composed of marks from various assignments, projects, in class activities, quizzes, tests, and/or other assessments that they may use. Teachers will understand and be able to articulate why the grades they assign are rational, justified, and fair, acknowledging that such grades reflect their preferences and judgments.



Teachers will be able to recognize and to avoid faulty grading procedures such as using grades as punishment. They will be able to evaluate and to modify their grading procedures in order to improve the validity of the interpretations made from them about students' attainments.

# 6. Teachers should be skilled in communicating assessment results to students, parents, other lay audiences, and other educators.

Teachers must routinely report assessment results to students and to parents or guardians. In addition, they are frequently asked to report or to discuss assessment results with other educators and with diverse lay audiences. If the results are not communicated effectively, they may be misused or not used. To communicate effectively with others on matters of student assessment, teachers must be able to use assessment terminology appropriately and must be able to articulate the meaning, limitations, and implications of assessment results. Furthermore, teachers will sometimes be in a position that will require them to defend their own assessment procedures and their interpretations of them. At other times, teachers may need to help the public to interpret assessment results appropriately.

Teachers who meet this standard will have the conceptual and application skills that follow. Teachers will understand and be able to give appropriate explanations of how the interpretation of student assessments must be moderated by the student's socio-economic, cultural, language, and other background factors. Teachers will be able to explain that assessment results do not imply that such background factors limit a student's ultimate educational development. They will be able to communicate to students and to their parents or guardians how they may assess the student's educational progress. Teachers will understand and be able to explain the importance of taking measurement errors into account when using assessments to make decisions about individual students. Teachers will be able to explain the limitations of different informal and formal assessment methods. They will be able to explain printed reports of the results of pupil assessments at the classroom, school district, state, and national levels.

# 7. Teachers should be skilled in recognizing unethical, illegal, and otherwise inappropriate assessment methods and uses of assessment information.

Fairness, the rights of all concerned, and professional ethical behavior must undergird all student assessment activities, from the initial planning for and gathering of information to the interpretation, use, and communication of the results. Teachers must be well-versed in their own ethical and legal responsibilities in assessment. In addition, they should also attempt to have the



inappropriate assessment practices of others discontinued whenever they are encountered. Teachers should also participate with the wider educational community in defining the limits of appropriate professional behavior in assessment.

Teachers who meet this standard will have the conceptual and application skills that follow. They will know those laws and case decisions which affect their classroom, school district, and state assessment practices. Teachers will be aware that various assessment procedures can be misused or overused resulting in harmful consequences such as embarrassing students, violating a student's right to confidentiality, and inappropriately using students' standardized achievement test scores to measure teaching effectiveness.



# APPENDIX D

# Synthesis of Competency Standards in Student Assessment for Educational Administrators

# Competencies associated with assisting teachers:

- 1. Have a working level of competence in the *Standards for Teacher Competence in Educational Assessment of Students*.
- 2. Know the appropriate and useful mechanics of constructing various assessments.

# Competencies associated with *providing leadership* in developing and implementing assessment policies:

- 3. Understand and be able to apply basic measurement principles to assessments conducted in school settings.
- 4. Understand the purposes (e.g., description, diagnosis, and placement) of different kinds of assessment (e.g., achievement, aptitude, and attitude) and the appropriate assessment strategies to obtain the assessment data needed for the intended purpose.
- 5. Understand the need for clear and consistent building- and district-level policies on student assessment.

# Competencies needed in using assessments in making decisions and in communicating assessment results:

- 6. Understand and express technical assessment concepts and terminology to others in nontechnical but correct ways.
- 7. Understand and follow ethical and technical guidelines for assessment.
- 8. Reconcile conflicting assessment results appropriately.
- 9. Recognize the importance, appropriateness, and complexity of interpreting assessment results in light of students' linguistic and cultural backgrounds and other out-of-school factors in light of making accommodations for individual differences, including disabilities, to help ensure the validity of assessment results for all students.
- 10. Ensure the assessment and information technology are employed appropriately to conduct student assessment.
- 11. Use available technology appropriately to integrate assessment results and other student data to facilitate students' learning, instruction, and performance.
- 12. Judge the quality of an assessment strategy or program used for decision making within their jurisdiction.