# Summary Program Report, Elementary Education IUPUC Division of Education June 3, 2013

This report summarizes performance data for student assessments associated with the three professional programs housed in the IUPUC division of education. The first program is Elementary education, and the additional are the dual license programs in English as a Second Language and Special Education. All candidates admitted into the IUPUC Division of Education Elementary Education program complete the requirements for a B.S. in Elementary Education. Through the spring semester of 2013, candidates could choose to complete a certification program in four areas: reading specialist, special education, education technology, and English as a second language. Because of state requirements for candidates to complete a concentration equivalent to a minor alongside the Elementary Education degree, the IUPUC Division of Education is transitioning to a program model where only special education and English as a second language will be offered as dual license programs. In this report, we report data from candidates enrolled in the B.S. in Elementary Education, as well as candidates completing a dual license in either English as a second language and special education.

The Division of Education at IUPUC collects division-specific student performance data by way of three separate outcome frameworks. The first is the IUPUC Student Learning Outcomes (SLOs). Framework. The General Education Board at IUPUC developed the SLO framework as a replacement for the IUPUI-specific Principles of Undergraduate Learning (PULs). This framework defines a set of campus-wide expectations for all undergraduate students. In the fall of 2012, the university collected the first round of SLO data, with a second round collected in the spring semester of 2013. This report summarizes the academic year 2012-2013 and represents the performance of two groups, preprofessional students and teacher candidates enrolled in courses identified as general education courses. The second framework, the Critical Components of Effective Teaching (CCETs), is specific to the division and replaces the IUPUI Principles of Teacher Education (PTEs) framework. The CCET framework defines expectations for all undergraduate students formally admitted into the professional program in elementary education. The 2012-2013 academic year marks the second round of CCETs data collection. The third framework is the PRAXIS II assessment framework for the exams that candidates are required to take for certification. For IUPUC Elementary Education majors, the Praxis 0011 and 0300 assessments (0011: Elementary Education: Curriculum, Instruction and Assessment and 0300: Reading Specialist) are required for all Elementary Education program completers. In addition, candidates seeking dual licensing in either English as a Second Language or Special Education are required to take the Praxis 0361 and 0543 (0361: and 0543: Special Education: Core Knowledge and Mild to Moderate Applications). The frameworks for the four Praxis assessments are shown in Appendix X.

## **I. Learning Outcomes**

IUPUC Student Learning Outcomes (SLOs)

The IUPUC General Education Student Learning Outcomes assessment framework was piloted in the spring of 2012 and implemented in the fall of 2012. The framework is organized into three categories: Foundational Skills, Areas of Knowledge, and Modes of Inquiry. In the fall of 2012 and spring of 2013, data were collected for the following SLOs. The complete Framework is provided in Appendix A.

- 1. Discovers, explores, and analyzes ideas taking into account diverse sources and viewpoints; presents the results in writing with attention to appropriate genres, audience expectations, and rhetorical concepts
- 2. Demonstrates both a) proficiency in oral discourse in a variety of formats and b) the ability to critically evaluate oral presentations according to established criteria
- 3. Solve problems and be able to make inferences by application of appropriate mathematical models

*IUPUC Critical Components of Effective Teaching (CCETs)* 

The division has revised the formal assessment system for accreditation based on a new conceptual framework (*Critical Components of Effective Teaching*, CCETs: Appendix A) and a new program established in anticipation of the division's next NCATE (National Council for Accreditation of Teacher Education) accreditation report to be submitted in the fall of 2014 and in response to changes to the state of Indiana's teacher licensing policies. The Revisions to Professional Educator Preparation (REPA) led the division to develop areas of concentrations and revisions of program credit hours in order to be in compliance with the new licensing requirements mandated by the state. The division found that the Indiana University Principles for Teacher Education (PTEs) no longer captured the learning outcomes sought by the revised programs. In the spring of 2012, the IUPUC DoE faculty approved the CCETs as the conceptual framework the division will utilize moving forward. The CCET outcomes are aligned with the standards of the division's accrediting professional organization, the Association for Childhood Education International (ACEI). The ACEI standards are included in Appendix A.

The particular assessment discussed in this report is a two-semester long student teaching evaluation (a performance assessment administered in the senior year of the program). The student teaching evaluation is administered in each semester of the candidates' senior year and was developed to capture evidence of candidates' ability to implement best practices in K-6 classroom settings. In total, there are twenty-six individual learning outcomes associated with this assessment. For the purposes of this report, the focus will be on five primary learning outcomes that define the skills, knowledge and dispositions expected of the elementary education candidates by program completion. The primary learning outcomes measured by the assessment are as follows:

• Candidate demonstrates knowledge of student learning and development (CCET 4) Knowledge of Student Learning

- Candidate creates an environment where K-6 students are fully engaged and on task and within which diverse opinions are encouraged and nurtured. (CCET 4.b, 4.d) Learning Environment
- Candidate implements lessons that are creative, engaging, and appropriate for the learning community. (CCET 4.a, 4.c) *Lesson Implementation*
- Candidate builds productive learning relationships with students (CCET 4.e) *Teacher/Student Relationship*

## PRAXIS Certification Exams Frameworks

In order to recommend candidates for certification in the state of Indiana, IUPUC Division of Education confirms that students have satisfactorily completed a stateapproved program and have met any state required stipulations, including the receipt of a passing score on the state-required PRAXIS exam in their certification area(s). All candidates enrolled in the division must complete the elementary education program. Candidates may choose a concentration leading to certification in the additional areas of English as a Second Language and Special Education. For certification in Elementary Education (all IUPUC candidates), the state required assessments are the Praxis 0011 and 0300 assessments (0011: Elementary Education: Curriculum, Instruction and Assessment and 0300: Reading Specialist). Candidates seeking dual licensing in either English as a Second Language or Special Education are required to take an additional exam specific to the license area, either the Praxis 0361 or 0543 (0361: and 0543: Special Education: Core Knowledge and Mild to Moderate Applications). The state of Indiana requires these exams as additional proof that each candidate requesting licensure has obtained the knowledge and skills necessary to perform at a satisfactory level as a teacher in K-6 classrooms. The content categories of each assessment are summarized below. A full description of each exam, as provided by the Education Testing Service, ETS, is available in Appendix A.

The framework design of the Praxis 0011 (required of all program completers), Elementary Education: Curriculum, Instruction, and Assessment, includes assessment of the content generally taught in elementary grades (reading/language arts, mathematics, science, social studies, arts and physical education, as well as the planning of curriculum, design of instruction, and assessment of learning. Thirty-five percent of the exam is made up of Reading and Language Arts content and pedagogy and 20% of Mathematics content and pedagogy. The areas of Science, Social Studies, and Arts and Physical Education each contribute to 10% of the exam. The final content category, reflected by 15% of the exam, is termed as "General Information about Curriculum, Instruction, and Assessment." The framework design of the Praxis 0300 (required of all program completers), Reading Specialist, includes the categories of (1) Theoretical & Knowledge Bases of Reading, (2) Application of Theoretical & Knowledge Bases of Reading in Instruction, (3) Application of Theoretical & Knowledge Bases of Reading in Diagnosis & Assessment, and (4) Reading Leadership (percentage of exam in each category, respectively, 18%, 45%, 27%, 10%).

The framework for the certification test required of candidates seeking a dual license in Special Education, Praxis 0543 (Special Education: Core Knowledge and Mild to Moderate Applications), includes the categories of (1) Development and Characteristics of Learners, (2) Planning and the Learning Environment, (3) Instruction, (4) Assessment, (5) Foundations and Professional Responsibilities, and (6) Integrated Constructed-response Questions (comprising 14%, 17%, 17%, 14%, 13%, and 25% of the exam, respectively).

Lastly, candidates seeking dual licensure in English as a Second Language are required to take the Praxis 0361 (English to Speakers of Other Languages), consisting of the content categories of (1) Foundations of Linguistics and Language Learning (includes a listening portion), (2) Planning, Implementing and Managing Instruction, (3) Assessment, and (4) Cultural and Professional Aspects of the Job (comprising 40%, 30%, 15%, and 15% of the exam).

#### II. Assessment Measures

The degree to which teacher candidates meet SLO expectations was measured across several IUPUC General Education courses in the fall semester of 2012 and the spring semester of 2013. Both teacher candidates formally accepted into the Elementary Education program and future candidates, not yet accepted into the program but anticipating applying to the program, were evaluated on the three SLOs discussed earlier. Candidates' knowledge and understanding were measured on a five-point scale ranging from pre-skill level to exemplary level. Results are collected and distributed to divisions based on the candidates declared major. Results are not provided based on status in the program; therefore it is not possible to know how scores vary within the division based on program status (accepted or yet to apply). Rubrics for the SLO assessments are provided in Appendix B.

The CCETs assessment (student teaching evaluation) is administered in both semesters of the candidates' senior year. The evaluation instrument is completed by the supervising classroom teacher and the university supervisor based on multiple classroom observations of candidate performance. For the purpose of this report, results from the five evaluation categories described earlier are presented from the fall semester of 2012 and the spring semester of 2013. These categories relate to the CCET cluster of "Teaching all Learners" and have been identified as important indicators for informing program improvement efforts. The candidates were assessed on a four-point scale ranging from the "unsatisfactory" level to the "exemplary" level. The target performance for all DoE candidates is that of "developing professional." The detailed descriptions of the scoring categories for each of the CCET indicators are given in Appendix B and help to differentiate between the levels of performance expected in each category.

Teacher candidates typically sit for the PRAXIS assessment close to the end of their time in the program. In order to be recommended for licensure in the state of Indiana, a candidate must take and pass the appropriate PRAXIS assessment. Scores are shared with the state and reported to the institution in the form of percent passing.

## **III. Assessment Findings**

## SLO Results

The results from the IUPUC SLO assessments for academic year 2012-2013 indicate that candidates' performance is lowest overall within the indicators of SLO 3: Solve problems and be able to make inferences by application of appropriate mathematical models (Table 3). In particular, performance is lowest for the two indicators, "Explain information given in mathematical form" and "Calculation," both receiving an average score of 2.6 for Division of Education candidates. This score indicates that the Division's candidates currently fulfilling general education requirements are providing evidence of the development of an emerging or basic understanding of these topics. Performance within the other two outcomes measured this academic year shows that Division of Education candidates provided evidence of developing at least a basic understanding of the topic areas within each outcome.

Highest performance for Division candidates was within SLO 2: Demonstrates both a) proficiency in oral discourse in a variety of formats and b) the ability to critically evaluate oral presentations according to established criteria. The topical area showing the most development was the ability to analyze public discourse where Division candidates' average score was 4.3, approaching evidence of exemplary performance.

Performance within SLO 1: Discovers, explores, and analyzes ideas taking into account diverse sources and viewpoints; presents the results in writing with attention to appropriate genres, audience expectations, and rhetorical concepts, was consistent, with all average topical scores just over 3, evidence of performance over a basic level of understanding.

Table 1
Division of Education Performance SLO 1

1.1 Establishes and supports a clear thesis.

Pre-skill

1.2 Uses appropriate rhetorical conventions.

Pre-skill

Exemplary

Exemplary

n=13 av.=3.3 md=3.0 dev.=0.9

1.3 Synthesizes diverse sources and viewpoints.

Pre-skill

Exemplary

n=14 av.=3.1 md=3.0 dev.=1.0

1.4 Shows evidence of editing and revision with attention to mechanical errors.

Exemplary

n=14 av.=3.2 md=3.0 dev.=1.0

1. Discovers, explores, and analyzes ideas taking into account diverse sources and viewpoints; presents the results in

writing with attention to appropriate genres, audience expectations, and rhetorical concepts.

Table 2

## Division of Education Performance SLO 2

2. Demonstrates both a)proficiency in oral discourse in a variety of formats and b) the ability to critically evaluate oral presentations according to established criteria.

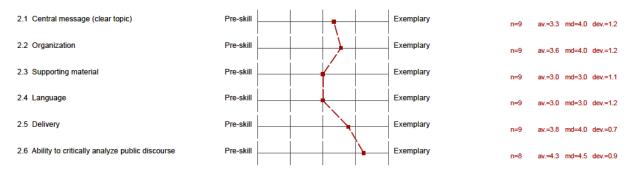
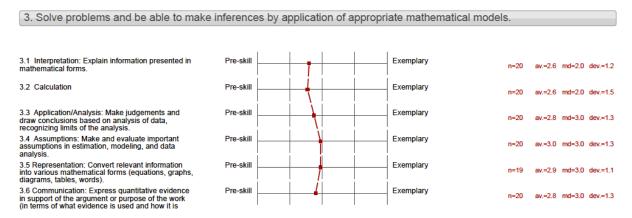


Table 3
Division of Education Performance SLO 3



#### CCETs Results

All Division of Education candidates are evaluated on Indicators 2 – 5 in the third semester of the program during the student teaching portion of the semester. This student teaching placement is the general elementary education placement. Indicator 1 is measured in the fourth semester of the program, during the student teaching placement involving the candidate's dual licensure area or concentration area. The elementary education program, English as a second language (TESOL) and Special Education (CEC) candidates are evaluated on indicator 1. Candidates choosing a concentration in the areas of computer education or middle grades content are not evaluated on indicator 1, as these programs require a different student teaching evaluation form. The results for indicator 1 in Table 4 show results disaggregated by elementary, TESOL, and CEC candidates and the total number of candidates evaluated do not correspond with the numbers in the other indicators because some candidates opted for the other programs mentioned earlier.

As seen in Table 4, none of the candidates' evaluations were scored at the "unacceptable" level, and very few candidates fell within the "underdeveloped" level. Overall averages for the five indicators were consistent, with average scores of 3.1 in all but

one category. It is important to note that target scores for candidates as established by the Division is "Developing Professional;" therefore, an average of slightly over 3 is in line with Division goals for student learning.

Even though numbers were small within the TESOL and CEC programs, the average scores for candidates choosing to pursue a dual in either of the two areas realized was higher than their general elementary education counterparts. The six candidates enrolled in these programs realized over a ½ point gain on their general elementary education classmates. This score does not necessarily indicate growth within the program, and may be attributed to the quality of candidates pursuing dual licensure.

Table 4: Percent of Fall 2012 and Spring 2013 Graduates Assessed at CCET-aligned

**Learning Objectives** 

Learning Objectiv		T	T	T	T
CCET-aligned	Unacceptable	Under-	Developing	Exemplary	Average
Indicator		developed	Professional		Indicator
		_			Rating
1. Knowledge of	El. Ed – 0%(0)	El. Ed -	El. Ed -	El. Ed -	El. Ed – 3.1
Student Learning	TESOL -0%(0)	14%(2)	57%(8)	29%(4)	TESOL -
	CEC - 0%(0)	TESOL -	TESOL-	TESOL-	3.7
		0%(0)	33%(1)	67%(2)	CEC - 3.8
		CEC - 0%(0)	CEC - 25%(1)	CEC - 75%(3)	
2.Learning	0% - (0)	6% - (2)	77% - (24)	16% - (5)	3.1
Environment					
3.Lesson	0% - (0)	6% - (2)	77% - (24)	16% - (5)	3.1
Implementation					
4.Instructional	0% - (0)	6% - (2)	77% - (24)	16% - (5)	3.1
Activities					
5.Teacher/	0% - (0)	3% - (1)	68% - (21)	29% - (9)	3.3
Student		_	_		
Relationship					

#### PRAXIS Assessment Results

Pass rate data for the PRAXIS assessment is released to teacher education programs by the Indiana Department of Education. Disaggregated data are not provided; therefore, gleaning specific information from the assessment results is not possible. However, in 2011 – 2012, IUPUC candidates demonstrated high levels of knowledge that exceeded the state cut-off scores in the required Praxis Assessments Elementary Education Curriculum and Instruction Assessment (0011) and Reading Specialist Assessment (0300). The state cut rates for these assessments are 165 and 370, respectively. IUPUC Division of Education candidates' average scaled scores were 181 and 540, respectively. The pass rate for the 33 program completers was 100% for both assessments. Likewise, 100% of IUPUC candidates seeking dual licensure in English as a Second Language or Special Education passed the associated PRAXIS assessments in their respective dual license area.

## IV. Actions Taken in Response to Findings

Elementary Education Program

Results from the three assessments shared in this report have informed the elementary education program in multiple ways. First, the results of the PRAXIS test have confirmed that program completers possess the knowledge necessary to become a teacher in the state of Indiana. The consistent 100% pass rate realized by the Division's candidates indicate that all candidates benefit from the experiences that the program provides.

Results from the SLO data indicate that the Division's candidates continue to struggle more in knowledge and application of mathematics and science, and excel in communication and written skill. Many would argue that this finding is characteristic of candidates in many elementary education programs. The Division recognizes that candidates require additional preparation in math and sciences and has implemented various measures within the methods classes that provide additional content-focused pedagogical experiences, including hands-on science labs and numerous opportunities for problem solving in mathematics. The Division has made a conscious effort to supplement content-focused activities in the sciences so that candidates not only learn methods to teach young children, but also develop deep, conceptual knowledge of content included in the elementary curriculum. The SLO data add a new level of understanding that before was limited to the interpretation of course grades. Moving forward, the Division will continue to be better prepared to focus interventions where they are needed based on the topical indicators within each Student Learning Outcome (SLO).

Results from the CCET assessment of student teaching may indicate that the candidates' results may be experiencing a ceiling effect. Since the Division's target performance is "developing professional" and the average candidate performs above that level, it is important to target interventions to candidates who score at the "underdeveloped" level. A few semesters ago, the Division implemented a new student teaching model in which candidates complete two separate placements, the first in the third semester of the program. Once the first placement is completed, the candidates complete additional coursework in an eight-week intensive format before beginning the second placement. The CCET assessment has helped identify candidates needing additional interventions prior to the final semester of student teaching. Once identified, the individual candidates are offered individually focused support in the areas that were evaluated as underdeveloped. This support could range from one-on-one mentoring, to providing supplemental materials to support areas such as classroom management, student engagement, and instructional planning, implementation, and assessment (among others).

Results from the PRAXIS assessments indicate that IUPUC DoE program completers meet the requirements for licensure set by the state. The Division will continue to monitor the results, as well as the goals the for our program enrollment in our Title II Institutional Report Card. The Division will have one more semester of PRAXIS II assessment data prior to the transition of the Indiana state-specific teacher assessment, Indiana Core Assessment, to be implemented January 1, 2014. With the implementation of the new assessment, it will

be necessary to carefully monitor student performance as it will be impossible to link the existing PRAXIS II data to the Indiana Core Assessment for purposes of trend analysis.

## Special Education Program

Program-specific assessment data designed to evidence sufficient mastery of *Council for Exceptional Children* standards for Mild Intervention Programs has been collected over several academic years for dual license special education teacher candidates at IUPUC in order to meet NCATE program requirements for national recognition. Though special education teacher candidates perform consistently at the "exemplary" or "developing professional" levels across program assessments overall, relative weaknesses were identified within Special Education *Program Assessment 7: Individual Assessment and Instructional Planning.* Data derived from this program assessment rubric, as well as candidate self-report, specifically evidenced lower teacher candidate performance on interpreting assessment results to inform instructional planning and IEP development, particularly when interpreting formal assessment tools. As a result, this program assessment, as well as course content in *K426: Assessment and Instruction*, were revised in 2012 to provide teacher candidates with more experience in conducting. scoring, and reporting K-12 student assessment data using formal measurement tools. Initial data from the past academic year indicates that increased familiarity with the tools, including scoring and reporting of associated subscales, has enhanced teacher candidates' ability to interpret assessment results, and more specifically, to apply these results when developing student instructional goals and related lesson planning.

## English as a Second Language (ESL) Program

Those candidates who choose and successfully obtain a dual license in English as a Second Language consistently outperform their non-dual license colleagues on CCETs measures. Therefore, there have been few modifications to the ESL program based solely on assessment results. The major program change has been the addition of a course to the program of study for ESL dual-license candidates, EDUC L-403 Assessment Literacy for Cultural and Linguistic Diversity. The need for a course, such as this one, was identified through collaborations with local school district personnel and ESL teacher education faculty at IUPUI. As the populations that are served by IUPUC DoE become more and more diverse, the need continues to grow for our candidates to identify and track students' English proficiency levels. This course prepares candidates seeking a dual license in English as a Second Language to navigate through the proper assessments, as well as preparing for them to interpret and react to assessment results.

# Appendix A Assessment Frameworks

IUPUC Student Learning Outcomes Framework: p. 11

IUPUC Division of Education Critical Components of Effective Teaching Framework: p. 12

PRAXIS Frameworks: pp. 12 - 22

During the 2010-2011 and 2011-2012 academic years, Faculty at IUPUC developed a shared set of student learning outcomes (SLOs) for general education.

Common rubrics for each of the student learning outcomes were subsequently developed with preliminary testing in Spring of 2012. This document contains the fifteen learning outcomes, the common rubrics, and a table showing alignment of each IUPUC SLO with the IUPUI/IUPUC Principles of Undergraduate Learning.

		IUPUC General Education Student Learning Outcomes	
L.	Fou	ndational Skills	
	Α.	Core Communications	
		1. Discover, explore, and analyze ideas, taking into account diverse sources and viewpoints; present the results	
		in writing with attention to appropriate genre, audience expectations, and rhetorical conventions.	SLO 1 Rubric page 3
		2. Demonstrate both a) proficiency in oral discourse in a variety of formats and b) the ability to evaluate oral	
		presentations according to established criteria.	SLO 2 Rubric page 4
	В.	Mathematical Modeling	
		3. Solve problems and be able to make inferences by application of appropriate mathematical models	SLO 3 Rubric page 5
		4. Be able to create appropriate mathematical models such as graphs, tables and equations.	SLO 4 Rubric page 6
ш.	Are	eas of Knowledge	
	A.	Natural, Quantitative, and Information Sciences	
		5. Demonstrate the ability to explain and use natural scientific vocabulary and concepts, the ability to describe	
		methods applicable to answering scientific questions, and the ability to articulate criticism of scientific debates	
		and discoveries.	SLO 5 Rubric page 7
		6. Demonstrate the ability to obtain, analyze, interpret and criticize qualitative observations and quantitative	
		measurements to explain natural phenomena and to test hypotheses.	SLO 6 Rubric page 8
		7. Perform the basic operations of personal computer use and critically assess technological worth; filter, analyze,	
		and critique information and experience.	SLO 7 Rubric page 9
	В.	Arts and Humanities	
		8. Demonstrate an understanding and appreciation of the complexity of the human experience, the arts and	
		aesthetics, and the great ideas and cultures of the world.	SLO 8 Rubric page 11
		9. Interpret and critically evaluate the creative products of human expression.	SLO 9 Rubric page 12
	С	. Social and Historical Studies	
		10. Understand the methods social scientists use to explore social phenomena; describe forces (e.g. economic,	
		social, political) that influence behavior.	SLO 10 Rubric page 13
		11. Understand how people have existed, acted and thought in the past in various parts of the world; describe	
		the social and historical forces that impacted them and how those forces might influence contemporary society.	SLO 11 Rubric page 14
ш.	N	flodes of Inquiry	
	A	. World Languages and Cross-Cultural Inquiry	
		12. Demonstrate both a) an understanding and appreciation of the complexity of world cultures and b) the ability	
		to think transnationally or transculturally about social, political, economic, aesthetic, or technological issues.	SLO 12 Rubric page 15
	В	. Researched Writing	
		13. Demonstrate the ability to determine the nature and extent of research materials needed, evaluate information	
		and sources critically, and write persuasively through the effective use of evidence derived from appropriate	
		sources.	SLO 13 Rubric page 17
	C	Ethical Inquiry	
		14. Demonstrate personal and social responsibility by using knowledge in the service of society.	SLO 14 Rubric page 18
		15. Demonstrate ethical reasoning; convey understanding of how ethical issues and values frame and shape human	

SLO 15 Rubric page 19

SLO/PUL Table page 20

conduct and ways of life.

Table: Student Learning Outcomes and Principles of Undergraduate Learning Alignment

#### IUPUC Division of Education Elementary Education Conceptual Framework Critical Components of Effective Teaching

Upon completion of the elementary education program, each candidate is expected to develop the skills and knowledge related to teaching and learning in the elementary grades as outlined in the following five Critical Components of Effective Teaching.

#### 1. Supporting Learner Development

The candidate uses inquiry to discover each child's path to learning by considering

- Society and culture (ACEI 1, ACEI 2.4, ACEI 5.2)
   Developmental differences (ACEI 1)
   Motivation for learning (ACEI 1)
   Documentation of student learning (ACEI 4.0)

- e) Learning experience design (ACEI 1, ACEI 2)

#### 2. Facilitating Learning

The candidate uses knowledge of the learner to plan, facilitate, and monitor learning in each curricular area, including

- a) Literacy (ACEI 2.1, ACEI 4)
   b) Mathematics (ACEI 2.3, ACEI 4)
- c) Social Studies (ACEI 2.4, ACEI 4) d) Science (ACEI 2.2, ACEI 4)

- e) The Arts (ACEI 2.5, ACEI 4) f) Health and Physical Education (ACEI 2.6, 2.7, ACEI 4)

#### 3. Creating a Community of Learners

The candidate uses inquiry to discover professional attributes related to the role of a teacher in a community of learners including

- a) Modes of instruction (ACEI 3.3)
- Instructional materials and tools (ACEI 2.1, ACEI 2.2, ACEI 2.3, ACEI 2.4, ACEI 4)
- c) Development of a professional stance (ACEI 5.1, ACEI 5.2) d) Structure of curriculum (ACEI 2.8)

#### 4. Teaching All Learners

The candidate recognizes the necessity to identify and foster each child's learning potential through

- a) Integration and application of knowledge for instruction (ACEI 2.8, 3.1)
- Differentiation of instruction to diverse learners (ACEI 3.2)
- c) Development of critical thinking and problem solving as related to instructional goals and equitable learning opportunities (ACEI 3.3)
- d) Engagement in learning (ACEI 3.4)
- e) Communication and collaboration in the classroom (ACEI 3.5)

## 5. Teaching within a Professional Community

The candidate demonstrates an understanding of the professional role of teachers including the recognition of the importance of

- Reflective practice (ACEI 5.2)
   Career-long learning (ACEI 5.1)
- c) Sustainable relationships with families and community partners also entrusted with the growth and well-being of children. (ACEI 5.3, ACEI 5.4)



Listening, Learning, Leading\*

# Elementary Education: Curriculum, Instruction, and Assessment (0011/5011)

Test at a Glance					
Test Name Test Code	Elementary Education: Curriculum, Instruction	n, and Assessment			
Time	2 hours	2 hours			
Number of Questions	110	110			
Format	Multiple-choice questions	Multiple-choice que	stions		
Test Delivery	Paper delivered	Computer delivered			
	Content Categories	Approximate Number of Questions	Approximate Percentage of Examination		
	Reading and Language Arts     Curriculum, Instruction, and Assessment     Mathematics	: 38	35%		
	Curriculum, Instruction, and Assessment	22	20%		
	III. Science Curriculum, Instruction, and Assessment	11	10%		
	IV. Social Studies Curriculum, Instruction, and Assessment	11	10%		
	V. Arts and Physical Education Curriculum, Instruction, and Assessment	11	10%		
	<ol> <li>General Information about Curriculum, Instruction, and Assessment</li> </ol>	17	15%		

## About This Test

The Elementary Education: Curriculum, instruction, and Assessment test is designed for prospective teachers of students in the elementary grades. Examinees typically have completed a bachelor's degree program in elementary/middle school education or have prepared themselves through some alternative certification program.

The test questions cover the breadth of material a new teacher needs to know. The questions assess knowledge of both principles and processes. Some of the questions assess basic understanding of curriculum planning, instructional design, and assessment of student learning; many pose particular problems that teachers routinely face in the classroom; and many are based on authentic examples of student work. Some of the questions concern general issues, but the majority are set in the context of the subject matters most commonly taught in elementary school: reading and language arts, mathematics, science, social studies, arts, and physical education.

This test may contain some questions that will not count toward your score.

#### Elementary Education: Curriculum, Instruction, and Assessment (0011/5011).

## Overview of the Test

CURRICULUM topics examine the organization, materials, and resources of each content area and the implications for using them:

- · Components of ourricula and how they are organized
- Integration of concepts within each content area and across content areas and the pedagogical implications of that integration
- Types of our ioular materials, media, and resources, such as basal readers and trade books in reading, maps and globes in social studies, measurement equipment in math, equipment and displays in science, and technologies, including computer software and videotapes

INSTRUCTION topics examine content-specific teaching and learning principles and their application for appropriate and effective instruction:

- Methods to identify, assess, activate, and build on the prior knowledge, experiences, and skills that a given group of students brings to learning in each content area.
- Methods for preparing, evaluating, and justifying instructional activities in each content area and across content areas for a given group of students
- Selection of teaching and learning strategies—such as demonstration, cooperative learning, guided oral and silent work, use of journals, graphic organizers, and the inquiry method—that help individual students and groups of students to see and understand varied topics and concepts
- Methods for adjusting instruction to meet students' needs, including corrective and developmental instruction, reteaching, follow-up, and enrichment instruction
- Strategies for motivating and encouraging student success
- Theoretical and empirical bases of various methods of instruction

ASSESSMENT topics examine content-specific and general assessment and evaluation procedures and the implications for using these procedures appropriately and effectively:

- Traditional and standardized testing methodologies such as standardized tests, basal reader tests, and screening tests—that are appropriate for use in each content area and in general instruction
- Informal, classroom-based, and nontraditional assessment strategies—such as observation, oral reports, running records, informal reading inventories, portfolios, and performance samples—that are appropriate for use in each content area and in general instruction
- Interpretation of data obtained from various assessment strategies in each content area and in general instruction
- Anticipation and identification of common points of confusion in the content areas, such as errors, patterns of error, inaccuracies, misconceptions, and buggy algorithms



Listoning, Learning, Leading?

## Reading Specialist (0300)

Test at a Glance					
Tost Namo	Rec	ading Specialist			
Test Code	030	Ю			
Time	2 h	ours			
Number of Questions	120	)			
Format	Mu	tiple-choice questions			
	Co	ntent Categories	Approximate Number of Questions	Approximate Percentage of Questions	
TV I	L	Theoretical & Knowledge Bases of Reading	22	18%	
	IL	Application of Theoretical & Knowledge Bases of Reading in Instruction	54	45%	
	IIL	Application of Theoretical & Knowledge Bases of Reading in Diagnosis & Assessment	32	27%	
	IV.	Reading Leadership	12	10%	

## About This Test

The Reading Specialist test is intended primarily for persons who have advanced academic preparation and/or who are being considered for supervisory or instructional positions related to the teaching of reading instruction in grades K-12. The test is most appropriate for candidates with advanced preparation (i.e., those with a master's degree or course work comparable to the training needed for a master's degree) who expect to have specialized responsibilities related to the teaching of reading at any level from kindergarten through twelfth grade. It is also appropriate for individuals who wish to be considered for supervisory or instructional positions related to the teaching of reading—those seeking positions as reading clinicians, consultants, supervisors, specialists, coordinators, or resource persons and thus intending to be responsible for more than the teaching of developmental reading in a regular classroom setting.

The 120 multiple-choice questions cover both knowledge of relevant facts and the ability to analyze problems and apply principles to reading literacy instruction. The test content covers the theoretical and knowledge bases of reading, the application of theoretical and knowledge bases of reading in instruction, the application of theoretical and knowledge bases of reading in diagnosis and assessment, and reading leadership. As much as possible, the test questions involve the evaluation and application of ideas and practices to reading literacy instruction, as opposed to the recall of factual material.

This test may contain some questions that will not count toward your score.

#### Reading Specialist (0300)

## Topics Covered

Representative descriptions of topics covered in each category are provided below.

## Theoretical and Knowledge Bases of Reading

- Demonstrate an understanding of the social, linguistic, and cultural influences on language and literacy learning
- Demonstrate knowledge of experiences that support different stages of literacy development
- Demonstrate an understanding of the relationships among reading, writing, speaking, and listening
- Demonstrate knowledge of the role of phonemic awareness (e.g., rhyming, segmenting, blending sounds) and the alphabetic principle in reading acquisition
- Demonstrate knowledge of the role of the reader's prior knowledge, of the reader's social/cultural/ linguistic background, and of the role of social interaction in constructing meaning
- Demonstrate knowledge of the role of fluency in constructing meaning
- Demonstrate an understanding of the functions of orthography, morphology, syntax, semantic systems, and genre patterns, and recognition of the influences of purpose, context, and genre in constructing meaning

## Application of Theoretical and Knowledge Bases of Reading in Instruction

- Demonstrate an understanding of the relationship between reading and writing instruction and of how writing and reading support each other at different developmental levels
- Demonstrate knowledge of how to construct instructional plans in which assessment, goals, instruction, and reassessment are connected and continuous
- Demonstrate knowledge of explicit instructional strategies to teach students how to monitor their own word identification strategies, comprehension, and comprehension strategies
- Demonstrate knowledge of instructional approaches to foster higher-order, critical, reflective thinking about text

- Demonstrate an understanding of different decoding strategies and of instructional approaches to teach students how to use them
- Demonstrate an understanding of the instruction of comprehension strategies, including modeling when and how to orchestrate multiple comprehension strategies and their scaffolding
- Demonstrate knowledge of explicit instruction and scaffolding for learning study skills and strategies (e.g., note taking and test taking)
- Demonstrate knowledge of how to evaluate the level of text difficulty and appropriateness of reading materials and programs for a variety of instructional purposes and learning situations
- Demonstrate an understanding of how literacy practices and needs differ across content areas (e.g., science, math, history, art)
- Demonstrate an understanding of how to appropriately use texts (e.g., nonprint materials, media, trade books, textbooks, and electronic texts) within diverse genres for multiple purposes and lifelong learning
- Demonstrate knowledge of a variety of children's/ adolescent's literature, including multicultural literature, and how to mediate it to enhance instruction
- Demonstrate an understanding of how technology can be used to enhance instruction
- Demonstrate an understanding of how to teach students to recursively apply strategies for planning, drafting, revising, and editing texts to different genres for a variety of purposes and audiences
- Demonstrate an understanding of the purpose of publication of student writing in literacy acquisition
- Demonstrate an understanding of deliberate vocabulary instruction across grades and content areas.
- Demonstrate knowledge of how to plan and implement instruction that addresses the strengths and needs of all students
- Demonstrate an understanding of instructional decisions to accommodate learners with social, cultural, linguistic, and cognitive differences

## Reading Specialist (0300)

- Demonstrate knowledge of various instructional grouping strategies to motivate and engage all students (e.g., flexible, whole class, small group, individual, ability/achievement) and the issues associated with each
- Demonstrate an understanding of how to create a safe and respectful learning environment for all students
- Demonstrate an understanding of how to organize programmatic activities to encourage reading (e.g., book groups, read-a-thons) with an understanding of differences between extrinsic and intrinsic motivation.

## III. Application of Theoretical and Knowledge Bases of Reading in Diagnosis and Assessment

- Demonstrate an understanding of the nature and multiple causes of reading difficulties
- Demonstrate an understanding of the appropriate selection, use, and interpretation of formal assessment tools (e.g., norm-reterenced tests, oriterion-referenced tests, formal and informal inventories, on-demand direct writing) and teacherdeveloped assessment tools (e.g., constructedresponse measurements, portfolio-based assessments, running records, miscue analysis, student self-evaluations, work/performance samples, observations, anecdotal records, journals) to report, evaluate, and modify instruction for successful learning
- Demonstrate an understanding of basic measurement concepts (e.g., reliability, validity)
- Demonstrate an understanding of how to consult and collaborate with the classroom teacher to use assessment results to evaluate and modify reading instruction
- Demonstrate an understanding of how to communicate the findings of reading assessment data with all stakeholders effectively (e.g., students, parents, classroom teachers, guidance counselors, speech teachers, and other personnel)
- Demonstrate an understanding of how to communicate and collaborate children's reading development with families effectively

## N. Reading Leadership

- Demonstrate an understanding of how to develop and adapt reading programs to meet student needs within the framework of guidelines and regulations at the classroom, building, district, state, and federal levels
- Demonstrate an awareness of how to access literacy research and disseminate it across grade levels
- Demonstrate an understanding of how to use schoolwide initiatives and other services to students to improve instruction
- Demonstrate an understanding of how standards and their assessment define curriculum, impact the reading program, and influence instruction
- Demonstrate an understanding of outturally relevant ourricular approaches to improve instruction
- Demonstrate an understanding of how to critically analyze school-wide reading programs and initiatives in relation to reading goals and student needs
- Demonstrate an understanding of how to serve as a resource within the school
- Demonstrate an understanding of how to promote collaboration among colleagues (e.g., classroom teachers, paraprofessionals, volunteers) for the literacy development of all students
- Demonstrate an understanding of how to engage in, promote, and provide professional development opportunities
- Demonstrate an understanding of the importance of school and community when promoting home-school connections
- Demonstrate an understanding of how to promote positive and effective literacy connections between the home and the school
- Demonstrate an understanding of how to promote positive and effective literacy connections between the school and the community

## 4. Learn About Your Test

Learn about the specific test you will be taking

## Special Education: Core Knowledge and Mild to Moderate Applications (0543/5543)

Test at a Glance						
Test Name	Special Education: Core Knowledge at	Special Education: Core Knowledge and Mild to Moderate Applications				
Test Code	0543	5543				
Time	2 hours	2 hours				
Number of Questions	90 multiple-choice questions; 3 integrated constructed-response questions	90 multiple-choice questions; 3 integrated constructed-response questions				
Format	Multiple choice: 75% of total score Integrated constructed response: 25% of total score 25% of total score 25% of total score					
Delivery	Paper delivered	Computer delivered				
	Content Categories	Approximate Approximate Number of Percentage of Questions Examination				
	<ul> <li>Development and Characteristics of Learners</li> </ul>	17 14%				
	IL Planning and the Learning Environ	ment 20 17%				
	III. Instruction	20 17%				
	IV. Assessment	17 14%				
	<ul> <li>V. Foundations and Professional Responsibilities</li> </ul>	16 13%				
	VI. Integrated Constructed-response Questions	3 25%				

## About This Test

The Special Education: Core Knowledge and Mild to Moderate Applications test is designed for examinees who plan to teach students with mild to moderate disabilities at any grade level from preschool through grade 12. Its focus is on five major content areas: Development and Characteristics of Learners, Planning and the Learning Environment, Instruction, Assessment, and Poundations and Professional Responsibilities.

The 90 multiple-choice questions assess the knowledge and understanding of principles and practices related to special education and mild to moderate applications. The three constructed-response questions are integrated ones that assess an examinee's knowledge of students with mild to moderate disabilities as related to instruction and assessment, learning environment and classroom management, and collaboration.

Some of the guestions on this test may not count toward your score.

## Topics Covered

A summary of the topics covered in each category is provided below.

## Development and Characteristics of Learners (approximately 14%)

- Human development and behavior
- Theoretical approaches to student learning and motivation
- Basic characteristics and defining factors for each of the major disability categories
- Impact of disabilities on Individuals, families, and society across the life span
- Impact of language, cultural, and gender differences on the Identification process
- Co-occurring conditions
- How family systems contribute to the development of individuals with disabilities
- Environmental and societal influences on student development and achievement

## Planning and the Learning Environment (approximately 17%)

- Characteristics of good lesson plans
- Basic elements of effective lesson plans
- Learning objectives that are measurable and appropriately challenging
- Means of providing access to the curriculum
- · Organizing the learning environment
- Understands how to manage student behavior
- Design and maintenance of a safe and supportive classroom environment that promotes student achievement

#### III. Instruction (approximately 17%)

- Instructional strategies/techniques that are appropriate, considering students'ages and abilities
- Instructional strategies for ensuring individual academic success in one-to-one, small group, and large group settings
- Instructional strategies that facilitate maintenance and generalization of concepts
- Selection and implementation of research-based interventions for individual students
- Selection and implementation of supplementary

- and/or functional curriculum
- Options for assistive technology
- Instructional strategies/techniques that support transition goals
- Preventive strategies and intervention strategies for at-risk learners

## IV. Assessment (approximately 14%)

- Evidence-based assessments that are effective and appropriate
- Defines and uses various assessments
- Interprets assessment results
- Understands and uses the results of assessments.

## V. Foundations and Professional Responsibilities (approximately 13%)

- Federal definitions
- Federal requirements for the pre-referral, referral, and identification
- Federal safeguards of the rights of stakeholders.
- Components of a legally defensible individualized education program
- Major legislation
- Roles and responsibilities of the special education teacher
- Roles and responsibilities of other professionals who deliver special education services
- Strengths and limitations of various collaborative approaches
- Communication with stakeholders
- Potential bias issues that may impact teaching and interactions with students and their families

## Integrated Constructed-response Questions (approximately 25%)

- Instruction and Assessment
- Learning environment and classroom management
- Collaboration



Listoning, Lourning, Louding,"

## English to Speakers of Other Languages (0361)

Test at a Glance				
Test Name Test Code	English to Speakers of Other Languages 0361			
Time	2 hours, with a 30-minute listening section			
Number of Questions	Section 1: 20 multiple-choice questions (lists Section 2: 100 multiple-choice questions	oning")		
Format	Multiple-choice questions			
	Content Categories	Approximate Number of Questions	Approximate Percentage of Examination	
	L Foundations of Linguistics and Language Learning Section 1 (Listening"): Section 2	48 20 28	40%	
	II. Planning, Implementing, and Managing Instruction III. Assessment	36 18	30% 15%	
	IV. Cultural and Professional Aspects of the Job	18	15%	

<sup>&</sup>quot;The listening section in Category I is composed of 20 questions and will be reported as a separate section on the score report.

## About This Test

The English to Speakers of Other Languages test is designed to measure basic linguistic and pedagogical knowledge within the context of teaching ESOL in elementary or secondary schools.

The test is 120 minutes long, including two timed 15-minute listening sections. This test may contain some questions that do not count toward your score.

## Recorded Portion: Section I, Parts A and B

- . The 20 questions in Section I, Parts A (Oral Grammar and Vocabulary) and B (Pronunciation), are on an audio recording.
- At the beginning of Section I, the test supervisor will play an introductory statement to check the volume. Be sure to notify the supervisor if the volume needs to be adjusted or if there is any other problem with the recording.

## English to Speakers of Other Languages (0361)

- The recorded questions in Section I are based on speech samples recorded by students who are not native speakers of English; you will be asked to identify errors in the students' speech. Therefore, before taking the test, you should be familiar with the speech of nonnative speakers who are learning English.
- Each of the recorded speech samples is printed in the test book. As you listen to the recordings, mark the students' errors directly on the printed version of the speech samples to help focus your listening.
- After each speech sample, there will be a pause for you to choose and mark your answer. Be prepared to answer within the time provided. The speech samples in Part A will be played one time only. The speech samples in Part B will be played twice.
- Ten questions cover oral grammar and vocabulary via recorded excerpts of English spoken by a nonnative speaker. The excerpts, questions, and suggested answers are printed in the test book.
- The format for the next 10 questions is similar. The questions concern pronunciation, and each excerpt is played twice.

## Topics Covered

Representative descriptions of topics covered in each category are provided below.

## Foundations of Linguistics and Language Learning

- Linguistic Theory
  - Phonetic transcription and terminology, stress and intonation patterns, and the effects of phonetic environment on pronunciation
  - Types of morphomes (e.g., stem/root and affix, bound and free, derivational and inflectional) and how words are morphologically related to each other
  - English syntax (e.g., how words are combined into phrases and sentences and transformations such as question formation), the parts of speech and the tenses of English verbs
  - Basic features of semantics and how combinations of words convey meaning (e.g., phrases, sentences, and idioms)
  - Familiarity with differences among languages in terms of their phonology, morphology, syntax, and semantics

## Language and Culture

- Basic concepts of pragmatics and sociolinguistics (i.e., that language varies according to a speaker's identity, purpose, and context)
- Understanding the nature and value of World Englishes and dialect variation, and communicative competence
- Range of social and academic language functions required for English-language proficiency
- Second-Language Learning
  - Familiarity with research-based models for second-language learning and acquisition (e.g., cognitive, behaviorist, constructivist)
  - Second-language acquisition, first-language acquisition, and how learners' first language can affect their second-language productions (e.g., L1 interference, accent, code switching)
  - Stages of second-language acquisition (e.g., silent period, interlanguage, morphome acquisition order)
  - Types of student motivations (intrinsic and extrinsic) and their implications for the second-language learning process
  - Language modeling, comprehensible input, and scaffolding in language learning

#### Literacy

- Relationships between English phonemes and graphemes as well as the differences between English pronunciation and spelling
- Conventions of standard written English and the range of genres and rhetorical patterns used in written English
- Familiarity with current approaches to literacy development
- Stages of English literacy development and the importance of oral language skills to literacy development
- First-language literacy influences on the development of English literacy

## English to Speakers of Other Languages (0361)

## II. Planning, implementing, and Managing Instruction

- Instructional Theory
  - Characteristics, theoretical foundations, and appropriate use of methods and approaches in second-language learning (e.g., the direct method, Total Physical Response, the Natural Approach)
  - Various Instructional delivery models (e.g., push in, pull out, sheltered instruction)
- Teaching Techniques
  - Organizing learning around content and language objectives and aligning learning with standards
  - Language instruction should be age appropriate
  - Collaboration with general education and content area teachers
  - Various methods for promoting students' acquisition of productive and receptive language skills in both social and academic contexts
  - Strategies for teaching language skills both discretely and integratively
  - Strategies for supporting content-based language learning
  - Lessons and activities that help students become more effective language learners by developing their cognitive and metacognitive strategies
  - Techniques that help students activate prior knowledge and support appropriate transfer of language and literacy skills from L1 to L2
  - Activities and assignments that provide students with authentic language use and meaningful interaction in English
  - Best practices for teaching English literacy to both literate and nonliterate English-language learners

#### Materials

- Locating, selecting, modifying, and/or creating instructional materials that support individual students' learning styles and needs
- Selecting culturally responsive, age-appropriate, and linguistically accessible teaching materials and resources
- Resources (e.g., audiovisual aids, realia, computer software) that support ESL and content instruction
- · Managing the Classroom and Students
  - Student performance may be affected by various factors (e.g., age, limited formal schooling, educational interruptions)
  - Classroom management and the learning environment for English-language learners
  - Using correction and constructive feedback and their implications for student learning and motivation
  - Providing students with a language-, text-, and print-rich environment at an appropriate level
  - Techniques for teaching English-language learners strategies to become more independent (e.g., using dictionaries, using context clues, self-editing)

## Appendix B Assessment Instruments

SLO Assessment Rubrics: pp. 24- 26

CCETs Assessment Rubric: p. 27

#### General Education Student Learning Outcome 1 Common Assessment Rubric

	_	- 1 -5 1		essment Rubric		
Student	Key Words/	Scoring Criteria Level E	Scoring Criteria Level D	Scoring Criteria Level C	Scoring Criteria Level B	Scoring Criteria Level A
Learning	Key Phrases	Pre-Skill	Emerging	Basic	Proficient	Exemplary
Outcome		Pre-Skill	Emerging	Dayic	Pronuent	exemplary
1. Discover	a. Establish	Does not contain one	Contains a general,	Contains one thesis	Contains a clear,	Thesis is presented in
explore, &	and support	clear supportable	vague, or implied	with support in	supportable thesis	an innovative way
analyze ideas	a clear	thesis as assigned.	thesis or multiple	paragraphs that show	with an organization	with attention to
taking into	thesis	Thesis is off topic.	theses.	organization	structure throughout	audience and purpose.
account				throughout	the writing	
diverse				tin oughtout	the triang	
sources and						
viewpoints;	b. Use	Does not contain	Use of rhetorical	Rhetorical conventions	Rhetorical conventions	Rhetorical conventions
presents the	appropriate	appropriate rhetorical	conventions are	are evident, though	are evident and	are precise, accurate,
results in	rhetorical	conventions	incomplete and/or	they may uneven in	applied throughout	displaying energetic
writing with	conventions	conventions	grossly inaccurate	application	the writing	style and diction
attention to	conventions		grossiy maccurate	аррисации	the writing	style and diction
appropriate						
genres,						
audience	c	Does not synthesize	Source documentation	Sources and	Sources and	Structure is carefully
expectations,	Synthesize	diverse sources and	is incomplete or	viewpoints are mostly	viewpoints are	detailed and logically
and	diverse	viewpoints	inaccurate	evident; they mostly	smoothly integrated	planned. Sentences
rhetorical	sources and	viewpoints	maccurate	contribute to unified	into the writing	are varied. Specific
concepts.	viewpoints			and coherent support	providing clear and	evidence is conclusive
concepts.	viewpoints			and conerent support		evidence is conclusive
					coherent support	
	d. Show	Does not show	Style is repetitive ,	Editing may be	Writing shows strong	Writing shows careful
	evidence of	evidence of editing	syntax is confusing,	superficial, but it is	evidence of editing	evidence of editing
	editing and	and revision	inappropriate diction,	evident. A few	with few grammatical	with few to no
	revision	and revision	excessive mechanical		and mechanical errors	
	revision with		excessive mechanical errors impede	mechanical errors may	and mechanical errors	mechanical or
				exist		grammatical errors
	attention to		comprehension			
	mechanical					
	errors					

General Education Student Learning Outcome 2

Student	Key Words/	Scoring Criteria Level E	Scoring Criteria Level D	Scoring Criteria Level C	Scoring Criteria Level B	Scoring Criteria Level A
Learning	Key Phrases					
Outcome	Key I III ases	Pre-Skill	Emerging	Basic	Proficient	Exemplary
2. Demonstrate both a) proficiency in	a. Central Message (clear topic)	Central message is not explicitly stated, can possibly be deduced	Central message is basically understandable, but is not often supported and is not memorable	Central message is stated, consistent with supporting material	Central message is clear, strongly supported	Central message is compelling, precisely stated and memorable
oral discourse in a variety of formats and	b. Organization	Organizational pattern is not observable within the presentation	Organizational pattern is intermittently observable within the presentation	Organizational pattern is consistently observable	Organizational pattern is observable, fosters understanding of presentation content	Organization is skillful, makes the content of the presentation cohesive
b) the ability to critically evaluate oral presentations according to established criteria	c. Supporting material	Insufficient supporting materials serve to minimally support the presentation	Supporting materials partially reference information, partially supporting the presentation	Supporting materials make appropriate reference to information and generally support the presentation or the credibility of the speaker	Supporting information provides strong evidence for analysis and supports the credibility of the speaker	A variety of supporting information provides content for analysis and establishes authority and credibility of speaker
	d. Language	Language choices are unclear and minimally support the presentation. Language choice is not appropriate to audience	Language choices are commonplace or cliché and only partially support the presentation. Language choice is appropriate to audience	Language choices are often interesting, support the presentation. Language choice is appropriate to audience	Language choices are thoughtful, interesting, and make the presentation effective. Language choice is appropriate to audience	Language is compelling, is appropriate to audience, and enhances the presentation.
	e. Delivery	Delivery techniques detract from the presentation and the speaker appears uncomfortable.	Delivery techniques make the presentation understandable; the speaker appears tentative	Delivery techniques make the presentation interesting and the speaker appears moderately comfortable	Delivery techniques strongly support the presentation and the speaker appears comfortable	Delivery techniques make the presentation compelling and make the speaker appear polished and confident.
	f. Ability to critically analyze public discourse	Provides some information about the speaker's central message but reveals limited understanding of key elements of effective public discourse	Provides limited information about the speaker's central message, organization, language and delivery, and supporting material	Describes the speaker's central message, organization, language and delivery, and supporting material.	Evaluates effectiveness of speaker's central message, organization, language and delivery, and supporting material to increase listener's understanding	Critically analyzes speaker's use of central message, organization, language and delivery, and supporting material to deliver a compelling message

Rubric developed using Association of American Colleges and Universities "Oral Communication VALUE Rubric"

## General Education Student Learning Outcome 3

Student	Key Words/	Scoring Criteria Level E	Scoring Criteria Level D	Scoring Criteria Level C	Scoring Criteria Level B	Scoring Criteria Level A
Learning	Key Phrases	Pre-Skill	Emerging	Basic	Proficient	Exemplary
Outcome					***************************************	
3. Solve problems and be able to make inferences by application of appropriate mathematical	a. Interpretation- explain information presented in mathematical forms	Attempts to explain information presented in mathematical forms, but draws incorrect conclusions about what the information means	Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units	Provides predominantly accurate explanations of information presented in mathematical forms	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information	Provides accurate explanations of information presented in mathematical forms. Makes highly appropriate and well-supported inferences based on that information
models	b. Calculation	Calculations are attempted but are both unsuccessful and are not comprehensive	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to solve the problem	Calculations attempted are predominantly correct and sufficiently comprehensive to solve the problem	Calculations are essentially all correct and are comprehensive enough to solve the problem.	Calculations are comprehensive to solve the problem and are full correct. They are presented elegantly.
	c. Application/ Analysis- make judgments and draw conclusions based on analysis of data, recognizing limits of the analysis	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work	Uses the quantitative analysis of data as the basis for basic judgments, drawing somewhat plausible conclusions from this work	Uses the quantitative analysis of data as the basis for workmanlike judgments, drawing plausible conclusions from this work	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work
	d. Assumptions- Make and evaluate important assumptions in estimation, modeling, and data analysis	Attempts to describe assumptions	Generally describes assumptions	Explicitly describes assumptions	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate	Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows clear understanding that confidence in final conclusions is limited by the accuracy of the assumptions

Informed by Association of American Colleges and Universities Quantitative Literacy VALUE Rubric

Appendix C - Detailed scoring description at each CCET-aligned Learning Objective

CCET-aligned	Unacceptable	Underdeveloped	Developing	Exemplary
Indicator			Professional	
Knowledge of	Level of Content is	Basic understanding of	Activities and	Level of content is
Student Learning	inappropriate for most	developmental	assignments often	differentiated
	students. Minimal	characteristics. Some	address the needs of	consistently to address a
	knowledge of student	activities and assignments	individual learners as	range of abilities.
	development evidenced.	demonstrate understanding	well as whole group.	Activities and
		of appropriate student		assignments incorporate
<u> </u>	40 % 111	development.		all cognitive levels.
Learning	Allows off-task behavior.	Creates an environment in	Creates an	Creates an environment
Environment	Students demonstrate	which students are involved	environment in	where students are fully
	negative behaviors	and on task. Students are	which students	engaged and on task; in
	towards peers. Diverse	able to work cooperatively	consistently are	which diverse opinions
	opinions relating to	to accomplish instructional	involved and on task	are not only encouraged,
	learning taking place are	objectives.	Diverse opinions are	but nurtured. Students
	not welcomed.		respected. Students	accept and encourage one another to take
			feel safe taking risks	one tarourer to tare
			to accomplish	ownership in
			instructional	accomplishing
<u> </u>		Some effort is evident to	objectives.	instructional objectives.
Lesson	Lessons lack creativity.	Donne entore is evident to	Student engagement	Lessons demonstrate a
Implementation	Minimal effort evident to	connect curriculum content	is reflected both in	strong connection
	connect curriculum	to the learning community.	the classroom	between students'
	content to the learning	Lessons reflect some	environment and in student work.	interests and life
	community.	creativity at a basic level.		experiences. Students
			Through creative	are inspired to pursue
			activities, lessons	interests through
			reflect the interests of the students.	creative lessons that
			of the students.	incorporate higher level thinking skills.
				uniking skills.

Instructional	Depends on one or two	Limited awareness of	The curriculum is	Lesson plans indicate the
Activities	teaching strategies that	learning styles. Begins to	adapted to diverse	use of multiple teaching
	do not meet all learning	address the basic diverse	learners with unique	strategies that address
	styles. No development	needs of students. Few	needs and talents.	multiple learning styles
	of metacognitive	metacognitive strategies.	Lesson plans reflect a	and facilitate
	strategies.	_	variety of strategies,	development of
	_		some of which	metacognitive strategies
			facilitate	for problem solving and
			metacognitive	evaluate reasoning.
			strategy use.	
Teacher/Student	Views students only as	Some efforts are made to	Attempts to	Develops a multi-faceted
Relationship	part of the whole	view individual students	understand each	picture of each student
_	classroom. Limited effort	holistically. Teacher-	individual student.	through a variety of
	is made to view the	student interaction builds a	Builds a foundation	assessments and
	individual student	foundation of respects and	of respect and	personalized learning
	holistically. Limited	rapport.	rapport not only	engagements.
	effort is made to build a		through interactions	Establishment of mutual
	foundation of respect		but also through	respect and rapport are
	and rapport.		quality teaching	evident.
			strategies.	