



Ohio Assessments for Educators

Technical Report

Development and Validation
2012–2014

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Preface

This technical manual documents the activities undertaken to provide validity evidence to support the use of the tests included in the Ohio Assessments for Educators (OAE) program and provides information to support the validity of score interpretations.

This manual is intended for policy makers, state educators, and other interested stakeholders who would like to learn more about:

- the purpose, structure, and composition of the OAE testing program;
- the assessment frameworks (i.e., test competencies) and test item validation processes;
- the content and bias review processes; and
- the establishment of Ohio passing standards.

Purpose of the Ohio Assessments for Educators (OAE) Program

Introduction

The Ohio Assessments for Educators (OAE) program assesses the content-area and professional (pedagogical) knowledge of candidates who are either seeking initial Ohio educator licensure or adding a new licensure area. The OAE program, administered by Pearson, includes 38 content-area assessments and four professional (pedagogical) knowledge assessments. Five OAE assessments include two separate tests each (i.e., Subtest I and Subtest II) for a total of 47 unique tests. The OAE tests are aligned with Ohio Educational Preparation Standards, Ohio Standards for the Teaching profession, and Ohio Student Standards.

Each test was validated for use in Ohio in accordance with the practices recommended by the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999). The Standards require a clear definition of content domain and a rationale to support a claim that the knowledge and skills being assessed in a licensure test are required for credential-worthy performance. Educators, educator preparation faculty, and administrators from across Ohio were involved in reviewing the test materials for content, job-relatedness, and prevention of bias; validating their appropriateness for use in Ohio; and making recommendations for the passing score for each test. In addition, in accordance with State of Ohio requirements, assessment materials, where available, were to have been previously administered to educator licensure candidates in states other than Ohio.

The OAE tests are computer-based and delivered through a national network of Pearson computer-based testing centers. Most tests are available year round by appointment.

The OAE program offers several web-based resources to help candidates prepare for the tests. These resources include online study guides, practice tests, detailed score reports, and computer-based testing tutorials. In addition, a suite of faculty resources and interactive worksheets are available to assist in candidate preparation. The Ohio Department of Education and educator preparation programs have access to an interactive, electronic database that allows them to create customized reports of candidate test results, institution performance, or perform customized data queries.

Composition of the OAE Program

Currently, 46 OAE tests¹ are available for test administration. The OAE program includes four professional (pedagogy) knowledge tests that are matched to Ohio licensure grade bands (Early Childhood, Middle Childhood, Adolescence to Young Adult, and Multi-Age). Content-area tests match Ohio license types. Thirty-two OAE tests have been operational since September 3, 2013; 12 OAE tests have been operational since January 21, 2014; two OAE tests have been operational since September 2, 2014.

¹ Validation activities are in progress for the Dance test.

Ohio Assessments for Educators (OAE)

Pedagogical Knowledge Assessments

- 001 Assessment of Professional Knowledge: Early Childhood (PK–3)
- 002 Assessment of Professional Knowledge: Middle Childhood (4–9)
- 003 Assessment of Professional Knowledge: Adolescence to Young Adult (7–12)
- 004 Assessment of Professional Knowledge: Multi-Age (PK–12)

Content Knowledge Assessments

- 005 Agriscience
- 006 Art
- 007 Biology
- 008 Business Education
- 009 Chemistry
- 010 Computer Information Science
- 011 Dance
- 012 Early Childhood Education
- 013 Early Childhood Special Education
- 014 Earth and Space Science
- 015 Educational Leadership
- 016 Computer/Technology (Subtest I)
- 017 Computer/Technology (Subtest II)
- 018 Elementary Education (Subtest I)
- 019 Elementary Education (Subtest II)
- 020 English Language Arts
- 021 English to Speakers of Other Languages
- 022 Family and Consumer Sciences
- 023 Health
- 024 Integrated Science
- 025 Integrated Social Studies
- 026 Marketing
- 027 Mathematics
- 028 Middle Grades English Language Arts
- 029 Middle Grades Science
- 030 Middle Grades Mathematics
- 031 Middle Grades Social Studies
- 032 Music
- 034 Physical Education
- 035 Physics
- 036 Prekindergarten (Subtest I)
- 037 Prekindergarten (Subtest II)
- 038 Reading (Subtest I)
- 039 Reading (Subtest II)

- 040 School Counselor
- 041 School Library Media Specialist
- 042 School Psychologist
- 043 Special Education
- 044 Special Education Specialist: Deaf/Hard of Hearing
- 045 Special Education Specialist: Visually Impaired
- 046 Technology Education (Subtest I)
- 047 Technology Education (Subtest II)
- 048 Theater

Alignment of the OAE Assessments and State Needs

The process of gathering validity evidence to support the use of the OAE assessments began with the alignment of the OAE frameworks (i.e., test competencies) to Ohio standards. An initial online review of the OAE frameworks with Ohio educators continued the validation process. A content validation survey of the competencies included in each framework was completed with practicing Ohio educators and teacher educators, who reviewed each test item for potential bias and validated each item using industry-accepted validation criteria. Panels of Ohio educators and teacher educators participated in standard setting (i.e., passing score setting) activities.

The assessment validation activities described above, and in greater detail throughout this report, provide support that the OAE assessments are aligned both to the state's need for a system of evaluating educator candidates and to its needs for identifying those who possess the knowledge and skills necessary to be an entry level educator in the state.

The OAE and Ohio State Standards

The OAE program provides licensure tests that are aligned with Ohio Educational Preparation Standards, Ohio Educator Standards, and Ohio Student Standards. Pearson worked with the State of Ohio to verify that the content of the OAE is appropriate as defined by these standards. The standards that were consulted during the OAE test validation process include:

- Ohio Educational Preparation Standards
 - 2008 National Initial Physical Education Teacher Education Standards (NASPE)
 - 2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs
 - ALA/AASL Standards for Initial Preparation of School Librarians, 2010
 - American Association for Health Education 2008 NCATE Health Education Teacher Preparation Standards
 - AMLE Middle Level Teacher Preparation Standards, Fourth Draft 2012
 - Career-Technical Baccalaureate Agriscience 2008 Ohio Program Standards
 - Career-Technical Baccalaureate Family and Consumer Sciences 2008 Ohio Program Standards
 - Career-Technical Baccalaureate General Marketing Education 2008 Ohio Program Standards
 - Career-Technical Baccalaureate Integrated Business 2008 Ohio Program Standards Grades 4 and Beyond

- Council for Accreditation of Counseling and Related Educational Programs (CACREP) Standards (2009)
- Council for Accreditation of Counseling and Related Educational Programs (CACREP) Standards (2009), Common Core Curricular Experiences
- CEC Program Standards Initial Special Education Teachers of Individuals with Exceptional Learning Needs Who are Blind and/or Visually Impaired (2009)
- CEC Program Standards Initial Special Education Teachers of Individuals with Exceptional Learning Needs Who are Deaf or Hard of Hearing (2009)
- Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)
- Centers for Disease Control and Prevention 2012 Health Education Curriculum Analysis Tool (HECAT)
- ELCC Educational Leadership Program Standards–Building Level, 2011
- ELCC Educational Leadership Program Standards–District Level, 2011
- ISTE Technology Coach Program Standards, 2012
- ISTE Technology Director Program Standards, 2012
- National Association of School Psychologists Standards for Graduate Preparation of School Psychologies (2010)
- NCATE/ITEA/CTTE Program Standards (2003)—Programs for the Preparation of Technology Education Teachers
- NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12
- Multi-Age Computer Information Science 2007 Ohio Program Standards (Grades PreK–12)
- Multi-Age Dance: 2008 Modified Ohio/NASD Program Standards (Grades PreK–12)
- Multi-Age Drama/Theater: 2008 Modified Ohio/NAST Program Standards (Grades PreK–12)
- Multi-Age Music: 2007 Modified Ohio/NASM Program Standards (Grades PreK–12)
- Multi-Age Visual Arts: 2007 Modified Ohio/NASM Program Standards (Grades PreK–12)
- NCATE/NCTM: Programs for Initial Preparation of Mathematics Teachers–Middle Level
- NCATE/NCTM: Programs for Initial Preparation of Mathematics Teachers–Secondary
- NCSS National Standards for Social Studies Teachers
- NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form
- Prekindergarten Associate—2008 Ohio/CEC-DEC/NAEYC Ohio Core Body of Knowledge and Competencies Program Standards
- Prekindergarten Endorsement—2008 Ohio/NAEYC/Ohio’s Early Learning Content Standards Ages 3–5
- Reading Endorsement 2007 Modified Ohio/IRA Program Standards (Grades PreK–12)

- TESOL Standards for the Recognition of Initial TESOL Programs in P–12 ESL Teacher Education (2010)
- Ohio Educator Standards
 - Ohio Standards for the Teaching Profession
 - Ohio Standards for Principals
 - Ohio Standards for Superintendents
- Ohio Student Standards
 - Ohio’s Early Learning and Development Standards
 - Ohio New Learning Standards
 - Dance
 - Drama/Theatre
 - English Language Arts
 - Fine Arts
 - Mathematics
 - Music
 - Physical Education
 - Science
 - Social Studies
 - Visual Arts
 - Ohio’s 2003 Academic Content Standards in Technology
 - Ohio Physical Education Academic Content Standards
 - Agriculture and Environmental Systems Career Field Technical Content Standards
 - Business and Administrative Services Career Field Technical Content Standards Document
 - Family and Consumer Sciences Content Standards with Academic Content Standards in English Language Arts, Mathematics, Science and Social Studies, 2007
 - Marketing Career Field Technical Content Standards Document
 - National Health Education Standards: Achieving Excellence (2007) American Cancer Society

More information about the alignment studies may be found in Appendix A of this manual.

Support Materials and Other Tools for the OAE Program

Pearson developed multiple web-based OAE test preparation tools designed to help educator candidates prepare for the OAE. The test preparation tools are available on the OAE program website at www.oh.nesinc.com. The online tools offer flexibility to accommodate varying methods of preparation (independent study or under the direction of an instructor or faculty advisor); areas of focus (test content); and opportunities for access (at school, at home, while traveling). Faculty from institutions of higher education can also gain an understanding of the tests and how to help their candidates prepare through the use of the OAE Faculty Resources.

Candidates have access to the following resources to guide their preparation:

- **OAE Assessment frameworks.** Assessment frameworks include the test competencies covered by each OAE assessment. In each framework, the competencies are organized into content domains that reflect the main areas of pedagogical or content area knowledge included on the test. Descriptive statements provide details about the nature and range of content covered by each competency
- **OAE Study Guides.** Online study guides are available for each assessment. The study guides include an overview of the test format, number of questions, test duration, test competencies with descriptive statements, and sample test questions with explanations of correct responses. The guides also include information to assist candidates in preparing for and taking the assessment.
- **OAE Practice Tests.** Online practice tests simulate the computer-based test experience. They can be taken in real time or paused and returned to at any time. Practice test-takers receive a competency-level report with instant scoring of multiple choice questions—and explanations of correct responses.
- **OAE Expanded Study Guides.** Expanded online study guides include interactive diagnostic tests with explanations of correct responses, instructional content with abundant practice exercises and review questions, and source recommendations for further preparation.
- **Computer-Based Testing Tutorials.** Two tutorials are available to candidates on the program website. One tutorial is designed to help familiarize candidates with the navigation tools and operations of computer-based testing. It includes information about how to navigate through an assessment, select answers, and end the assessment. The second tutorial is downloadable and interactive. It guides candidates on how to record, change, and review answers. The tutorial also gives candidates the opportunity to practice using various functions of the computer-based environment, including viewing visuals and exhibits, scrolling pages, reviewing items, typing in an essay box, and using an on-screen calculator.
- **Faculty Resources.** Educator preparation program faculty have access to an array of resources, including specially designed worksheets that may be used to map the OAE assessment framework content to the program curriculum. This mapping may assist in assessing the degree of alignment between the knowledge and skills taught in the preparation program curriculum and in the content of the OAE assessment frameworks.
- **Test Preparation Worksheets.** Candidates can complete worksheets to assess their preparedness to test. Faculty can review the completed worksheets to help assess whether a candidate may be ready to test based on the content covered in their coursework and guide further candidate preparation.

Validity Evidence to Support the OAE Program

Gathering validity evidence involves a comprehensive process of reviewing assessment content for alignment with state requirements for licensure, reviewing content to ensure it is equitable and free from bias, validating test competencies and items, and establishing an appropriate passing standard. Pearson worked with the Ohio Department of Education and Ohio educators and educator preparation faculty to implement such a process for the OAE program, collecting key validity evidence to support the use of the tests for the purpose of educator licensure.

Bias Prevention and Fairness in Test Development

To create sensitive, fair, and valid assessments for test takers, Pearson makes bias prevention and equity a priority during the development and review of tests. Test developers and editors are charged with detecting and removing potentially biased content, situations, language, and stereotypes throughout the test design process. The composition of educator review committees reflects, to the extent possible, representative demographic characteristics, as does the drawing of participant samples for content validation surveys and standard setting activities.

Additionally, Pearson test development staff employ statistical analyses designed to detect instances where one group of candidates performs significantly better on an item than another group of equivalent ability (differential item functioning). Based on the results, any issues with the items can be addressed before tests become operational.

Pearson's *Fairness and Diversity in Tests* manual guides these efforts. This manual was developed by psychometricians and test development experts, and is used by educators across the country for test development purposes. In four major sections, it provides an in-depth discussion of the dimensions of bias in test development, addresses specific bias prevention steps and methods of bias review to be taken in test development, and includes a comprehensive understanding of equity inclusion (i.e., the inclusion of content that reflects diverse populations).

The sources of bias discussed in the manual include:

- bias due to content;
- bias in language;
- bias due to assumptions and stereotypes; and
- bias due to lack of inclusion of test content that reflects diversity of the population for whom the test is intended.

Assessment Validity

The process used to gather validity evidence to support the use of the OAE tests is designed to establish and/or support the connection between the test and its educational purposes (i.e., educator licensure). This connection provides evidence supporting the validity of the score interpretations, which is the central concern in high-stakes professional testing programs. Comprehensive validity evidence strengthens the credibility of a licensure test for state use.

Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests. Validity is, therefore, the most fundamental consideration in developing and evaluating tests. The process of validation involves accumulating evidence to provide a sound scientific basis for the proposed score interpretations. (AERA, APA, & NCME, 1999, p. 9)

The *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999) provides professional guidelines for accumulating validity evidence. The guidelines are clear that the process for accumulating such validity evidence must be comprehensive and draw from every aspect of test development.

The Assessment Validation Process

The process begins with defining test materials and linking them to the most appropriate measurement tools for assessing the content. Content validation surveys are conducted to provide empirical evidence that the framework for each field includes appropriate and relevant content, which supports the validity of the test score interpretations. They provide information regarding the relative job-related importance of the frameworks, based on the judgments of practicing teachers and teacher educators.

Collecting validity evidence is an ongoing process. Pearson accumulates validity evidence throughout every step of the development and administration of the tests, including subsequent validation reviews as tests are redeveloped.

The tests provided for validation for use in Ohio were developed in accordance with the guidelines specified in the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999) for defining test materials, developing test items, establishing passing standards, and collecting evidence to support the validity of the tests. Pearson conducted the following activities to collect validity evidence to support the use of the tests in Ohio.

1. Establish Ohio Advisory Committees
2. Review Test Content
3. Conduct Content Validation Surveys
4. Conduct Bias Item Validation
5. Conduct Confirmatory Item Validation
6. Conduct Standard Setting
7. Establish Passing Standards

1. Establish Ohio Advisory Committees

Ohio educators and teacher educators reviewed and validated test materials for the OAE program. Pearson worked with the Ohio Department of Education (ODE) to establish two groups of reviewers: a Bias Review Committee (BRC) for multiple fields and a Content Advisory Committee (CAC) for each assessment. The CACs and BRC were composed of licensed Ohio educators and educator preparation faculty as recommended by educator stakeholder groups (e.g., professional organizations, preparation program deans, school superintendents and principals) throughout the state. Recommended individuals were invited to complete a committee application form. In assembling each review group, Pearson worked with ODE to provide representation in terms of ethnicity, gender, geographic region of the state, and school setting (e.g., urban, suburban, and rural areas).

The test review process should include empirical analyses and, when appropriate, the use of expert judges to review items and response formats. The qualifications, relevant experience, and demographic characteristics of the expert judges should also be documented. (AERA, APA, & NCME, 1999, p. 44)

Bias Review

While bias prevention is an integral part of Pearson test development activities and a component of each CAC's responsibility, Pearson established a separate and independent BRC to specifically focus on reviewing assessment materials for potential bias issues, a development step recommended by the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999). The BRC reviewed the OAE frameworks and test items.

Content Review

Standard 14.14 of the *Standards for Educational and Psychological Testing* requires that evidence should be provided to show that the knowledge and skills that the test intends to assess are required for credential-worthy performance in the occupation and are consistent with the purpose of the licensure program (AERA, APA, & NCME, 1999). For each assessment, a CAC reviewed test materials for accuracy and validated it to include only content that is pertinent to the field and important for use in a licensing instrument. The role of each CAC was to review test materials for content accuracy and appropriateness to provide content-related validity evidence to support the use of the tests with Ohio educator candidates. CACs reviewed the OAE frameworks, validated test items, and participated in standard setting activities.

2. Review Test Content

An assessment framework defines the content knowledge and skills important for the job of an entry-level educator in the area being assessed. Pearson developed an assessment framework for each OAE test, guided by recommendations in the *Standards for Educational and Psychological Testing*:

The first step [in test development] is to extend the original statement of purpose(s), and the construct or content domain being considered, into a framework for the test that describes the extent of the domain, or the scope of the construct to be measured. The test framework, therefore, delineates the aspects (e.g., content, skills, processes, and diagnostic features) of the construct or domain to be measured.... The delineation of the test framework can be guided by theory or an analysis of the content domain or job requirements as in the case of many licensing and employment tests. The test framework serves as a guide to subsequent test evaluation. (AERA, APA, & NCME, p. 37)

Each OAE assessment framework is structured to include content domains, competencies, and descriptive statements.

- Content domains are the primary areas of content knowledge for the test area and serve to structure the content for both test preparation and score reporting purposes.
- The competencies are broad meaningful statements of knowledge and/or skills that are important for performing the job of a licensed educator in Ohio public and nonpublic schools. Collectively, the competencies define the range of content to be measured by the test.

- The descriptive statements provide examples of the content and applications covered by the competencies. The descriptive statements are meant to be examples and do not cover the entire range of the competencies.

The following steps were taken in reviewing the assessment frameworks for each OAE assessment.

- Completed an alignment study of each OAE framework with relevant Ohio standards, including Ohio Educational Preparation Standards, Ohio Educator Standards, and Ohio Student Standards.
- Conducted preliminary bias prevention and content reviews of OAE assessment frameworks with Ohio advisory committees. These reviews elicited focused feedback regarding the content and structure of the assessment frameworks. Reviewer comments were considered, and necessary changes were incorporated into the draft assessment frameworks.

Content Review of Assessment Frameworks. For each assessment, a CAC, composed of experts in the specific field, participated in an online review of the assessment framework. As required by the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999), assessment frameworks for licensure need to focus on knowledge and skills necessary for safe and effective practice in the profession. Therefore, the role of each CAC was to consider if the framework was aligned with expectations for Ohio educators, addressed important areas of Ohio educator knowledge and skills clearly and appropriately, and was free from potential bias.

Pearson provided information regarding the background and purpose of the OAE program and directions for completing the review. Committee members independently reviewed the assessment framework for alignment, completeness, language and terminology, and freedom from bias. They were provided an opportunity to suggest revisions to the framework, including concepts or topics to be added or general comments about the framework. Pearson test development specialists reviewed committee members' recommended revisions and updated the assessment frameworks as necessary. The criteria used to determine if revisions were needed to the framework included the following:

- improving alignment to Ohio and/or national standards
- adding emerging content
- addressing potential bias
- enhancing job-relatedness
- increasing or decreasing the emphasis of one component of content versus another component to align with Ohio needs
- incorporating terminology commonly used in Ohio
- increasing representativeness of content with Ohio educator preparation program curricula

Bias Review of Assessment Frameworks. The preliminary frameworks provided for the OAE were reviewed for potential bias during the initial development of the assessments and then were later reviewed for potential bias by the CAC. An additional review of the frameworks by the Ohio BRC was also conducted.

Pearson provided information to BRC committee members regarding the background, purpose, and policies of the OAE program, and directions for completing the review. Committee members were trained in the definition of bias as well as the inclusive and exclusive aspects of bias review. They independently reviewed the competencies

included in the assessment frameworks using criteria pertaining to content, language, offense, stereotypes, fairness, and diversity. Committee members rated each competency as fair only if it met all criteria for fairness and diversity. For competencies rated as potentially biased, committee members indicated which review criteria were not satisfied. Pearson test development specialists then reviewed competencies rated as potentially biased by one or more committee members and recommended revisions and updated the assessment frameworks as necessary.

3. Conduct Content Validation Surveys

Content-related validity evidence is important in licensure testing because it provides evidence that the test adequately represents the content domain of the occupation for which the assessment is developed (AERA, APA, & NCME, 1999). The *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 1999) require a clear definition of content domain and a rationale to support a claim that the knowledge and skills being assessed in a licensure test are required for credential-worthy performance. Pearson conducted content validation surveys with Ohio educators and faculty at Ohio educator preparation programs to gather additional input from experts and stakeholders regarding the importance of the knowledge and skills specified in each assessment framework for professional practice in their field.

Survey participants and ratings. Pearson targeted over 8000 practicing educators (public school teachers, school administrators, and educator preparation faculty) across all of the OAE assessment areas.

Using an interactive, online survey instrument, survey participants used a five-point scale to independently rate the components of each assessment framework, as shown below.

How important is the knowledge or skill described by this competency for performing the job of an educator in this field in Ohio public and non-public schools?

1. No importance
2. Little importance
3. Moderate importance
4. Great importance
5. Very great importance

How well does the set of descriptive statements represent important aspects of the competency?

1. Poorly
2. Somewhat
3. Adequately
4. Well
5. Very well

How well does the set of competencies as a whole cover the content knowledge and skills required for teaching in this field in Ohio public and non-public schools?

1. Poorly
2. Somewhat
3. Adequately
4. Well
5. Very well

Survey results. Based on the survey results, all competencies and descriptive statements across all test areas met the retention criteria, receiving mean ratings of 3.0 or higher across respondent groups. Appendix B provides the overall mean competency (importance) ratings, mean descriptive statements ratings, and mean composite (the set of all competencies for a field) ratings for the OAE assessments for each respondent group.

4. Conduct Bias Item Validation

Pearson conducted two item validation meetings with the Ohio BRC. The purpose of the meetings was to review OAE test items for potential bias according to established review criteria. As the *Standards for Educational and Psychological Testing* state:

Test developers should strive to identify and eliminate language, symbols, words, phrases, and content that are generally regarded as offensive by members of racial, ethnic, gender, or other groups, except when judged to be necessary for adequate representation of the domain. (AERA, APA, & NCME, 1999, p. 82)

Pearson provided BRC committee members with information regarding the background, purpose, and policies of the OAE program, and directions for completing the review. Committee members were provided training in the definition of bias as well as the inclusive and exclusive aspects of bias review. They independently rated test items using criteria pertaining to content, language, offense, stereotypes, fairness, and diversity. If a committee member indicated that an item contained potential bias, he/she also provided the reason(s) that the item was rated as potentially biased.

Following the independent review of the test items, Pearson analyzed the BRC ratings. Any item that was rated as potentially biased by one or more BRC members was reviewed again by members of the BRC. During this additional review, the BRC discussed each item and the reason(s) provided why the item might contain potential bias, and then came to consensus regarding the status of the item.

More than 200 items across the OAE tests were reviewed for potential bias at the second meeting. At the conclusion of the meeting, any items deemed to be potentially biased by the BRC were deleted from their respective item banks.

5. Conduct Confirmatory Item Validation

Pearson conducted Confirmatory Item Validation activities for all tests included in the OAE program. The CAC for each OAE assessment participated in the item validation activities. Committee members reviewed each item included in the item bank for their test field(s) and provided an independent item validation judgment. They rated each test item as either "valid" or "not valid" according to the review criteria listed below.

- Match to competency or content domain
- Accuracy

- Freedom from bias
- Job-relatedness

An item was rated “valid” if it matched all four of the review criteria; an item was rated “not valid” if it failed to match one or more of the review criteria. When rating items “not valid,” committee members indicated which of the four criteria were not met and provided a written reason for the “not valid” rating. Committee members also offered suggestions for revising the item to make it valid.

Pearson analyzed the item validation ratings and reviewed the committee members’ item validation comments. Items rated “not valid” because of potential bias by at least two committee members were deleted from the item banks, as were items that were rated “not valid” by 40% or more of the committee members. In addition, items rated “not valid” due to accuracy by more than 1/9 of the committee members also were further reviewed by Pearson staff, who made a final determination of item status. Items that were rated “not valid” based on typographical or editorial feedback were revised and retained in the item banks.

Approximately 2000 items across the test fields underwent further review by Pearson staff and approximately 400 items were deleted from the OAE item banks. In addition, the results of the Confirmatory Item Validation activity indicated that additional assessment development and validation was needed for three OAE fields: (005) Agriscience, (011) Dance, and (023) Health. With ODE approval, Pearson conducted the following additional validation activities for these fields:

- Revise assessment frameworks
- Develop test items to match revised framework
- Conduct bias and content review of assessment framework with Ohio educators and revise based on Ohio educator recommendations
- Conduct bias and content review of test items with Ohio educators and revise items based on Ohio educator recommendations
- Conduct content validation survey of revised assessment framework with Ohio teachers and teacher educators
- Conduct standard setting activities for the revised assessments

6. Conduct Standard Setting

The process of establishing passing requirements on a test is referred to as *standard setting*. Standard setting relates directly to the validity of the interpretations made about candidates based on their test scores because the process produces a recommended passing score. The recommended passing score defines the boundary line between the acceptable level of knowledge and skills required of an entry-level educator and an unacceptable level of knowledge and skills. The *Standards for Educational and Psychological Testing* require that passing scores be set high enough to distinguish adequate from inadequate performance, but not too high to be unreasonably limiting (AERA, APA, & NCME, 1999).

Standard Setting activities were conducted as part of the Confirmatory Item Validation activities. Each CAC participated in a well-researched, industry accepted Modified-Angoff Standard Setting process described below.

Composition of Standard Setting Committees. The Standard Setting committee convened for each OAE test area included educators from Ohio institutions of higher education and currently practicing Ohio teachers. Following are features specific to the Standard Setting committees.

- Over 500 Ohio education professionals participated in the standard setting activity.
- The number of participants representing each test area ranged from 8 to 21 educators.
- Overall, approximately 74% of the committee members were female and 22% were male (4% did not provide that information).
- The majority of the committee members (approximately 64%) were PreK through Grade 12 educators, while approximately 36% were college faculty.
- PreK through Grade 12 educators included practicing teachers, principals, administrators, and other professionals.
- Committees represented the ethnic diversity of the state of Ohio, with the following approximate distribution: 1% Hispanic; 4% Black or African American; 1% Asian American/Pacific Islander; 70% White; and 24% other ethnicities, two or more ethnicities, and undeclared.

Implementation of the Modified-Angoff Procedure for Multiple-Choice Items.

Committee members provided standard setting ratings based on their professional judgment, their knowledge of the test field, their understanding of the qualifications of prospective educators, the content of a test form, and test data, when available, about candidate performance on the test form. This process conforms to Standard 4.21 of the *Standards for Educational and Psychological Testing* which states:

When cut scores defining pass–fail or proficiency categories are based on direct judgments about the adequacy of item or test performances or performance levels, the judgmental process should be designed so that judges can bring their knowledge and experience to bear in a reasonable way. (AERA, APA, & NCME, 1999, p. 60)

Pearson provided committee members with background information regarding the assessment validation process employed for the OAE program. To orient them to the content and items of the assessment as seen by candidates, committee members participated in a simulated test-taking activity, during which time they reviewed and answered the items on the appropriate OAE test form(s). Committee members were also provided with the assessment framework for their field and an answer key.

Following the simulated test-taking activity, Pearson presented the committee with the standard setting task and process. For each multiple-choice item on the test form, committee members were asked to respond to the following question:

Imagine a hypothetical group of individuals who are just at the level of knowledge and skills required to perform effectively the job of an initially-licensed educator in this field in Ohio schools.

What percent of this group would answer the item correctly?

Once the task was introduced, Pearson led a discussion to help committee members understand the concept of the hypothetical reference group. Individuals in the hypothetical reference group are defined as having a sufficient level of knowledge and skills needed to serve as initially-licensed educators.

Following the training, which included a practice component, committee members provided their professional judgments concerning the performance of the hypothetical group of individuals on the items. Then, committee members participated in a second round of ratings. For the second round, they were provided with an Item Rating Summary Form and an Item Difficulty Report for each item. The Item Rating Summary Form provided committee members with their own initial item ratings, the median rating for the item, and the distribution of item ratings from other committee members. The Item Difficulty Report provided past performance on the test items, if available (note that, in accordance with State of Ohio requirements, assessment materials, where available, were to have been previously administered to educator licensure candidates in states other than Ohio). Before completing the second round of ratings, committee members were instructed on how to read and consider the information included on the Item Rating Summary Form and Item Difficulty Report. In the second round, committee members were able to change all, some, or none of their first-round ratings.

Implementation of the Modified-Angoff Procedure for Constructed-Response Items. For tests with constructed-response items, each committee member was asked to respond to the following question:

Imagine a hypothetical individual who is just at the level of knowledge and skills required to perform effectively the job of an initially-licensed educator in this field in Ohio schools.

For this constructed-response, what score represents the level of response that would be achieved by this individual?

Pearson described the scoring scale(s), performance characteristics, and holistic scoring procedures. Committee members reviewed validated marker responses (i.e., those constructed-response item responses identified as representative sample responses at each score point on the score scale) against the performance characteristics and score scale(s) used to score each response. Committee members then provided their professional judgments concerning the performance of the hypothetical individual on the constructed-response items. For the second round of ratings, for each item, committee members were provided with their own ratings, the distribution of ratings from other committee members, and the frequency distribution of scores assigned from previous administrations of the respective items. As with the multiple-choice items, committee members were provided information about how to read and consider the information provided, and were able change all, some, or none of their first-round ratings.

Evaluation of Process. At the end of the meeting, committee members were asked to complete an evaluation of the standard setting process.

Passing Standard Calculations. Following the standard setting meetings, Pearson calculated a panel-based recommended passing standard for each OAE test based on the Round Two ratings provided by the committee members².

² Only validated items were used to determine passing scores. If a test form included items that were not validated by Ohio educators, those items were removed from the test form and replaced with validated items.

7. Establish Passing Standards

A multi-step process was used to establish the passing standard for each OAE assessment that involved the Ohio Educator Standards Board, the Capacity Committee of the State Board of Education of Ohio, and the full State Board of Education.

Educator Standards Board. Pearson provided the following information to the Ohio Educator Standards Board:

- a presentation regarding the assessment validation process
- the relationship of the OAE assessments to the corresponding Ohio licensure areas
- panel-recommended passing standard for each OAE test and standard error of measure adjustments to the panel-recommended passing standard
- past candidate performance applying the Ohio educator panel-recommended passing scores, if available

The Educator Standards Board reviewed and discussed the information provided and made a recommendation for a passing score for each test that was provided to the Capacity Committee of the State Board of Education of Ohio.

Capacity Committee. Pearson provided the following information to the Capacity Committee of the State Board of Education of Ohio:

- a presentation regarding the assessment validation process
- the relationship of the OAE assessments to the corresponding Ohio licensure areas
- panel-recommended passing standard for each OAE test and standard error of measure adjustments to the panel-recommended passing standard
- past candidate performance applying the Ohio educator panel-recommended passing scores, if available
- passing score recommendations from the Ohio Educator Standards Board

The Capacity Committee reviewed and discussed the information provided and made a recommendation for a passing score for each test that was provided to the State Board of Education of Ohio.

State Board of Education. Pearson provided the following information to the State Board of Education of Ohio:

- a presentation regarding the assessment validation process
- the relationship of the OAE assessments to the corresponding Ohio licensure areas
- panel-recommended passing standard for each OAE test and standard error of measure adjustments to the panel-recommended passing standard
- past candidate performance applying the Ohio educator panel-recommended passing scores, if available
- passing score recommendations from the Ohio Educator Standards Board
- passing score recommendations from the Capacity Committee of the State Board of Education of Ohio

The State Board of Education reviewed and discussed the information provided and determined the passing score for each test. Pearson implemented the state-approved passing scores when each test became operational.

References

- American Educational Research Association, American Psychological Association, and National Council on Measurement in Education (1999). *Standards for Educational and Psychological Testing*. Washington, D.C.: American Educational Research Association.
- Angoff, W. H. (1984). *Scales, Norms and Equivalent Scores*. Princeton, NJ: Educational Testing Service.
- Evaluation Systems Pearson. (2009). *Fairness and diversity in tests*. Amherst, MA: Author.

Appendices

Appendix A: OAE Alignment Studies

Appendix B: Content Validation Survey Results

**Appendix A:
OAE Alignment Studies**

Alignment of OAE Assessment of Professional Knowledge: Early Childhood (PK-3) Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Early Childhood (PK-3)		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards
<u>Student Development and Learning</u>				
0001	Understand processes of human development, variations in student development, and how to apply this knowledge to provide instructional environments and experiences that promote all students' development and learning.	1; 4-5	1; 4	Domains: Social-Emotional Development, Approaches Toward Learning, Physical Well-Being and Motor Development, Cognitive Development and General Knowledge, Language and Literacy Development
0002	Understand learning processes, factors that can affect student learning and performance, and how to apply this knowledge to provide instructional environments and experiences that promote all students' learning and achievement.	1; 4-5	1-2; 5	Domains: Approaches Toward Learning,

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Early Childhood (PK-3)		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards
0003	Understand student diversity and how to provide learning opportunities and environments that are responsive to student differences, promote all students' learning, and foster students' appreciation of and respect for diversity.	1-2	1; 5	Domains: Social-Emotional Development,
<u>Assessment, Instruction, and the Learning Environment</u>				
0004	Understand assessment instruments and practices, the relationship between assessment and instruction, and how to use assessment to guide instruction and monitor students' learning progress.	3	3	
0005	Understand principles and procedures of curricular and instructional planning and how to use effective planning to design instruction that promotes all students' learning and achievement.	4-5	2-4	
0006	Understand principles and practices associated with various instructional approaches and how to apply these principles and practices to promote all students' achievement of instructional goals.	4-5	2; 4-5	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Early Childhood (PK-3)		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards
0007	Understand principles and practices of motivation and communication and how to apply these principles and practices effectively to promote students' active engagement and learning.	1; 4-5	4-5	
0008	Understand how to structure and manage the classroom to establish a safe, inclusive, and positive environment that is organized and productive; fosters excellence; and promotes learning, appropriate student behavior, and effective work habits.	1; 4	5	
<u>The Professional Environment</u>				
0009	Understand how to establish partnerships and collaborate effectively with families, colleagues, and members of the community to enhance and support student learning.	2-3	6	
0010	Understand roles and expectations for professional educators, legal and ethical guidelines, and strategies for continuous professional growth and self-reflection.	4; 6	5-7	

Alignment of OAE Assessment of Professional Knowledge: Middle Childhood (4-9) Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Middle Childhood (4-9)		AMLE Middle Level Teacher Preparation Standards, Fourth Draft 2012	Ohio Standards for the Teaching Profession
<u>Student Development and Learning</u>			
0001	Understand processes of human development, variations in student development, and how to apply this knowledge to provide instructional environments and experiences that promote all students' development and learning.	1; 4	1; 4
0002	Understand learning processes, factors that can affect student learning and performance, and how to apply this knowledge to provide instructional environments and experiences that promote all students' learning and achievement.	1; 4	1-2; 5
0003	Understand student diversity and how to provide learning opportunities and environments that are responsive to student differences, promote all students' learning, and foster students' appreciation of and respect for diversity.	1-2; 4	1; 5

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Middle Childhood (4-9)		AMLE Middle Level Teacher Preparation Standards, Fourth Draft 2012	Ohio Standards for the Teaching Profession
<u>Assessment, Instruction, and the Learning Environment</u>			
0004	Understand assessment instruments and practices, the relationship between assessment and instruction, and how to use assessment to guide instruction and monitor students' learning progress.	4	3
0005	Understand principles and procedures of curricular and instructional planning and how to use effective planning to design instruction that promotes all students' learning and achievement.	2; 4	2-4
0006	Understand principles and practices associated with various instructional approaches and how to apply these principles and practices to promote all students' achievement of instructional goals.	4	2; 4-5
0007	Understand principles and practices of motivation and communication and how to apply these principles and practices effectively to promote students' active engagement and learning.	4	4-5
0008	Understand how to structure and manage the classroom to establish a safe, inclusive, and positive environment that is organized and productive; fosters excellence; and promotes learning, appropriate student behavior, and effective work habits.	1; 3-4	5
<u>The Professional Environment</u>			
0009	Understand how to establish partnerships and collaborate effectively with families, colleagues, and members of the community to enhance and support student learning.	3; 5	6
0010	Understand roles and expectations for professional educators, legal and ethical guidelines, and strategies for continuous professional growth and self-reflection.	3; 5	5-7

Alignment of OAE Assessment of Professional Knowledge: Adolescence to Young Adult (7-12) Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educator Standards
Adolescence to Young Adult (7-12)		Ohio Standards for the Teaching Profession
<u>Student Development and Learning</u>		
0001	Understand processes of human development, variations in student development, and how to apply this knowledge to provide instructional environments and experiences that promote all students' development and learning.	1; 4
0002	Understand learning processes, factors that can affect student learning and performance, and how to apply this knowledge to provide instructional environments and experiences that promote all students' learning and achievement.	1-2; 5
0003	Understand student diversity and how to provide learning opportunities and environments that are responsive to student differences, promote all students' learning, and foster students' appreciation of and respect for diversity.	1; 5

Competencies		Ohio Educator Standards
Adolescence to Young Adult (7-12)		Ohio Standards for the Teaching Profession
<u>Assessment, Instruction, and the Learning Environment</u>		
0004	Understand assessment instruments and practices, the relationship between assessment and instruction, and how to use assessment to guide instruction and monitor students' learning progress.	3
0005	Understand principles and procedures of curricular and instructional planning and how to use effective planning to design instruction that promotes all students' learning and achievement.	2-4
0006	Understand principles and practices associated with various instructional approaches and how to apply these principles and practices to promote all students' achievement of instructional goals.	2; 4-5
0007	Understand principles and practices of motivation and communication and how to apply these principles and practices effectively to promote students' active engagement and learning.	4-5
0008	Understand how to structure and manage the classroom to establish a safe, inclusive, and positive environment that is organized and productive; fosters excellence; and promotes learning, appropriate student behavior, and effective work habits.	5

Competencies		Ohio Educator Standards
Adolescence to Young Adult (7-12)		Ohio Standards for the Teaching Profession
<u>The Professional Environment</u>		
0009	Understand how to establish partnerships and collaborate effectively with families, colleagues, and members of the community to enhance and support student learning.	6
0010	Understand roles and expectations for professional educators, legal and ethical guidelines, and strategies for continuous professional growth and self-reflection.	5-7

Alignment of OAE Assessment of Professional Knowledge: Multi-Age (PK-12) Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards	Ohio Student Standards
Multi-Age (PK-12) APK		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	AMLE Middle Level Teacher Preparation Standards, Fourth Draft 2012	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards
<u>Student Development and Learning</u>					
0001	Understand processes of human development, variations in student development, and how to apply this knowledge to provide instructional environments and experiences that promote all students' development and learning.	1; 4-5	1; 4	1; 4	Domains: Social-Emotional Development, Approaches Toward Learning, Physical Well-Being and Motor Development, Cognitive Development and General Knowledge, Language and Literacy Development
0002	Understand learning processes, factors that can affect student learning and performance, and how to apply this knowledge to provide instructional environments and experiences that promote all students' learning and achievement.	1; 4-5	1; 4	1-2; 5	Domains: Approaches Toward Learning

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards	Ohio Student Standards
Multi-Age (PK-12) APK		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	AMLE Middle Level Teacher Preparation Standards, Fourth Draft 2012	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards
0003	Understand student diversity and how to provide learning opportunities and environments that are responsive to student differences, promote all students' learning, and foster students' appreciation of and respect for diversity.	1-2	1-2; 4	1; 5	Domains: Social-Emotional Development
<u>Assessment, Instruction, and the Learning Environment</u>					
0004	Understand assessment instruments and practices, the relationship between assessment and instruction, and how to use assessment to guide instruction and monitor students' learning progress.	3	4	3	
0005	Understand principles and procedures of curricular and instructional planning and how to use effective planning to design instruction that promotes all students' learning and achievement.	4-5	2; 4	2-4	

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards	Ohio Student Standards
Multi-Age (PK-12) APK		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	AMLE Middle Level Teacher Preparation Standards, Fourth Draft 2012	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards
0006	Understand principles and practices associated with various instructional approaches and how to apply these principles and practices to promote all students' achievement of instructional goals.	4-5	4	2; 4-5	
0007	Understand principles and practices of motivation and communication and how to apply these principles and practices effectively to promote students' active engagement and learning.	1; 4-5	4	4-5	
0008	Understand how to structure and manage the classroom to establish a safe; inclusive; and positive environment that is organized and productive; fosters excellence; and promotes learning; appropriate student behavior; and effective work habits.	1; 4	1; 3-4	5	

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards	Ohio Student Standards
Multi-Age (PK-12) APK		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	AMLE Middle Level Teacher Preparation Standards, Fourth Draft 2012	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards
<u>The Professional Environment</u>					
0009	Understand how to establish partnerships and collaborate effectively with families; colleagues; and members of the community to enhance and support student learning.	2-3	3; 5	6	
0010	Understand roles and expectations for professional educators; legal and ethical guidelines; and strategies for continuous professional growth and self-reflection.	4; 6	3; 5	5-7	

Alignment of OAE Computer Information Science Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Computer Information Science (PK-12)		Multi-Age Computer Information Science 2007 Ohio Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	Ohio's 2003 Academic Content Standards in Technology
<u>Computer use in Educational Environments</u>				
0001	Understand basic concepts, related to the operation and use of computers and technology in educational environments.	1.2; 1.4; 1.6-1.7; 3.2	2	4
0002	Understand the characteristics and uses of productivity software.	1.2-1.3; 1.10	2	3-4
<u>Computer System Concepts</u>				
0003	Understand basic terminology related to computer architecture and characteristics of computer architecture.	1.14	2	6-7
0004	Understand characteristics and functions of operating systems.	1.5; 1.14	2	6-7
0005	Understand types and characteristics of computer networks.	1.7-1.8; 1.13	2	6-7
0006	Understand the interactions between people and information systems and the social aspects of computing	1.1; 1.7; 1.9	2	1, 2, 7

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Computer Information Science (PK-12)		Multi-Age Computer Information Science 2007 Ohio Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	Ohio's 2003 Academic Content Standards in Technology
<u>Program Design and Algorithms</u>				
0007	Understand principles and procedures for designing a program.	1.11	2	6-7
0008	Understand concepts and principles of modularization and data encapsulation in computer programming.	1.11	2	6-7
0009	Understand characteristics and uses of algorithms in high-level languages.	1.11	2	6-7
0010	Understand principles and procedures for program development and implementation	1.11	2	6-7
<u>Programming and Program Testing</u>				
0011	Understand types and characteristics of programming languages.	1.11	2	6-7
0012	Understand types and characteristics of statements, operators, and control structures in high-level languages	1.11	2	6-7
0013	Understand characteristics and applications of data types, structures, and abstraction mechanisms in high-level languages	1.11	2	6-7
0014	Understand basic concepts related to code analysis, program testing, and documentation	1.11	2	6-7

Alignment of OAE Art Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Visual Arts		Multi-Age Visual Arts: 2007 Modified Ohio/NASAD Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Visual Arts
<u>Foundations of Art: Elements and Principles</u>				
0001	Understand the elements of art.	5	2	Perceiving/Knowing (PE) K-1; 3; 6; Producing/Performing (PR) K-6, 8, HS Beginning; Responding/Reflecting (RE) 1-2, HS Advanced
0002	Understand the principles of design.	5	2	(PE) 1, 3, 6; (PR) 1-5, 7, HS Beginning; (RE) 1-3
<u>Art Media, Tools, Technologies, Techniques, and Processes</u>				
0003	Understand media, tools, technologies, techniques, and processes used in drawing.		2	(PE) 2, 4-8, HS Intermediate; (PR) K, 2-7, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced; (RE) K-1, 8, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Visual Arts		Multi-Age Visual Arts: 2007 Modified Ohio/NASAD Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Visual Arts
0004	Understand media, tools, technologies, techniques, and processes used in painting.		2	(PE) 2, 4-8, HS Intermediate; (PR) K, 2-7, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced; (RE) K-1, 8, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced
0005	Understand media, tools, technologies, techniques, and processes used in printmaking.		2	(PE) 2, 4-8, HS Intermediate; (PR) K, 2-7, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced; (RE) K-1, 8, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced
0006	Understand media, tools, technologies, techniques, and processes used in sculpture.		2	(PE) 2, 4-8, HS Intermediate; (PR) K, 2-7, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced; (RE) K-1, 8, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced
0007	Understand media, tools, technologies, techniques, and processes used in photography, video/film art, multimedia arts, and design arts.		2	(PE) 2, 4-8, HS Intermediate; (PR) K, 2-7, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced; (RE) K-1, 8, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Visual Arts		Multi-Age Visual Arts: 2007 Modified Ohio/NASAD Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Visual Arts
0008	Understand media, tools, technologies, techniques, and processes used in functional arts, such as ceramics, fiber arts, and jewelry.		2	(PE) 2, 4-8, HS Intermediate; (PR) K, 2-7, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced; (RE) K-1, 8, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced
<u>Visual Arts in Historical and Cultural Contexts</u>				
0009	Understand the purposes and functions of art in cultures and societies throughout history.	4	2	(PE) 1-2, 4, 7-8, HS Accelerated, HS Advanced; (RE) 1
0010	Understand how works of art and architecture relate to their historical context (e.g., cultural, political, social, religious, technological).	4	2	(PE) 1-8, HS Beginning, HS Intermediate, HS Accelerated, HS Advanced; (PR) 2, 7; (RE) 2-8, HS Beginning, HS Intermediate, HS Accelerated
0011	Understand how art from various cultures and historical periods influenced and was influenced by art from other cultures and historical periods.	4	2	(PE) 5, 7, HS Beginning, HS Intermediate, HS Accelerated; (RE) 6
0012	Understand the distinguishing characteristics of art from various cultures.	4	2	(PE) 2, 4, HS Intermediate, HS Accelerated; (RE) K, 7-8

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Visual Arts		Multi-Age Visual Arts: 2007 Modified Ohio/NASAD Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Visual Arts
0013	Understand similarities and differences among art forms or artworks from various cultures and historical periods.	4	2	(PE) 3; (RE) K
0014	Understand ways in which visual images may influence current cultural and societal issues.	4	2	(PE) 5; (RE) 3, HS Accelerated
<u>Aesthetics and Art Criticism</u>				
0015	Understand aesthetic concepts.	2	2	(PE) 5, 7, HS Accelerated; (RE) HS Beginning, HS Intermediate, HS Accelerated, HS Advanced
0016	Understand critical analysis and interpretation of artworks.	2	2	(RE) 2, 7, HS Accelerated
<u>Connecting the Visual Arts to Other Disciplines</u>				
0017	Understand connections between visual arts and other disciplines.	3	2	(PE) 4, 6, HS Accelerated; (PR) K, 3, 5-6, 8
0018	Understand careers and opportunities for lifelong learning in the visual arts.	3	2	(RE) HS Beginning, HS Intermediate, HS Accelerate, HS Advanced

Alignment of OAE Biology Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Life Sciences (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Nature of Science</u>					
0001	Understand principles and procedures of scientific inquiry.	Unifying Concepts: A.1-3; Bio: A.11; B.20	2	Science Inquiry and Application	Gr. 6-12: 2-4; 7-8
0002	Understand the history and nature of science.	Unifying Concepts: A.1-A.2; A.4 Chem: B.25 Phys: B.20 Bio: B.19 Earth/Space Sci: B.20	2	Science Inquiry and Application	
0003	Understand the relationships between biology, engineering, technology, mathematics, and society.	Unifying Concepts: A.5 Bio: A.11; B.18; B.21	2	Science Inquiry and Application	Gr. 6-12: 1-2; 4
<u>Biochemistry and Cell Biology</u>					

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Life Sciences (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0004	Understand the chemistry of living systems.	Bio: A.1; B.13	2	Bio: Cells	
0005	Understand cell structure, function, and bioenergetics.	Bio: A.8; B.13-B.14	2	Bio: Cells	
<u>Genetics and Evolution</u>					
0006	Understand molecular genetics.	Bio: A.7; B.15	2	Bio: Cells; Heredity	
0007	Understand patterns and processes of inheritance.	Bio: A.4; A.7; B.16	2	Bio: Heredity	
0008	Understand the mechanisms of biological evolution.	Bio: A.4; A.6-A.7; B.15	2	Bio: Evolution	
0009	Understand the scientific explanations and evidence for the history of life on Earth.	Bio: A.2-A.4; B.16	2	Bio: Heredity; Evolution	
<u>Biological Unity and Diversity</u>					
0010	Understand the structures and functions of organisms and their life cycles.	Bio: A.1-A.2; A.8-A.10	2	Bio: Diversity and interdependence of life	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Life Sciences (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0011	Understand how organisms obtain, store, and use energy and matter to maintain homeostasis.	Bio: A.1-A.2; A.10; B.13-B.14;	2	Bio: Cells; Diversity and Interdependence of Life	
0012	Understand the anatomy and physiology of human organ systems.	Bio: A.1; A.8-A.10; A.12; B.14; B.17	2	Bio: Cells; Diversity and Interdependence of Life	
<u>Ecology and Environment</u>					
0013	Understand populations and communities.	Bio: A.1; A.5-A.6; A.9; B.14	2	Bio: Cells; Diversity and Interdependence of Life	
0014	Understand ecosystems and biomes.	Bio: A.1; A.5; B.14	2	Bio: Cells; Diversity and Interdependence of Life	
0015	Understand the effects of human activities on the biosphere.	Bio: A.5; A.12; B.18		Bio: Cells; Diversity and Interdependence of Life	

Alignment of OAE Business Education Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Business		Career-Technical Baccalaureate Integrated Business 2008 Ohio Program Standards Grades 4 and Beyond	Ohio Standards for the Teaching Profession	Business and Administrative Services Career Field Technical Content Standards Document
<u>Business Management, Law, and Ethics</u>				
0001	Understand functions, principles, and methods of organizational management.	1.3; 1.6	2	Management, Risk Management, Emotional Intelligence, Financial Management, Information Management, Knowledge Management, Operations Management, Project Management
0002	Understand principles of human resources management.	1.3	2	Risk Management, Emotional Intelligence, Knowledge Management, Human Resources Management
0003	Understand business law and issues related to ethics and social responsibility in business.	1.3	2	Business Law, Information Management, Legal System

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Business		Career-Technical Baccalaureate Integrated Business 2008 Ohio Program Standards Grades 4 and Beyond	Ohio Standards for the Teaching Profession	Business and Administrative Services Career Field Technical Content Standards Document
<u>Accounting, Personal Financial Management, and Quantitative Analysis</u>				
0004	Understand business accounting.	1.1	2	Accounting, Information Management
0005	Understand personal finance and principles of consumer economics.	1.2; 1.6	2	Money and Personal Finance
0006	Understand basic techniques of computation and quantitative analysis in business.	1.6	2	Correlated Mathematics Academic Content Benchmarks are included in the following units: Management, Entrepreneurship, Customer Relationship Management, Risk Management, Communication Skills, Money and Personal Finance, Economics, Accounting, Financial Management, Technology, Information Management, Operations Management, Project Management
<u>Economics and International Business</u>				
0007	Understand fundamental principles of microeconomics.	1.2	2	Economics

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Business		Career-Technical Baccalaureate Integrated Business 2008 Ohio Program Standards Grades 4 and Beyond	Ohio Standards for the Teaching Profession	Business and Administrative Services Career Field Technical Content Standards Document
0008	Understand fundamental principles of macroeconomics.	1.2	2	Economics
0009	Understand international business, marketing, and trade.	1.3	2	Marketing, Economics
<u>Marketing, E-Commerce, and Entrepreneurship</u>				
0010	Understand basic principles of marketing, marketing research, and product/service planning and placement.	1.3	2	Marketing, Customer Relationship Management
0011	Understand principles and procedures related to e-commerce and Internet marketing.	1.3	2	Marketing, Customer Relationship Management
0012	Understand entrepreneurship and business plan development.	1.3	2	Management, Entrepreneurship, Economics
<u>Business Communications, Technology, Career Development, and Professionalism</u>				
0013	Understand principles and procedures related to business communication.	1.4	2	Communications Skills, Technology
0014	Understand information systems in business.	1.7	2	Risk Management, Technology, Information Management

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Business		Career-Technical Baccalaureate Integrated Business 2008 Ohio Program Standards Grades 4 and Beyond	Ohio Standards for the Teaching Profession	Business and Administrative Services Career Field Technical Content Standards Document
0015	Understand information processing and computer technology applications in business.	1.7	2	Technology, Information Management
0016	Understand career development and professionalism.	1.5; 5.13; 8.5	2	Professional Development

Alignment of OAE Chemistry Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Physical Sciences: Chemistry (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Nature of Science</u>					
0001	Understand principles and procedures of scientific inquiry.	Unifying Concepts: A.1-3; Chem: A.12; B.26	2	Gr. 6-12: 2-4; 7-8	Gr. 6-12: 2-4; 7-8
0002	Understand the history and nature of science.	Unifying Concepts: A.1-A.2; A.4 Chem: B.25 Phys: B.20 Bio: B.19 Earth/Space Sci: B.20	2	Science Inquiry and Application	
0003	Understand the relationships between science, technology, engineering, mathematics, and society.	Unifying Concepts: A.5; Chem: A.13; B.24; B.27	2	Science Inquiry and Application	Gr. 6-12: 1-2; 4

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Physical Sciences: Chemistry (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Matter and Atomic Structure</u>					
0004	Understand the properties of matter.	Chem: A.1; A.3; A.12	2	Chem: Atomic Structure	
0005	Understand atomic theory and the periodic table.	Chem: A.1; A.3; B.14	2	Chem: Periodic Table	
0006	Understand the kinetic molecular theory, the nature of phase changes, and the gas laws.	Chem: A.3-A.4; B.23	2	Chem: Gas Laws; Phases of Matter	
<u>Energy and Chemical Bonding</u>					
0007	Understand the principles of thermodynamics and calorimetry.	Chem: A.4; A.12; B.16; B.23	2	Chem: Chemical Reactions	
0008	Understand energy relationships in chemical bonding, chemical reactions, and physical processes.	Chem: A.2; A.4; B.16; B.18; B.23	2	Chem: Intramolecular Chemical Bonding; Chemical Reactions	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Physical Sciences: Chemistry (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0009	Understand the nomenclature and structure of inorganic and organic compounds.	Chem: A.1; A.9; A.10; B.19	2	Chem: Representing Compounds	CCSS - Reading Standards for Literacy in Science and Technical Subjects 6-12: 4
0010	Understand chemical bonding and intermolecular forces and their effect on the properties of substances.	Chem: A.2-A.3; B.21	2	Chem: Intramolecular Chemical Bonding	
<u>Chemical Reactions</u>					
0011	Understand the nature of chemical reactions.	Chem: A.2; A.4; A.6; A.8; B.16	2	Chem: Chemical Reactions	
0012	Understand the principles of chemical equilibrium.	Chem: A.4; A.6; B.16; B.23	2	Chem: Chemical Reactions	
0013	Understand acid-base chemistry.	Chem: A.8; A.12; B.21	2	Chem: Chemical Reactions	
0014	Understand oxidation-reduction reactions and electrochemistry.	Chem: A.5; A.8; A.12; B.27	2	Chem: Chemical Reactions	
<u>Stoichiometry and Solutions</u>					
0015	Understand the mole concept.	Chem: A.6	2	Chem: Quantifying Matter; Stoichiometry	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Physical Sciences: Chemistry (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0016	Understand stoichiometry.	Chem: A.6	2	Chem: Quantifying Matter; Stoichiometry	CCSS - Reading Standards for Literacy in Science and Technical Subjects 6-12: 4
0017	Understand the properties of solutions and colloidal suspensions.	Chem: A.8; B.18; B.20	2	Chem: Intramolecular Chemical Bonding	

Alignment of OAE Computer Information Science Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Computer Information Science (PK-12)		Multi-Age Computer Information Science 2007 Ohio Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	Ohio's 2003 Academic Content Standards in Technology
<u>Computer use in Educational Environments</u>				
0001	Understand basic concepts, related to the operation and use of computers and technology in educational environments.	1.2; 1.4; 1.6-1.7; 3.2	2	4
0002	Understand the characteristics and uses of productivity software.	1.2-1.3; 1.10	2	3-4
<u>Computer System Concepts</u>				
0003	Understand basic terminology related to computer architecture and characteristics of computer architecture.	1.14	2	6-7
0004	Understand characteristics and functions of operating systems.	1.5; 1.14	2	6-7
0005	Understand types and characteristics of computer networks.	1.7-1.8; 1.13	2	6-7
0006	Understand the interactions between people and information systems and the social aspects of computing	1.1; 1.7; 1.9	2	1, 2, 7

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Computer Information Science (PK-12)		Multi-Age Computer Information Science 2007 Ohio Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	Ohio's 2003 Academic Content Standards in Technology
<u>Program Design and Algorithms</u>				
0007	Understand principles and procedures for designing a program.	1.11	2	6-7
0008	Understand concepts and principles of modularization and data encapsulation in computer programming.	1.11	2	6-7
0009	Understand characteristics and uses of algorithms in high-level languages.	1.11	2	6-7
0010	Understand principles and procedures for program development and implementation	1.11	2	6-7
<u>Programming and Program Testing</u>				
0011	Understand types and characteristics of programming languages.	1.11	2	6-7
0012	Understand types and characteristics of statements, operators, and control structures in high-level languages	1.11	2	6-7
0013	Understand characteristics and applications of data types, structures, and abstraction mechanisms in high-level languages	1.11	2	6-7
0014	Understand basic concepts related to code analysis, program testing, and documentation	1.11	2	6-7

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Computer Information Science (PK-12)		Multi-Age Computer Information Science 2007 Ohio Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	Ohio's 2003 Academic Content Standards in Technology
0014	Understand basic concepts related to code analysis, program testing, and documentation	1.11	2	6-7

Alignment of OAE Computer/Technology Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards		Ohio Student Standards
Computer/Technology (endorsement)		ISTE Technology Coach Program Standards, 2012	ISTE Technology Director Program Standards, 2012	Ohio's 2003 Academic Content Standards in Technology
<u>Subtest I</u>				
<u>Basic Operations, Concepts, and Issues of Digital Technology</u>				
0001	Understand basic principles of computer hardware and software operation and care.	3.2; 3.5		1; 3
0002	Understand basic troubleshooting for computers and related peripheral device.	3.5		1; 3
0003	Understand acceptable use policies and legal and ethical issues.	5.2	5.2	1-2
0004	Understand privacy, security, and safety issues.	5.2	5.2	1-2
<u>Subtest I</u>				
<u>Productivity Applications of Digital Technology</u>				
0005	Understand managing records and information.	2.8	3.2	3
0006	Understand communicating through multiple forms of media.	3.7	3.2-3.3	3-4

Competencies		Ohio Educational Preparation Standards		Ohio Student Standards
Computer/Technology (endorsement)		ISTE Technology Coach Program Standards, 2012	ISTE Technology Director Program Standards, 2012	Ohio's 2003 Academic Content Standards in Technology
0007	Understand communicating using digital collaborative tools.	3.7	3.3	3-4
0008	Using electronic research tools and applying information literacy skills.	3.3		3-5
<u>Subtest II</u>				
<u>Teaching and Learning Applications of Digital Technology</u>				
0001	Understand using current best practices and research findings on the effective use of technology to improve teaching and learning.	2.1-2.8; 3.4	2.1-2.5	
0002	Understand criteria for evaluating and selecting software and electronic learning media.	3.4; 3.6	2.1	

Alignment of OAE Early Childhood Education Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Early Childhood (PK-3)		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	Ohio Standards for the Teaching Profession	Ohio Early Learning and Development Standards	Ohio New Learning Standards
<u>Child Development and Learning</u>					
0001	Understand early childhood development from birth through age 8 and factors that influence young children's development and learning.	1a-1b	1	Social and Emotional Development, Approaches Toward Learning, Cognition and General Knowledge	
0002	Understand the goals, benefits, types, and uses of assessment.	3a-3c	3		
0003	Understand how to create positive indoor and outdoor learning environments for children from birth through age 8.	1c; 4a-4c	5	Approaches Toward Learning	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Early Childhood (PK-3)		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	Ohio Standards for the Teaching Profession	Ohio Early Learning and Development Standards	Ohio New Learning Standards
<u>Language and Literacy Development</u>					
0004	Understand oral language development and how to promote listening and speaking skills in children from birth through age 8.	4c	2; 4	Language and Literacy Development: Listening and Speaking	ELA SL.K.1–K.6; SL.1.1–1.6; SL.2.1–2.6; SL.3.1–3.6
0005	Understand the foundations of literacy development in children from birth through age 8.	5a	2	Language and Literacy Development: Reading	ELA RF.K.1–K.4; RF.1.1–1.4; RF.2.1–2.4; RF.3.1–3.4
0006	Understand instruction in reading and reading comprehension for children from birth through age 8.	5a-5c	4	Language and Literacy Development: Reading	ELA RL.K.1–K.10; RL.1.1–1.10; RL.2.1–2.10; RL.3.1–3.10; RI.K.1–K.10; RI.1.1–1.10; RI.2.1–2.10; RI.3.1–3.10
0007	Understand writing processes and strategies for developing children's writing competence.	5a-5c	2	Language and Literacy Development: Writing	ELA W.K.1–K.8; W.1.1–1.8; W.2.1–2.8; W.3.1–3.8; 10

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Early Childhood (PK-3)		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	Ohio Standards for the Teaching Profession	Ohio Early Learning and Development Standards	Ohio New Learning Standards
<u>Learning Across the Curriculum</u>					
0008	Understand music, drama, creative movement, dance, and visual arts and how to facilitate arts learning for children from birth through age 8.	5a-5c	2		2012 Fine Arts K-3 Music: CE, PR, RE Drama/Theatre: CE, PR, RE Dance: PE, PR, RE Visual Art: PE, PR, RE
0009	Understand health, safety, and physical activity and how to facilitate learning about health and safety and participation in physical activities for children from birth through age 8.	5a-5c	2	Physical Well-Being and Motor Development	Physical Education K-3: 1-6
0010	Understand mathematical concepts, processes, and skills and how to facilitate mathematical learning for children from birth through age 8.	5a-5c	2	Cognition and General Knowledge: Mathematics	Mathematics K.CC, K.OA, K.NBT, K.MD, K.G; 1.OA, 1.NBT, 1.MD, 1.G; 2.OA, 2.NBT, 2.MD, 2.G; 3.OA, 3.NBT, 3.NF, 3.MD, 3.G

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Early Childhood (PK-3)		2010 NAEYC Standards for Initial & Advanced Early Childhood Professional Preparation Programs	Ohio Standards for the Teaching Profession	Ohio Early Learning and Development Standards	Ohio New Learning Standards
0011	Understand social studies concepts and skills and how to facilitate social studies learning for children from birth through age 8.	5a- 5c	2	Cognition and General Knowledge: Social Studies	
0012	Understand science concepts and skills and how to facilitate science learning for children from birth through age 8.	5a-5c	2	Cognition and General Knowledge: Science	Science K-3: ESS, PS, LS
<u>Professional Relationships and Responsibilities</u>					
0013	Understand strategies for building positive, collaborative relationships with children's families, other professionals, and community agencies and organizations.	2a-2c	6		
0014	Understand the roles and responsibilities of early childhood educators.	6a-6e	7		

Alignment of OAE Early Childhood Special Education Framework Assessment with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards		Ohio Educators Standards
Early Childhood Intervention Specialist (PK-3)		2010 NAEYC Standards for Initial and Advanced Early Childhood Professional Preparation Programs	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
<u>Understanding Young Children with Special Needs</u>				
0001	Understand typical processes of human growth and development.	1	1	1
0002	Analyze the developmental significance of disabilities.	1	1	1
0003	Understand learning processes.	1-6	1	1; 4
0004	Analyze the significance of disabilities for learning.	1; 3	1	1
0005	Understand assessment procedures for evaluating individual differences and making placement and programming decisions for young children with disabilities.	3	4	3

Competencies		Ohio Educational Preparation Standards		Ohio Educators Standards
Early Childhood Intervention Specialist (PK-3)		2010 NAEYC Standards for Initial and Advanced Early Childhood Professional Preparation Programs	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
0006	Understand medical aspects and physical management implications of disabilities.	1; 4		1
<u>Promoting Young Children's Growth and Development</u>				
0007	Apply procedures for structuring space and time to create safe, stimulating, and developmentally appropriate learning environments for children with disabilities.	1; 4-5	2	2; 5
0008	Apply procedures for using developmentally appropriate individual and group management strategies to provide an atmosphere that enhances young children's learning.	1; 4	2	2; 5
0009	Apply procedures for establishing a positive and supportive classroom climate that promotes all children's self-esteem and sense of competence.	1-2; 4-5	2	2; 5
0010	Understand how to promote young children's self-discipline and autonomy.	1; 4-5	5	4-5

Competencies		Ohio Educational Preparation Standards		Ohio Educators Standards
Early Childhood Intervention Specialist (PK-3)		2010 NAEYC Standards for Initial and Advanced Early Childhood Professional Preparation Programs	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
0011	Understand how to promote young children’s social development.	1; 4-5	5	4-5
0012	Understand how to promote young children’s receptive language development.	1-5	5	2; 4-5
0013	Understand how to promote young children’s expressive language development.	1-5	5	2; 4-5
0014	Understand emergent literacy and how to encourage the emergence of literacy in young children.	1; 4-5	3; 5	2; 4-5
0015	Understand how to promote young children’s daily living skills.	1; 3-4	5	2; 4-5
0016	Understand how to promote young children’s cognitive development.	1; 3-5	3; 5	2; 4-5
0017	Understand how to promote young children’s understanding of their world through exploration of content-area skills and concepts.	1; 3-5	3	2; 4-5

Competencies		Ohio Educational Preparation Standards		Ohio Educators Standards
Early Childhood Intervention Specialist (PK-3)		2010 NAEYC Standards for Initial and Advanced Early Childhood Professional Preparation Programs	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
0018	Understand aesthetic development and the role of the arts in young children's overall development.	1; 4-5	3	1-2; 4-5
0019	Understand how to promote young children's physical development.	1; 3-5	3	2; 4-5
<u>Working in a Collaborative Learning Community</u>				
0020	Understand how to establish partnerships with other members of the school community to enhance learning opportunities for young children with disabilities.	2-3; 5-6	7	6
0021	Understand how to foster strong school-home partnerships.	1-2; 3; 6	6; 7	6
0022	Understand how to encourage school-community interactions that enhance young children's opportunities for learning and development.	2; 6	7	6

Competencies		Ohio Educational Preparation Standards		Ohio Educators Standards
Early Childhood Intervention Specialist (PK-3)		2010 NAEYC Standards for Initial and Advanced Early Childhood Professional Preparation Programs	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
0023	Understand requirements, responsibilities, and constraints associated with teaching young children with disabilities.	3; 6	6	7
0024	Understand the history and philosophy of early childhood special education and key issues, trends, practices, and research relating to the education of young children with disabilities.	1-2; 6	6	2; 7

Alignment of OAE Early Childhood Special Education Framework Assessment with Ohio-specified Standards

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Competencies		Ohio Educational Preparation Standards	Ohio Educators Standards
Prekindergarten Special Needs		Prekindergarten Special Needs Endorsement Ages 3-5– Modified Ohio/NAEYC/Ohio's Early Learning Content Standards/Council for Exceptional Children/DEC, 2008	Ohio Standards for the Teaching Profession
<u>Understanding Young Children with Special Needs</u>			
0001	Understand typical processes of human growth and development.	1	1
0002	Analyze the developmental significance of disabilities.	1	1
0003	Understand learning processes.	3	1; 4
0004	Analyze the significance of disabilities for learning.	3	1
0005	Understand assessment procedures for evaluating individual differences and making placement and programming decisions for young children with disabilities.	4	3
0006	Understand medical aspects and physical management implications of disabilities.	2	1

Competencies		Ohio Educational Preparation Standards	Ohio Educators Standards
Prekindergarten Special Needs		Prekindergarten Special Needs Endorsement Ages 3-5– Modified Ohio/NAEYC/Ohio's Early Learning Content Standards/Council for Exceptional Children/DEC, 2008	Ohio Standards for the Teaching Profession
<u>Promoting Young Children's Growth and Development</u>			
0007	Apply procedures for structuring space and time to create safe, stimulating, and developmentally appropriate learning environments for children with disabilities.	2-3	2; 5
0008	Apply procedures for using developmentally appropriate individual and group management strategies to provide an atmosphere that enhances young children's learning.	2	2; 5
0009	Apply procedures for establishing a positive and supportive classroom climate that promotes all children's self-esteem and sense of competence.	2	2; 5
0010	Understand how to promote young children's self-discipline and autonomy.	2-3	4-5
0011	Understand how to promote young children's social development.	2-3	4-5
0012	Understand how to promote young children's receptive language development.	2-3	2; 4-5

Competencies		Ohio Educational Preparation Standards	Ohio Educators Standards
Prekindergarten Special Needs		Prekindergarten Special Needs Endorsement Ages 3-5– Modified Ohio/NAEYC/Ohio's Early Learning Content Standards/Council for Exceptional Children/DEC, 2008	Ohio Standards for the Teaching Profession
0013	Understand how to promote young children's expressive language development.	2-3	2; 4-5
0014	Understand emergent literacy and how to encourage the emergence of literacy in young children.	2-3	2; 4-5
0015	Understand how to promote young children's daily living skills.	2-3	2; 4-5
0016	Understand how to promote young children's cognitive development.	2-3	2; 4-5
0017	Understand how to promote young children's understanding of their world through exploration of content-area skills and concepts.	2-3	2; 4-5
0018	Understand aesthetic development and the role of the arts in young children's overall development.	2-3	1-2; 4-5
0019	Understand how to promote young children's physical development.	2-3	2; 4-5
<u>Working in a Collaborative Learning Community</u>			

Competencies		Ohio Educational Preparation Standards	Ohio Educators Standards
Prekindergarten Special Needs		Prekindergarten Special Needs Endorsement Ages 3-5– Modified Ohio/NAEYC/Ohio's Early Learning Content Standards/Council for Exceptional Children/DEC, 2008	Ohio Standards for the Teaching Profession
0020	Understand how to establish partnerships with other members of the school community to enhance learning opportunities for young children with disabilities.	5	6
0021	Understand how to foster strong school-home partnerships.	5	6
0022	Understand how to encourage school-community interactions that enhance young children's opportunities for learning and development.	5	6
0023	Understand requirements, responsibilities, and constraints associated with teaching young children with disabilities.	4, 6	7
0024	Understand the history and philosophy of early childhood special education and key issues, trends, practices, and research relating to the education of young children with disabilities.	1	2; 7

Alignment of OAE Elementary Education Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Student Standards
Early Childhood Generalist (Grades 4–5)		Ohio's New Learning Standards (Grades 4-5)
<u>Subtest I</u>		
<u>Reading and English Language Arts</u>		
0001	Understand foundations of language development and emergent literacy.	ELA RF 1.1-1.2, 4.3-4.4, 5.3-5.4; SL.4.2-4.4, 5.2-5.4
0002	Understand development of phonics, word analysis, spelling, and fluency.	ELA RF 4.3-4.4; 5.3-5.4
0003	Understand reading comprehension and vocabulary skills.	ELA RL 4.4, 5.4; RI.4.4, 5.4; L.4.4-4.6, 5.4-5.6
0004	Understand literary, informational, persuasive, and functional texts, and graphic sources.	ELA RL 4.1–4.7,4.9–4.10, 5.1–5.7, 5.9– 5.10; RI 4.1–4.10, RI 5.1–5.10
0005	Understand the processes, conventions, and modes of written and oral communication.	ELA W 4.1–4.10, 5.1–5.10; SL 4.1–4.6, 5.1–5.6; L 4.1–4.3, 5.1–5.3
<u>Subtest I</u>		
<u>Social Studies</u>		
0006	Understand fundamental concepts related to government and economics.	Government Strand, Economics Strand

Competencies		Ohio Student Standards
Early Childhood Generalist (Grades 4–5)		Ohio's New Learning Standards (Grades 4-5)
0007	Understand fundamental concepts and major developments related to U.S. and world history.	History Strand
0008	Understand fundamental concepts related to geography and methods of social studies inquiry.	Geography Strand
<u>Subtest II</u>		
<u>Mathematics</u>		
0001	Understand concepts of numeration, number sense, and mathematical operations.	4.OA; 4.NBT; 4.NF; 5.NBT; 5.NF
0002	Understand mathematical reasoning and problem solving, communication and representation, and data analysis.	4.MD; 5.MD
0003	Understand basic concepts of patterns, algebra, and functions.	5.OA
0004	Understand basic concepts of geometry and measurement.	4.MD; 4.G; 5.MD; 5.G
<u>Subtest II</u>		
<u>Science</u>		
0005	Understand fundamental concepts of the life sciences.	LS
0006	Understand fundamental concepts of the physical, Earth, and space sciences.	PS, ESS

Competencies		Ohio Student Standards
Early Childhood Generalist (Grades 4–5)		Ohio's New Learning Standards (Grades 4-5)
0007	Understand the nature of science and the processes of scientific inquiry.	LS, PS, ESS
<u>Subtest II</u>		
<u>The Arts, Health, and Fitness</u>		
0008	Understand basic elements of the arts and fundamental concepts of health and fitness.	Physical Education: 1–6 Fine Arts-Dance: PE, PR, RE Fine Arts-Drama/Theatre: CE, PR, RE Fine Arts Music: CE, PR, RE Fine Arts-Visual Art PE, PR, RE

Alignment of OAE Earth and Space Science Assessment Framework with Ohio-specified Standards

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Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Earth Sciences (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Nature of Science</u>					
0001	Understand principles and processes of scientific inquiry.	Unifying Concepts: A.1-3; Earth/Space Sci: A.10; B.21	2	Science Inquiry and Application	Gr. 6-12: 2-4; 7-8
0002	Understand the history and nature of science.	Unifying Concepts: A.1, A.2, A.4 Chem: B.25 Phys: B.20 Bio: B.19 Earth/Space Sci: B.20	2	Science Inquiry and Application	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Earth Sciences (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0003	Understand the relationships between science, technology, engineering, and mathematics.	Unifying Concepts: A.5 Earth/Space Sci: A.12; B.19	2	Science Inquiry and Application	Gr. 6-12: 1-2; 4
<u>Geology</u>					
0004	Understand historical geology.	Earth/Space Sci: A.3; A.5; A.8; B.13; B.16; B.18	2	Phys. Geol: Earth's History	
0005	Understand plate tectonics and the rock cycle.	Earth/Space Sci: A.1; A.3-A.5; B.13; B.18	2	Phys. Geol: Plate Tectonics	
0006	Understand Earth materials, geologic resources, and Earth's internal structure.	Earth/Space Sci: A.2; A.4-A.5; A.11; B.19	2	Phys. Geol: Minerals; Igneous, Metamorphic, and Sedimentary rocks; Plate Tectonics (internal Earth)	
0007	Understand the processes of weathering, erosion, and deposition.	Earth/Space Sci: A.1; A.3-.4; A.6; B.13	2	Phys. Geol: Igneous, Metamorphic, and Sedimentary Rocks	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Earth Sciences (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Oceanography and Freshwater Systems</u>					
0008	Understand the hydrologic cycle and its interaction with other Earth systems.	Earth/Space Sci: A.1-A.6; B.14-B.15	2	Phys. Geol: Igneous, Metamorphic, and Sedimentary Rocks; Earth's Resources	
0009	Understand the composition, structure, and properties of oceans.	Earth/Space Sci: A.1-A.4; A.6; A.11-A.12; B.14	2	Phys. Geol: Igneous, Metamorphic, and Sedimentary Rocks; Earth's Resources	
0010	Understand the characteristics and properties of freshwater systems.	Earth/Space Sci: A.1-A.4; A.6; A.11-A.12; B.15	2	Phys. Geol: Earth's Resources	
<u>The Atmosphere, Weather, and Climate</u>					
0011	Understand the structure and properties of the atmosphere.	Earth/Space Sci: A.1-A.2; A.4-A.7; A.12; B.14-B.15; B.19	2	Env. Sci: Earth System	
0012	Understand the characteristics of weather systems and the circumstances under which various weather conditions develop.	Earth/Space Sci: A.1; A.5-A.7; A.12; B.14-B.15; B.19	2	Env. Sci: Earth Systems	Gr. 6-12: 4

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Earth Sciences (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0013	Understand Earth's climate systems and the factors that influence climate.	Earth/Space Sci: A.1-A.2; A.4-A.7; A.12; B.14-B.15; B.19	2	Env. Sci: Earth Systems	
<u>Astronomy</u>					
0014	Understand the characteristics of stars, galaxies, and the universe.	Earth/Space Sci: A.9; B.16-B.17	2	Phys. Sci: The Universe	
0015	Understand characteristics and components of the solar system.	Earth/Space Sci: A.8; B.13; B.16	2	Phys. Sci: The Universe	
0016	Understand the sun-moon-Earth system and the apparent motions of stars and planets.	Earth/Space Sci: A.1; A.5; A.7; B.17	2	Phys. Sci: The Universe	

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards
Curriculum, Instruction, and Professional Development		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Visionary and Inclusive Leadership</u>		
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	5.0; 6.0
<u>Student Learning</u>		
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0; 6.0
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0; 3.0

Competencies		Ohio Educational Preparation Standards
Curriculum, Instruction, and Professional Development		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Systems for Capacity Building</u>		
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	2.0
<u>Resource Management and Educational Law</u>		
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	3.0
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0
0010	Understand the legal dimensions of educational leadership.	6.0

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards
Educational Research		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Visionary and Inclusive Leadership</u>		
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	5.0; 6.0
<u>Student Learning</u>		
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0; 6.0
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0; 3.0

Competencies		Ohio Educational Preparation Standards
Educational Research		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Systems for Capacity Building</u>		
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	2.0
<u>Resource Management and Educational Law</u>		
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	3.0
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0
0010	Understand the legal dimensions of educational leadership.	6.0

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

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Competencies		Ohio Educational Preparation Standards
Educational Staff Personnel Administration		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Visionary and Inclusive Leadership</u>		
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	5.0; 6.0
<u>Student Learning</u>		
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0; 6.0
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0; 3.0

Competencies		Ohio Educational Preparation Standards
Educational Staff Personnel Administration		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Systems for Capacity Building</u>		
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	2.0
<u>Resource Management and Educational Law</u>		
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	3.0
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0
0010	Understand the legal dimensions of educational leadership.	6.0

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Principal (4-9)		ELCC Educational Leadership Program Standards-Building Level, 2011	Ohio Standards for Principals
<u>Visionary and Inclusive Leadership</u>			
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0; 5.0; 6.0	1; 5
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	2.0; 5.0; 6.0	
<u>Student Learning</u>			
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0	2
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0	2

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Principal (4-9)		ELCC Educational Leadership Program Standards-Building Level, 2011	Ohio Standards for Principals
<u>Systems for Capacity Building</u>			
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0	2
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	1.0	3
<u>Resource Management and Educational Law</u>			
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	2.0; 3.0	4
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0	3
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0	3
0010	Understand the legal dimensions of educational leadership.	5.0	3

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Principal (5-12)		ELCC Educational Leadership Program Standards-Building Level, 2011	Ohio Standards for Principals
<u>Visionary and Inclusive Leadership</u>			
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0; 5.0; 6.0	1; 5
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	2.0; 5.0; 6.0	
<u>Student Learning</u>			
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0	2
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0	2

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Principal (5-12)		ELCC Educational Leadership Program Standards-Building Level, 2011	Ohio Standards for Principals
<u>Systems for Capacity Building</u>			
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0	2
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	1.0	3
<u>Resource Management and Educational Law</u>			
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	2.0; 3.0	4
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0	3
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0	3
0010	Understand the legal dimensions of educational leadership.	5.0	3

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

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Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Principal (PK-6)		ELCC Educational Leadership Program Standards-Building Level, 2011	Ohio Standards for Principals
<u>Visionary and Inclusive Leadership</u>			
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0; 5.0; 6.0	1; 5
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	2.0; 5.0; 6.0	
<u>Student Learning</u>			
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0	2
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0	2

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Principal (PK-6)		ELCC Educational Leadership Program Standards-Building Level, 2011	Ohio Standards for Principals
<u>Systems for Capacity Building</u>			
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0	2
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	1.0	3
<u>Resource Management and Educational Law</u>			
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	2.0; 3.0	4
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0	3
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0	3
0010	Understand the legal dimensions of educational leadership.	5.0	3

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards
Pupil Services Administration		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Visionary and Inclusive Leadership</u>		
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	5.0; 6.0
<u>Student Learning</u>		
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0; 6.0
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0; 3.0

Competencies		Ohio Educational Preparation Standards
Pupil Services Administration		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Systems for Capacity Building</u>		
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	2.0
<u>Resource Management and Educational Law</u>		
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	3.0
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0
0010	Understand the legal dimensions of educational leadership.	6.0

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards
School-Community Relations		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Visionary and Inclusive Leadership</u>		
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	5.0; 6.0
<u>Student Learning</u>		
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0; 6.0
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0; 3.0

Competencies		Ohio Educational Preparation Standards
School-Community Relations		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Systems for Capacity Building</u>		
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	2.0
<u>Resource Management and Educational Law</u>		
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	3.0
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0
0010	Understand the legal dimensions of educational leadership.	6.0

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

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Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Superintendent		ELCC Educational Leadership Program Standards-District Level, 2011	Ohio Standards for Superintendents
<u>Visionary and Inclusive Leadership</u>			
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0	1
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	5.0; 6.0	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Superintendent		ELCC Educational Leadership Program Standards-District Level, 2011	Ohio Standards for Superintendents
<u>Student Learning</u>			
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0; 6.0	4
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0; 3.0	4
<u>Systems for Capacity Building</u>			
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0	4; 5
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	2.0	2; 3

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Superintendent		ELCC Educational Leadership Program Standards-District Level, 2011	Ohio Standards for Superintendents
<u>Resource Management and Educational Law</u>			
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	3.0	2; 5
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0	5
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0	5
0010	Understand the legal dimensions of educational leadership.	6.0	3

Alignment of OAE Educational Leadership Assessment Framework with Ohio-specified Standards

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Competencies		Ohio Educational Preparation Standards
Vocational Education Administration		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Visionary and Inclusive Leadership</u>		
0001	Understand how to provide leadership in facilitating the development, articulation, implementation, and stewardship of a shared vision of learning; collaborating with diverse stakeholders; and mobilizing school and community resources to achieve the vision and promote the success of all student groups.	1.0; 4.0
0002	Understand the interplay of the political, social, economic, legal, ethical, and cultural contexts of education in promoting the success of all student groups.	5.0; 6.0
<u>Student Learning</u>		
0003	Understand how to advocate, nurture, and sustain a positive culture of learning that emphasizes high expectations and an instructional program that promotes success for all student groups.	2.0; 6.0
0004	Understand effective teaching and learning and the use of instructional leadership to promote the success of all student groups.	2.0; 3.0

Competencies		Ohio Educational Preparation Standards
Vocational Education Administration		ELCC Educational Leadership Program Standards-District Level, 2011
<u>Systems for Capacity Building</u>		
0005	Understand how to use professional development for faculty, staff, and self to promote lifelong learning and the success of all student groups.	1.0; 2.0
0006	Understand organizational management and its use in creating positive and productive learning systems that promote the success of all student groups.	2.0
<u>Resource Management and Educational Law</u>		
0007	Understand human resource management and its use in creating a positive and productive learning system that promotes the success of all student groups.	3.0
0008	Understand operational management and its use in creating a safe, efficient, and effective learning environment that promotes the success of all student groups.	3.0
0009	Understand fiscal and material resource management and its use in creating efficient and effective learning systems that promote the success of all student groups.	3.0
0010	Understand the legal dimensions of educational leadership.	6.0

Alignment of OAE English Language Arts Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Language Arts		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
<u>Vocabulary, Reading Comprehension, and Reading Various Text Forms</u>				
0001	Understand strategies for developing vocabulary knowledge and reading comprehension.	3.1.7; 3.3.1-3.3.3; 4.9	2	RL 7.4, 8.4, 9–10.4, 11–12.4; RI 7.4, 8.4, 9–10.4, 11–12.4, L.7.4–7.6, L.8.4–8.6, L.9–10.4–9–10.6, L.11–12.4–11–12.6
0002	Understand strategies for reading informational texts.	3.3.1-3.3.3	2	RI 7.1–7.9, 8.1–8.9, 9–10.1–9–10.9, 11–12.1–11–12.9
0003	Understand strategies for reading persuasive texts.	3.3.1-3.3.3	2	RI 7.1–7.9, 8.1–8.9, 9–10.1–9–10.9, 11–12.1–11–12.9
0004	Understand strategies for reading technical and functional texts.	3.3.1-3.3.3	2	RI 7.1, 7.4, 8.1, 8.4, 9–10.1, 9–10.4, 11–12.1, 11–12.4

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Language Arts		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
<u>Analyzing and Interpreting Literature</u>				
0005	Understand strategies for analyzing and interpreting various forms of literary nonfiction, fiction, and drama.	3.3.1-3.3.3	2	RL 7.1–7.7, 7.9–7.10, 8.1–8.7, 8.9–8.10, 9–10.1–9–10.7, 9–10.9–9–10.10, 11–12.1–11–12.7, 11–12.9–11–12.10
0006	Understand strategies for analyzing and interpreting various forms of poetry.	3.3.1-3.3.3	2	RL 7.1–7.7, 8.1–8.7, 9–10.1–9–10.7, 11–12.1–11–12.7
0007	Understand the major characteristics of American literature and literatures from around the world.	3.5.1-3.5.2	2	RL 7.1–7.7, 8.1–8.7, 9–10.1–9–10.7, 11–12.1–11–12.7, 7.9–7.10, 8.9–8.10, 9–10.9–9–10.10, 11–12.9–11–12.10
0008	Understand the major historical, social, cultural, and political aspects of American literature and literatures from around the world.	3.5.1-3.5.2	2	RL.7. 2, 7.9, 8.2, 8.9, 9–10.2, 9–10.6, 11–12.2, 11–12.9
<u>English Language Conventions, Composition, Writing Process, and Research</u>				
0009	Understand the conventions of Standard American English and the elements of effective composition.	3.1.6; 3.2.3	2	W.7.1, 8.1, 9–10.1, 11–12.1, L.7.1–7.3, L.8.1–8.3, L.9–10.1–9–10.3, L.11–12.1–11–12.3

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Language Arts		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
0010	Understand the writing process.	3.2.3; 3.4.1	2	W.7.5, 8.5, 9–10.5, 11–12.5
0011	Understand the elements of effective and appropriate research.	3.2.2	2	W.7.7–7.9, 8.7–8.9, 9–10.7–9–10.9, 11–12.7–11–12.9
<u>Modes of Writing</u>				
0012	Understand strategies for narrative writing.	3.4.2	2	W 7.3, 8.3, 9–10.3, 11–12.3
0013	Understand strategies for writing informational and explanatory texts.	3.4.2	2	W 7.2, 8.2, 9–10.2, 11–12.2
0014	Understand strategies for writing arguments.	3.4.2	2	W 7.1, 8.1, 9–10.1, 11–12.1

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Language Arts		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
0015	Understand strategies for analytical writing.	3.2.5; 3.4.2	2	W 7.2, 7.9, 8.2, 8.9, 9–10.2, 9–10.9, 11–12.2, 11–12.9
<u>Oral and Visual Communication</u>				
0016	Understand strategies for effective listening and speaking and for participating in group discussions.	3.2.2-3.2.4; 4.5	2	SL 7.1, 7.6, 8.1, 8.6, 9–10.1, 9–10.6, 11–12.1, 11–12.6
0017	Understand strategies for effective viewing and presenting and for analyzing various media.	3.2.1; 3.6.1-3.6.3	2	SL 7.2, 7.4–7.5, 8.2, 8.4–8.5, 9–10.2, 9–10.4–9–10.5, 11–12.2, 11–12.4–11–12.5

Alignment of OAE English to Speakers of Other Languages Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
English to Speakers of Other Languages (Endorsement)		TESOL Standards for the Recognition of Initial TESOL Programs in P-12 ESL Teacher Education (2010)	Ohio Standards for the Teaching Profession
<u>Foundations of Language and Language Acquisition</u>			
0001	Understand linguistic and sociolinguistic concepts as applied to ESOL instruction.	1.a.	
0002	Understand theories and processes of language acquisition and literacy development as applied to L1, L2, and ESOL instruction.	1.b.	1
<u>Foundations of ESOL Instruction</u>			
0003	Understand the role of culture in language learning and academic achievement and how to apply this knowledge to ESOL instruction.	2	1; 5
0004	Understand principles of standards-based ESOL instruction, including appropriate application of ESOL instructional approaches and resources.	3.a.-3.c.	1-2; 4

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
English to Speakers of Other Languages (Endorsement)		TESOL Standards for the Recognition of Initial TESOL Programs in P-12 ESL Teacher Education (2010)	Ohio Standards for the Teaching Profession
0005	Understand concepts and issues related to assessment of English Language Learners.	4.a.-4.b.	3
0006	Understand how ESOL instruction is impacted by national laws and policies, personal professional development, and school and community partnerships.	5.a.-5.b.	6-7
<u>Instruction and Assessment of English Language Learners</u>			
0007	Understand research-based best practices in ESOL instruction.	3.a.-3.b.	1; 4-5
0008	Understand how to assess and promote English Language Learners' oral and aural language development in English.	3.b.; 4.c.	
0009	Understand how to assess and promote English Language Learners' literacy development in English.	3.b.; 4.c.	
0010	Understand how to assess English Language Learners' content-area learning and support their access to the core curriculum.	3.b.; 4.c.	3

Alignment of OAE Family and Consumer Sciences Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Family & Consumer Sciences		Career-Technical Baccalaureate Family and Consumer Sciences 2008 Ohio Program Standards	Ohio Standards for the Teaching Profession	Family and Consumer Sciences Content Standards with Academic Content Standards in English Language Arts, Mathematics, Science and Social Studies, 2007
<u>Human Development and Relationships</u>				
0001	Understand human growth and development from early childhood throughout the life span.	1.2.1; 1.2.3	2	1F; 2B; 2C; 8A-8D
0002	Understand the characteristics of interpersonal relationships and communication.	1.2.4-1.2.5	2	2A-2C; 7F-7G
0003	Understand families and family well-being.	1.2.2-1.2.5	2	1A; 1G; 2C; 7C; 7E; 7H;
0004	Understand the roles and responsibilities of parenting.	1.2.2-1.2.4	2	9A-9E
<u>Personal Financial Literacy and Consumer Skills</u>				
0005	Understand the basic principles of personal financial literacy.	1.1.1-1.1.3	2	3A-3J; 7A

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Family & Consumer Sciences		Career-Technical Baccalaureate Family and Consumer Sciences 2008 Ohio Program Standards	Ohio Standards for the Teaching Profession	Family and Consumer Sciences Content Standards with Academic Content Standards in English Language Arts, Mathematics, Science and Social Studies, 2007
0006	Understand consumer skills and the basic principles of resource management throughout the life span.	1.1.1; 1.1.3-1.1.7	2	3D; 3G; 3J; 5A-5E; 7B; 7D
0007	Understand the selection; design; and maintenance of housing; interiors; textiles; and apparel.	1.1.6-1.1.7	2	
<u>Nutrition and Foods</u>				
0008	Understand the principles of nutrition and food science.	1.3.1; 1.3.3-1.3.4	2	1B-1E;
0009	Understand the principles of kitchen and food safety and sanitation in home; commercial; and institutional settings.	1.3.2; 1.3.4;	2	6A-6C
0010	Understand food preparation concepts and skills in home; commercial; and institutional settings.	1.3.1-1.3.4	2	1B; 6A-6C
<u>Workplace Skills and Careers</u>				
0011	Understand career options related to family and consumer sciences.	1.4.2; 1.4.5	2	4A-4C

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Family & Consumer Sciences		Career-Technical Baccalaureate Family and Consumer Sciences 2008 Ohio Program Standards	Ohio Standards for the Teaching Profession	Family and Consumer Sciences Content Standards with Academic Content Standards in English Language Arts, Mathematics, Science and Social Studies, 2007
0012	Understand employment and employability skills.	1.4.1-1.4.5	2	4A-4F

Alignment of OAE Health Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this draft.

Competencies		Educational Preparation Standards		Ohio Educator Standards	Student Standards
Health (PK-12)		Centers for Disease Control and Prevention 2012 Health Education Curriculum Analysis Tool (HECAT)	American Association for Health Education 2008 NCATE Health Education Teacher Preparation Standards	Ohio Standards for the Teaching Profession	National Health Education Standards: Achieving Excellence (2007) American Cancer Society
<u>Personal Health and Wellness</u>					
0001	Understand the benefits of personal health and wellness practices and causes, characteristics, treatment, and prevention of illness and disease.	PHW	I	2	1
0002	Understand principles of nutrition; concepts and issues associated with healthy and unhealthy eating; and strategies and resources for fostering students' lifelong healthy eating habits.	HE	I, IV	2	1-8
0003	Understand principles, components, and benefits of health-related physical fitness and strategies and resources for fostering students' participation in lifelong physical activity.	PA	I, IV	2	1-8

Competencies		Educational Preparation Standards		Ohio Educator Standards	Student Standards
Health (PK-12)		Centers for Disease Control and Prevention 2012 Health Education Curriculum Analysis Tool (HECAT)	American Association for Health Education 2008 NCATE Health Education Teacher Preparation Standards	Ohio Standards for the Teaching Profession	National Health Education Standards: Achieving Excellence (2007) American Cancer Society
0004	Understand factors and conditions that affect mental and emotional well-being, appropriate ways to manage stress, and strategies and resources for fostering students' ability to maintain or improve mental and emotional health.	MEH	I, IV	2	1-8
0005	Understand sexual and reproductive health; characteristics, transmission, and treatment of sexually transmitted infections (STIs), including HIV; and strategies and resources for fostering students' ability to abstain from, avoid, and prevent sexual risk behaviors.	SH	I, IV	2	1-8
<u>Avoiding and Preventing Health Risks</u>					
0006	Understand health risks associated with tobacco and alcohol and other drugs, and strategies and activities for fostering students' ability to avoid, reduce, and prevent health risks related to tobacco and alcohol and other drugs.	T, AOD	I, IV	2	1-8

Competencies		Educational Preparation Standards		Ohio Educator Standards	Student Standards
Health (PK-12)		Centers for Disease Control and Prevention 2012 Health Education Curriculum Analysis Tool (HECAT)	American Association for Health Education 2008 NCATE Health Education Teacher Preparation Standards	Ohio Standards for the Teaching Profession	National Health Education Standards: Achieving Excellence (2007) American Cancer Society
0007	Understand principles for maintaining safety; factors and behaviors that influence, cause, and reduce violence; and how to foster students' use of safety, injury-prevention, and violence-prevention skills.	S, V	I, IV	2	1; 3-8
0008	Understand interpersonal communication and how to foster students' use of communication skills to maintain healthy relationships and enhance personal, family, and community health.		I, IV	2	4
0009	Understand the role of decision making in identifying, implementing, and sustaining healthy behaviors; factors that influence decision making; and how to foster students' use of decision-making skills to enhance health.		I, IV	2	5
0010	Understand the role of goal setting in identifying, adopting, and maintaining healthy behaviors; factors that influence goal setting; and how to foster students' use of goal-setting skills to enhance health.		I, IV	2	6

Competencies		Educational Preparation Standards		Ohio Educator Standards	Student Standards
Health (PK-12)		Centers for Disease Control and Prevention 2012 Health Education Curriculum Analysis Tool (HECAT)	American Association for Health Education 2008 NCATE Health Education Teacher Preparation Standards	Ohio Standards for the Teaching Profession	National Health Education Standards: Achieving Excellence (2007) American Cancer Society
<u>Health Education, Literacy, and Advocacy</u>					
0011	Understand types and characteristics of reliable health information, products, and services and how to foster students' ability to access, analyze, and select valid information, products, and services to enhance health.		I, IV	2	3
0012	Understand research and theories related to health behavior; the influence of family, peers, culture, media, technology, and other factors on health; and how to foster students' use of advocacy skills to enhance personal, family, and community health.		I, IV	2	2, 8
0013	Understand practices and activities associated with a coordinated school health program (CSHP) and a comprehensive health education curriculum, as well as how to plan and use instruction and assessment to develop students' health knowledge, skills, and behaviors.		I-VIII	1-7	

Alignment of OAE Integrated Mathematics Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Mathematics (7-12)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Secondary	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
<u>Mathematical Processes and Number Sense</u>				
0001	Understand mathematical problem solving.	1	2	Algebra: HS; Functions: HS
0002	Understand mathematical communication, connections, and reasoning.	2-4	2	Algebra: HS
0003	Understand number theory.	9	2	The Number System: Grade 7-8
<u>Patterns, Algebra and Functions</u>				
0004	Understand relations and functions.	10	2	Expressions and Equations: Grade 7-8; Algebra: HS; Functions: HS
0005	Understand linear, quadratic, and higher-order polynomial functions.	10	2	Expressions and Equations: Grade 7-8; Algebra: HS; Functions: HS

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Mathematics (7-12)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Secondary	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
0006	Understand exponential and logarithmic functions.	10	2	Algebra: HS; Functions: HS
0007	Understand rational, radical, absolute value, and piece-wise defined functions.	10	2	Algebra: HS; Functions: HS
<u>Measurement and Geometry</u>				
0008	Understand measurement principles and procedures.	15	2	
0009	Understand Euclidean geometry in two and three dimensions	11	2	Geometry: Grade 7-HS
0010	Understand coordinate and transformational geometry.	11	2	Geometry: Grade 7- HS
<u>Trigonometry and Calculus</u>				
0011	Understand trigonometric functions.	12	2	Functions: HS; Geometry: HS
0012	Understand differential calculus.	12	2	
0013	Understand integral calculus.	12	2	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Integrated Mathematics (7-12)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Secondary	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
<u>Statistics, Probability, and Discrete Mathematics</u>				
0014	Understand principles and techniques of statistics.	14	2	Statistics and Probability: Grade 7- HS
0015	Understand principles and techniques of probability.	14	2	Statistics and Probability: Grade 7- HS
0016	Understand principles of discrete mathematics.	13	2	

Alignment of OAE Integrated Science Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Integrated Science (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Nature of Science</u>					
0001	Understand principles and procedures of scientific inquiry.	Unifying Concepts: A.1-3; Chem: A.12; B.26 Phys: A.10; B.21 Bio: A.11; B.20	2	Science Inquiry and Application	Gr. 6-12: 2-4; 7-8
0002	Understand the history and nature of science.	Unifying Concepts: A.1-A.2; A.4 Chem: B.25 Phys: B.20 Bio: B.19 Earth/Space Sci: B.20	2	Science Inquiry and Application	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Integrated Science (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0003	Understand the relationships between science, technology, engineering, mathematics, and society.	Unifying Concepts: A.5 Chem: A.13; B.24; B.27 Phys: A.11; B.22 Bio: A.11; B.18; B.21 Earth/Space Sci: A.12; B.19	2	Science Inquiry and Application	Gr. 6-12: 1-2; 4
<u>Physical Science</u>					
0004	Understand the properties and characteristics of matter.	Chem: A.1; A.3-A4; A.7; B.18; B.26 Phys: A.5-A.7; B.12-B.13; B.15	2	Phys. Sci: Classification of Matter; Atoms; Periodic Trends of the Elements; Reactions of Matter (nuclear reactions)	
0005	Understand chemical bonding, different types of chemical reactions, and stoichiometry.	Chem: A.2; A.5-A.6; A.8	2	Phys. Sci: Bonding and Compounds; Reactions of Matter (chemical reactions)	Gr. 6-12: 4

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Integrated Science (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0006	Understand the characteristics of energy transformations in physical and chemical systems.	Chem: A.4; B.23 Phys: B.12	2	Phys. Sci: Conservation of Energy; Transfer and Transformation of Energy	
0007	Understand force, motion, and energy.	Phys: A.1-A.4 Earth/Space Sci: B.17	2	Phys. Sci: Motion; Forces; Dynamics; Thermal Energy; Conservation of Energy	
0008	Understand the characteristics and properties of mechanical and electromagnetic waves.	Phys: A.8	2	Phys. Sci: Waves	
0009	Understand electricity and magnetism.	Phys: A.9	2	Phys. Sci: Electricity	
<u>Life Science</u>					
0010	Understand the characteristics, organization, and processes of cells.	Bio: A.1; A.8; B.13	2	Bio: Cells	
0011	Understand the classification and characteristics of organisms.	Bio: A.2-A.3; A.10; B.16-B.17	2	Bio: Diversity and Interdependence of Life	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Integrated Science (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0012	Understand concepts and principles related to genetics and evolution.	Bio: A.4; A.7; B.15-B.16; Earth/Space Sci: B.18	2	Bio: Heredity, Evolution	
0013	Understand characteristics of different biomes, relationships among organisms, and the flow of matter and energy through ecosystems.	Bio: A.5-A.6; A.9; B.14; B.18; Earth/Space Sci: B.19	2	Bio: Diversity and Interdependence of Life	
<u>Earth and Space Science</u>					
0014	Understand physical geology and the history of Earth.	Earth/Space Sci: A.1-A.5; A.11; B.13; B.16	2	Phys. Geol: Minerals; Igneous, Metamorphic, and Sedimentary rocks; Earth's History; Plate Tectonics; Earth's Resources; Glacial Geology; Env. Sci: Earth's Resources	
0015	Understand characteristics of the hydrosphere, weather, and climate.	Earth/Space Sci: A.3; A.5-A.7; B.13-B.15; B.19	2	Env. Sci: Earth Systems	
0016	Understand characteristics of the solar system and universe.	Earth/Space Sci: A.8-A.9; B.16-B.18	2	Phys. Sci: The Universe	

Alignment of OAE Integrated Social Studies Assessment Framework with Ohio-specified Standards

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Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
<u>Historiography and World History</u>						
0001	Understand historical concepts, terms, sources, perspectives, and research skills.	A.II; B.1	2	World Studies/Historical Thinking and Skills U.S. Studies/Historical Thinking and Skills	American History/Historical Thinking and Skills American Historic/Historic Documents Modern World History/Historical Thinking and Skills	2; 4; 6-8
0002	Understand major developments in world history from the beginnings of human society to 1350 CE.	A.II; B.1	2	World Studies/Early Civilizations World Studies/Feudalism and Transitions		

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0003	Understand major developments in world history from 1350 to 1871.	A.II; B.1	2	World Studies/First Global Age	Modern World History/Age of Enlightenment (1600-1800) Modern World History/Age of Revolutions (1750-1914) Modern World History/Imperialism (1800-1914)	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0004	Understand major developments in world history from 1871 to the present.	A.II; B.1	2	U.S. Studies/Colonization to Independence U.S. Studies/A New Nation	Modern World History/Age of Revolutions (1750-1914) Modern World History/Imperialism (1800-1914) Modern World History/Achievements and Crisis (1900-1945) Modern World History/The Cold War (1945-1991) Modern World History/Globalization (1991-Present) Contemporary World Issues/Civil and Human Rights Contemporary World Issues/National Security and International Diplomacy Contemporary World Issues/The World Economy	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0005	Understand major developments in early U.S. history from the precontact period to 1789.	A.II; B.1	2	U.S. Studies/A New Nation U.S. Studies/Expansion U.S. Studies/Civil War and Reconstruction		
0006	Understand major developments in U.S. history from 1789 to 1877.	A.II; B.1	2		American History/Industrialization and Progressivism (1877-1920) American History/Foreign Affairs from Imperialism to Post-World War I (1898-1930) American History/Prosperity, Depression, and the New Deal (1919-1941)	
0007	Understand major developments in U.S. history from 1877 to 1929.	A.II; B.1	2			

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0008	Understand major developments in U.S. history from 1929 to the present.	A.II; B.1	2		American History/Foreign Affairs from Imperialism to Post-World War I (1898-1930) American History/Prosperity, Depression, and the New Deal (1919-1941) American History/Social Transformation of the United States (1945-1994) American History/United States and the Post-Cold War World (1991 to Present)	
<u>Geography and Culture</u>						
0009	Understand geographic terms, concepts, sources, and research skills.	A.III; B.2	2	Geography/Spatial Thinking Skills	World Geography/Spatial Thinking Skills	2; 4; 6-8

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0010	Understand physical features, physical systems, and the interaction between the environment and human societies.	A.III, VIII-IX; B.2	2		Contemporary World Issues/Sustainability World Geography/Environment and Society World Geography/Region World Geography/Globalization	
0011	Understand human systems.	A.I, III, IX; B.2	2	Geography/ Human Systems	Contemporary World Issues/Global Connections Contemporary World Issues/Sustainability World Geography/Movement World Geography/Region World Geography/Human Settlement World Geography/Globalization	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
<u>Government</u>						
0012	Understand political science concepts, terms, perspectives, and research skills.	A.VI; B.3	2	Government/Civic Participation and Skills	American Government/Civic Participation and Skills	2; 4; 6-8
0013	Understand the foundations of U.S. government, the U.S. political process, and the rights and responsibilities of U.S. citizenship.	A.VI, X; B.3	2	Government/Civic Participation and Skills	American Government/Civic Involvement American Government/Civic Participation and Skills American Government/Basic Principles of the U.S. Government American Government/Role of the People American Government/Public Policy	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0014	Understand the structure, organization, and operation of different levels of government in the United States.	A.VI; B.3	2	Government/Roles and Systems of Government	American Government/Structure and Functions of the Federal Government American Government/Ohio's State and Local Governments American Government/Public Policy American Government/Government and the Economy	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
<u>Economics</u>						
0015	Understand basic economic concepts, microeconomics, and consumer economics and personal finance.	A.VII; B.4	2	Economics/ Economic Decision Making and Skills Economics/ Scarcity Economics/ Markets Economics/ Production and Consumption Economics/ Financial Literacy	Economics/Economic Decision Making and Skills Economics/Fundamentals of Economics Economics/Working and Earning Economics/Saving and Investing Economics/Credit and Debt Economics/Risk Management	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Integrated Social Studies		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0016	Understand macroeconomics and international economics.	A.VII-IX; B.4	2	Economics/ Markets	Economics/Government and the Economy Economics/Global Economy Contemporary World Issues/Technology Contemporary World Issues/The Global Economy World Geography/Globalization	

Alignment of OAE Marketing Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Marketing		Career-Technical Baccalaureate General Marketing Education 2008 Ohio Program Standards	Ohio Standards for the Teaching Profession	Marketing Career Field Technical Content Standards Document
<u>Marketing Principles</u>				
0001	Understand fundamental concepts, functions, and goals of marketing.	1.1	2	Marketing
0002	Understand market research functions, characteristics, and procedures.	1.1; 1.5-1.6	2	Marketing-Information Management
0003	Understand marketing strategies in business.	1.1; 1.6-1.7	2	Strategic Management Market Planning
0004	Understand principles of product planning; service planning; and price planning.	1.7; 2.4-2.6	2	Strategic Management; Marketing-Information Management; Market Planning; Pricing
0005	Understand channels of distribution in marketing.	2.12-2.14	2	Channel Management; Distribution
<u>Sales; Promotions; and Merchandise Control</u>				

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Marketing		Career-Technical Baccalaureate General Marketing Education 2008 Ohio Program Standards	Ohio Standards for the Teaching Profession	Marketing Career Field Technical Content Standards Document
0006	Understand consumer buying decisions and principles related to sales.	1.7; 2.11	2	Customer Relations; Marketing; Selling
0007	Understand customer relations and service.	2.11; 3.3	2	Customer Relations; Selling
0008	Understand product and service promotions.	2.6-2.8; 2.10	2	Product and Service Management; Marketing Communications
0009	Understand promotional media and principles of design as applied to promotional activities.	2.8-2.10	2	Product and Service Management; Marketing Communications
0010	Understand principles and procedures related to merchandising (including shipping and receiving; inventory control; and purchasing).	1.8	2	Operations; Distribution
0011	Understand security and safety precautions in the marketing environment.	1.3	2	Operations

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Marketing		Career-Technical Baccalaureate General Marketing Education 2008 Ohio Program Standards	Ohio Standards for the Teaching Profession	Marketing Career Field Technical Content Standards Document
<u>Economics; Business; and Entrepreneurship</u>				
0012	Understand basic principles and applications of macroeconomics.	1.8	2	Economics
0013	Understand basic principles and applications of microeconomics.	1.8	2	Economics
0014	Understand the structure; organization; and management of businesses.	1.1-1.2; 1.4; 4.1; 4.4	2	Business Law; Economics; Financial Analysis; Information Management; Operations;
0015	Understand principles and procedures related to entrepreneurship.	1.8; 4.2	2	Entrepreneurship
0016	Understand basic principles of finance and credit.	1.4; 1.8; 4.3	2	Financial Analysis
0017	Understand principles of human resource management.	1.2; 3.3; 4.7	2	Business Law; Communication Skills; Emotional Intelligence; Human Resources Management
0018	Understand laws affecting marketing activities.	1.8; 4.5; 4.11	2	Business Law

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Marketing		Career-Technical Baccalaureate General Marketing Education 2008 Ohio Program Standards	Ohio Standards for the Teaching Profession	Marketing Career Field Technical Content Standards Document
<u>Employment; Communication; and Problem-Solving Skills</u>				
0019	Understand processes and skills for seeking and maintaining employment.	3.4; 7.3; 10.5; 10.8	2	Professional Development
0020	Understand human relations and leadership skills in the marketing environment.	3.1; 3.3	2	Emotional Intelligence
0021	Understand business communication skills.	1.2; 1.7; 3.1-3.3; 4.9	2	Communication Skills; Emotional Intelligence; Information Management
0022	Apply mathematical principles and skills to solve problems in marketing contexts.	4.6; 4.10	2	
0023	Understand principles and applications of computer technology; information processing systems; and telecommunications in business and marketing contexts.	2.1-2.3; 4.6	2	Information Management
0024	Understand the role of student organizations and school partnerships with business and industry in marketing education.	6.6; 6.14; 7.6; 9.1; 9.6; 10.2	2	

Alignment of OAE Middle Grades English Language Arts Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4-6)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
<u>Reading Process and Comprehension and Reading Across the Curriculum</u>				
0001	Understand the foundations of reading development.		2	RF 4.1–4.4, 5.1–5.4
0002	Understand strategies for developing vocabulary knowledge and reading comprehension.	3.1.7; 3.3.1-3.3.3; 4.9	2	RL 4.4, 5.4; 6.4; RI 4.4, 5.4, 6.4; L.4.4–4.6, 5.4–5.6, 6.4–6.6
0003	Understand strategies for reading across the curriculum.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9; RH 6.1–6.10; RST.6.1–6.10
<u>Reading Various Text Forms and Analyzing and Interpreting Literature</u>				
0004	Understand strategies for reading informational texts.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9
0005	Understand strategies for reading persuasive texts.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4-6)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
0006	Understand strategies for analyzing and interpreting literary texts.	3.3.1-3.3.3	2	RL 4.1–4.7, 4.9, 5.1–5.7, 5.9, 6.1–6.7, 6.9
0007	Understand the major historical, social, cultural, and political aspects of literatures from around the world.	3.5.1-3.5.2	2	RL 4.2, 4.9, 5.2, 5.9, 6.2, 6.9
<u>English Language Conventions, Composition, Writing Process, and Research</u>				
008	Understand the conventions of Standard American English and the elements of effective composition.	3.2.3; 3.2.6	2	W 4.1, 5.1, 6.1; L.4.1–4.3, 5.1–5.3, 6.1–6.3
009	Understand the writing process and the elements of effective and appropriate research.	3.2.2-3.2.3; 3.4.1	2	W 4.4–4.5, 4.7–4.9, 5.4–5.5, 5.7–5.9, 6.4–6.5, 6.7–6.9
<u>Modes of Writing</u>				
0010	Understand strategies for descriptive writing.	3.4.2	2	W 4.3, 5.3, 6.3
0011	Understand strategies for writing informative and explanatory texts.	3.4.2	2	W 4.2, 5.2, 6.2

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4-6)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
0012	Understand strategies for writing arguments.	3.4.2	2	W 4.1, 5.1, 6.1
<u>Oral and Visual Communication</u>				
0013	Understand strategies for effective listening and speaking and for participating in group discussions.	3.2.2-3.2.4; 4.5	2	SL 4.1, 4.6, 5.1, 5.6, 6.1, 6.6
0014	Understand strategies for developing media literacy.	3.2.1; 3.6.1-3.6.3	2	SL 4.2, 4.4–4.5, 5.2, 5.4–5.5, 6.2, 6.4–6.5

Alignment of OAE Middle Grades English Language Arts Assessment Framework with Ohio-specified Standards

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Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4-6)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
<u>Reading Process and Comprehension and Reading Across the Curriculum</u>				
0001	Understand the foundations of reading development.		2	RF 4.1–4.4, 5.1–5.4
0002	Understand strategies for developing vocabulary knowledge and reading comprehension.	3.1.7; 3.3.1-3.3.3; 4.9	2	RL 4.4, 5.4; 6.4; RI 4.4, 5.4, 6.4; L.4.4–4.6, 5.4–5.6, 6.4–6.6
0003	Understand strategies for reading across the curriculum.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9; RH 6.1–6.10; RST.6.1–6.10
<u>Reading Various Text Forms and Analyzing and Interpreting Literature</u>				
0004	Understand strategies for reading informational texts.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9
0005	Understand strategies for reading persuasive texts.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4-6)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
0006	Understand strategies for analyzing and interpreting literary texts.	3.3.1-3.3.3	2	RL 4.1–4.7, 4.9, 5.1–5.7, 5.9, 6.1–6.7, 6.9
0007	Understand the major historical, social, cultural, and political aspects of literatures from around the world.	3.5.1-3.5.2	2	RL 4.2, 4.9, 5.2, 5.9, 6.2, 6.9
<u>English Language Conventions, Composition, Writing Process, and Research</u>				
008	Understand the conventions of Standard American English and the elements of effective composition.	3.2.3; 3.2.6	2	W 4.1, 5.1, 6.1; L.4.1–4.3, 5.1–5.3, 6.1–6.3
009	Understand the writing process and the elements of effective and appropriate research.	3.2.2-3.2.3; 3.4.1	2	W 4.4–4.5, 4.7–4.9, 5.4–5.5, 5.7–5.9, 6.4–6.5, 6.7–6.9
<u>Modes of Writing</u>				
0010	Understand strategies for descriptive writing.	3.4.2	2	W 4.3, 5.3, 6.3
0011	Understand strategies for writing informative and explanatory texts.	3.4.2	2	W 4.2, 5.2, 6.2

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4-6)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
0012	Understand strategies for writing arguments.	3.4.2	2	W 4.1, 5.1, 6.1
<u>Oral and Visual Communication</u>				
0013	Understand strategies for effective listening and speaking and for participating in group discussions.	3.2.2-3.2.4; 4.5	2	SL 4.1, 4.6, 5.1, 5.6, 6.1, 6.6
0014	Understand strategies for developing media literacy.	3.2.1; 3.6.1-3.6.3	2	SL 4.2, 4.4–4.5, 5.2, 5.4–5.5, 6.2, 6.4–6.5

Alignment of OAE Middle Grades English Language Arts Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4–9)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
<u>Reading Process and Comprehension and Reading Across the Curriculum</u>				
0001	Understand the foundations of reading development.		2	RF 4.1–4.4, 5.1–5.4
0002	Understand strategies for developing vocabulary knowledge and reading comprehension.	3.1.7; 3.3.1- 3.3.3; 4.9	2	RL 4.4, 5.4, 6.4, 7.4, 8.4, 9–10.4; RI 4.4, 5.4, 6.4, 7.4, 8.4, 9–10.4; L.4.4–4.6, 5.4–5.6, 6.4–6.6, 7.4–7.6, 8.4–8.6, 9–10.4-9.10.6
0003	Understand strategies for reading across the curriculum.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9, 7.1–7.9, 8.1–8.9, 9–10.10.9; RH 6.1–6.10, 7.1–7.10, 8.1–8.10, 9–10.1.10, RST 6.1–6.10, 7.1–7.10, 8.1–8.10, 9–10.1–9-10.10

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4–9)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
<u>Reading Various Text Forms and Analyzing and Interpreting Literature</u>				
0004	Understand strategies for reading informational texts.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9, 7.1–7.9, 8.1–8.9, 9–10.1–9-10.9
0005	Understand strategies for reading persuasive texts.	3.3.1-3.3.3	2	RI 4.1–4.9, 5.1–5.9, 6.1–6.9, 7.1–7.9, 8.1–8.9, 9–10.1–9-10.9
0006	Understand strategies for analyzing and interpreting literary texts.	3.3.1-3.3.3	2	RL 4.1–4.7, 4.9–4.10, 5.1–5.7, 5.9–5.10, 6.1–6.7, 6.9–6.10, 7.1–7.7, 7.9–7.10, 8.1–8.7, 8.9–8.10, 9–10.1–9-10.7, 9-10.9
0007	Understand the major historical, social, cultural, and political aspects of literatures from around the world.	3.5.1-3.5.2	2	RL 4.2, 4.9, 5.2, 5.9, 6.2, 6.9, 7.2, 7.9, 8.2, 8.9, 9–10.2, 9-10.9
<u>English Language Conventions, Composition, Writing Process, and Research</u>				
008	Understand the conventions of Standard American English and the elements of effective composition.	3.2.6; 3.2.3	2	W 4.1, 5.1, 6.1, 7.1, 8.1, 9–10.1; L 4.1–4.3, 5.1–5.3, 6.1–6.3, 7.1–7.3, 8.1–8.3, 9–10.1–9-10.3

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Language Arts and Reading (4–9)		NCTE/NCATE Standards for Initial Preparation of Teachers of Secondary English Language Arts Grades 7–12 (2003)	Ohio Standards for the Teaching Profession	Ohio New Learning Standards: K–12 English Language Arts
009	Understand the writing process and the elements of effective and appropriate research.	3.2.2-3.2.3; 3.4.1	2	W 4.4–4.5, 4.7–4.9, 5.4–5.5, 5.7–5.9, 6.4–6.5, 6.7–6.9, 7.4–7.5, 7.7–7.9, 8.4–8.5, 8.7–8.9, 9–10.4–9–10.5, 9–10.7–9–10.9
<u>Modes of Writing</u>				
0010	Understand strategies for descriptive writing.	3.4.2	2	W 4.3, 5.3, 6.3, 7.3, 8.3, 9–10.3
0011	Understand strategies for writing informative and explanatory texts.	3.4.2	2	W 4.2, 5.2, 6.2, 7.2, 8.2, 9–10.2
0012	Understand strategies for writing arguments.	3.4.2	2	W 4.1, 5.1, 6.1, 7.1, 8.1, 9–10.1
<u>Oral and Visual Communication</u>				
0013	Understand strategies for effective listening and speaking and for participating in group discussions.	3.2.2-3.2.4; 4.5	2	SL 4.1, 4.6, 5.1, 5.6, 6.1, 6.6, 7.1, 7.6, 8.1, 8.6, 9–10.1, 9–10.6
0014	Understand strategies for developing media literacy.	3.2.1; 3.6.1-3.6.3	2	SL 4.2, 4.4–4.5, 5.2, 5.4–5.5, 6.2, 6.4–6.5, 7.2, 7.4–7.5, 8.2, 8.4–8.5, 9–10.2, 9–10.4–9–10.5

Alignment of OAE Middle Grades Mathematics Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Mathematics (4-6)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Middle Level	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
<u>Number Sense and Operations</u>				
0001	Understand numbers.	9	2	Number and Operations in Base Ten: Grades 4-5; Number and Operations — Fractions: Grades 4-5; The Number System: Grade 6
0002	Understand operations.	9	2	Operations and Algebraic Thinking: Grades 4-5; Number and Operations in Base Ten: Grades 4-5; Number and Operations — Fractions: Grades 4-5; Ratios and Proportional Relationships: Grade 6; The Number System: Grade 6

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Mathematics (4-6)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Middle Level	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
<u>Algebra and Functions</u>				
0003	Understand patterns, relations, and functions.	10	2	Operations and Algebraic Thinking: Grades 4-5; Expressions and Equations: Grade 6
0004	Understand algebraic techniques and applications.	10	2	Operations and Algebraic Thinking: Grades 4-5; Expressions and Equations: Grade 6
0005	Understand linear relations and applications.	10	2	Expressions and Equations: Grade 6
0006	Understand nonlinear relations and concepts of calculus.	12	2	
<u>Measurement and Geometry</u>				
0007	Understand measurement principles, procedures, and applications.	15	2	Measurement and Data: Grades 4-5
0008	Understand Euclidean geometry in two and three dimensions.	11	2	Geometry: Grades 4-6

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Mathematics (4-6)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Middle Level	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
0009	Understand coordinate and transformational geometry.	11	2	Geometry: Grades 4-6
<u>Statistics, Probability, and Discrete Mathematics</u>				
0010	Understand principles and techniques of statistics.	14	2	Measurement and Data: Grades 4-5; Statistics and Probability: Grade 6
0011	Understand principles of probability and techniques for determining probability.	14	2	Statistics and Probability: Grade 6
0012	Understand principles of discrete mathematics.	13	2	

Alignment of OAE Middle Grades Mathematics Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Mathematics (4-9)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Middle Level	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
<u>Number Sense and Operations</u>				
0001	Understand numbers.	9	2	Number and Operations in Base Ten: Grades 4-5; Number and Operations — Fractions: Grades 4-5; The Number System: Grade 6; Number and Quantity: High School
0002	Understand operations.	9	2	Operations and Algebraic Thinking: Grades 4-5; Number and Operations in Base Ten: Grades 4-5; Number and Operations — Fractions: Grades 4-5; Ratios and Proportional Relationships: Grade 6; The Number System: Grade 6; Number and Quantity: High School
<u>Algebra and Functions</u>				

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Mathematics (4-9)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Middle Level	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
0003	Understand patterns, relations, and functions.	10	2	Operations and Algebraic Thinking: Grades 4-5; Expressions and Equations: Grade 6-8; Algebra: High School; Functions: High School
0004	Understand algebraic techniques and applications.	10	2	Operations and Algebraic Thinking: Grades 4-5; Expressions and Equations: Grade 6-8; Algebra: High School
0005	Understand linear relations and applications.	10	2	Expressions and Equations: Grade 6-8; Functions: Grade 8-HS
0006	Understand nonlinear relations and concepts of calculus.	12	2	Functions: Grade 8- High School
<u>Measurement and Geometry</u>				
0007	Understand measurement principles, procedures, and applications.	15	2	Measurement and Data: Grades 4-5
0008	Understand Euclidean geometry in two and three dimensions.	11	2	Geometry: Grades 4- High School

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Mathematics (4-9)		NCATE/NCTM Program Standards (2003): Programs for Initial Preparation of Mathematics Teachers-Middle Level	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-12 Mathematics
0009	Understand coordinate and transformational geometry.	11	2	Geometry: Grades 4- High School
<u>Statistics, Probability, and Discrete Mathematics</u>				
0010	Understand principles and techniques of statistics.	14	2	Measurement and Data: Grades 4-5; Statistics and Probability: Grade 6- High School
0011	Understand principles of probability and techniques for determining probability.	14	2	Statistics and Probability: Grade 6- High School
0012	Understand principles of discrete mathematics.	13	2	

Alignment of OAE Middle Grades Science Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-6)		NSTA 2012 Standards for Science Teacher Preparation: Elementary and Middle School Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Nature of Science</u>					
0001	Understand principles and procedures of scientific inquiry.	Interdisciplinary Perspectives: A.3-A.4; A.9-A.10 Phys Sci: A.17	2	Science Inquiry and Application	Gr. 4-5: 2-4; 7-8 Gr. 6-12: 2-4; 7-8
0002	Understand the history and nature of science.	Interdisciplinary Perspectives: A.3, A.7	2	Science Inquiry and Application	
0003	Understand the relationships between science, technology, engineering, mathematics, and society.	Interdisciplinary Perspectives: A.1- A.2; A.5	2	Science Inquiry and Application	Gr. 4-5: 2-4; 7-8 Gr. 6-12: 1-2; 4

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-6)		NSTA 2012 Standards for Science Teacher Preparation: Elementary and Middle School Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Physical Science</u>					
0004	Understand the properties and characteristics of matter.	Phys Sci: A.1-A.3; A.12; A.14-A.15; A.17	2	Gr. 4: Electricity, Heat, and Matter	
0005	Understand physical and chemical changes in matter.	Phys Sci: A.3-A.4; A.12-A.13	2	Gr. 4: Electricity, Heat, and Matter	
0006	Understand the characteristics and transformations of different forms of energy.	Phys Sci: A.4; A.7-A.11; A.13	2	Gr. 4: Electricity, Heat, and Matter Gr. 5: Light, Sound, and Motion	
0007	Understand relationships between force, mass, and motion.	Phys Sci: A.5-A.6; A.10-A.11	2	Gr. 6: Matter and Motion	
0008	Understand characteristics and properties of mechanical and electromagnetic waves.	Phys Sci: A.7-A.8	2	Gr. 4: Electricity, Heat, and Matter Gr. 5: Light, Sound, and Motion	
<u>Life Science</u>					
0009	Understand the characteristics, organization, and processes of cells.	Bio: A.10; A.12	2	Gr. 6: Cellular to Multicellular	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-6)		NSTA 2012 Standards for Science Teacher Preparation: Elementary and Middle School Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0010	Understand characteristics and life processes of living organisms.	Bio: A.1-A.2; A.4; A.6; A.8; A.13; A.15	2	Gr. 4: Earth's Living History Gr. 6: Cellular to Multicellular	
0011	Understand the concepts and principles related to genetics, the theory of evolution, and the classification of organisms.	Bio: A.3; A.9; A.11; A.14	2	Gr. 4: Earth's Living History Gr. 6: Cellular to Multicellular	
0012	Understand characteristics of different biomes, relationships between organisms, population dynamics, and the flow of matter and energy through ecosystems.	Bio: A.4-A.5; A.7- A.8; A.10	2	Gr. 4: Earth's Living History Gr. 5: Interactions within Ecosystems	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-6)		NSTA 2012 Standards for Science Teacher Preparation: Elementary and Middle School Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Earth and Space Science</u>					
0013	Understand the history of Earth, characteristics of Earth materials and resources, and the geologic processes that shape Earth.	Earth & Space Sci: A.4-A.6; A.8; A.11; A.13-A.14	2	Gr. 4: Earth's Living History Gr. 4: Earth's Surface Gr. 5: Cycles and Patterns in the Solar System (includes Earth Systems) Gr. 6: Rocks, Minerals, and Soil	
0014	Understand characteristics and properties of the hydrosphere.	Earth & Space Sci: A.3-A.4; A.6; A.9-A.11; A.13-A.14	2	Gr. 4: Earth's Surface Gr. 5: Cycles and Patterns in the Solar System (includes Earth Systems) Gr. 6: Rocks, Minerals, and Soil	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-6)		NSTA 2012 Standards for Science Teacher Preparation: Elementary and Middle School Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0015	Understand Earth's atmosphere, weather, and climate.	Earth & Space Sci: A.2- A.3; A.11- A.12	2	Gr. 5: Cycles and Patterns in the Solar System (includes Earth Systems)	
0016	Understand characteristics of the solar system and the universe.	Earth & Space Sci: A.1- A.2; A.8	2	Gr. 5: Cycles and Patterns in the Solar System (includes Earth Systems)	

Alignment of OAE Middle Grades Science Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Nature of Science</u>					
0001	Understand principles and procedures of scientific inquiry.	Unifying Concepts: A.1-3 Chem: A.12 Phys: A.10 Bio: A.11 Earth/Space Sci: A.10	2	Science Inquiry and Application	Gr. 4-5: 2-4; 7-8 Gr. 6-12: 2-4; 7-8
0002	Understand the history and nature of science.	Unifying Concepts: A.1-A.2; A.4	2	Science Inquiry and Application	
0003	Understand the relationships between science, technology, engineering, mathematics, and society.	Unifying Concepts: A.5 Chem: A.13 Phys: A.11 Bio: A.11 Earth/Space Sci: A.12	2	Science Inquiry and Application	Gr. 4-5: 2-4; 7-8 Gr. 6-12: 1-2; 4

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Physical Science</u>					
0004	Understand the properties and characteristics of matter.	Chem: A.1; A.3-A.4; A8; Phys: A.7	2	Gr. 4: Electricity, Heat, and Matter Phys. Sci: Classification of Matter; Atoms; Periodic Trends of the Elements; Reactions of Matter (Nuclear Reactions)	
0005	Understand physical and chemical changes in matter.	Chem: A.2-A.3; A.6; A.8	2	Gr. 4: Electricity, Heat, and Matter Gr. 7: Conservation of Mass and Energy Phys. Sci: Bonding and Compounds; Reactions of Matter (Chemical Reactions)	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0006	Understand the characteristics and transformations of different forms of energy.	Chem: A.4; Earth/Space Sci: A.5 Phys: A.1; A.4-A.6; A.9	2	Gr. 4: Electricity, Heat, and Matter Gr. 5: Light, Sound, and Motion Gr. 7: Conservation of Mass and Energy Gr. 8: Forces and Motion Phys. Sci: Conservation of Energy; Transfer and Transformation of Energy Phys. Sci: Electricity	
0007	Understand relationships between force, mass, and motion.	Phys: A.1-A.3	2	Gr. 6: Matter and Motion Gr. 8: Forces and Motion Phys. Sci: Motion; Forces; Dynamics; Thermal Energy; Conservation of Energy	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0008	Understand characteristics and properties of mechanical and electromagnetic waves.	Phys: A.8	2	Gr. 4: Electricity, Heat, and Matter Gr. 5: Light, Sound, and Motion Phys. Sci: Waves	
<u>Life Science</u>					
0009	Understand the characteristics, organization, and processes of cells.	Bio: A.1; A.8	2	Gr. 6: Cellular to Multicellular Gr. 7: Cycles of Matter and Flow of Energy Bio: Cells	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0010	Understand characteristics and life processes of living organisms.	Bio: A.2; A.8; A.10	2	Gr. 4: Earth's Living History Gr. 6: Cellular to Multicellular Gr. 7: Cycles of Matter and Flow of Energy Bio: Diversity and Interdependence of Life	
0011	Understand the concepts and principles related to genetics, the theory of evolution, and the classification of organisms.	Bio: A.2-A.4; A.7	2	Gr. 4: Earth's Living History Gr. 6: Cellular to Multicellular Gr. 8: Species and Reproduction Bio: Heredity; Evolution	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0012	Understand characteristics of different biomes, relationships between organisms, population dynamics, and the flow of matter and energy through ecosystems.	Bio: A.5-A.6; A.9	2	Gr. 4: Earth's Living History Gr. 5: Interactions within Ecosystems Gr. 7: Cycles of Matter and Energy Bio: Diversity and Interdependence of Life	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Earth and Space Science</u>					
0013	Understand the history of Earth, characteristics of Earth materials and resources, and the geologic processes that shape Earth.	Earth/Space Sci: A.1-A.5; A.11	2	Gr. 4: Earth's Living History Gr. 4: Earth's Surface Gr. 5: Cycles and Patterns in the Solar System (includes Earth Systems) Gr. 6: Rocks, Minerals, and Soil Gr. 8: Physical Earth Phys. Geol: Minerals; Igneous, Metamorphic, and Sedimentary Rocks; Earth's History; Plate Tectonics; Earth's Resources; Glacial Geology; Env. Sci: Earth's Resources	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0014	Understand characteristics and properties of the hydrosphere.	Earth/Space Sci: A.3; A.5-A.6; A.11	2	Gr. 4: Earth's Surface Gr. 5: Cycles and Patterns in the Solar System (includes Earth Systems) Gr. 6: Rocks, Minerals, and Soil Gr. 7: Cycles and Patterns of Earth and the Moon (includes Hydrologic Cycle) Env. Sci: Earth Systems	
0015	Understand Earth's atmosphere, weather, and climate.	Earth/Space Sci: A.3; A.5-A.7; A.11	2	Gr. 5: Cycles and Patterns in the Solar System (includes Earth Systems) Gr. 7: Cycles and Patterns of Earth and the Moon (includes Hydrologic Cycle) Env. Sci: Earth Systems	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Science (4-9)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: Grades K-8 and High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0016	Understand characteristics of the solar system and the universe.	Earth/Space Sci: A.8-A.9	2	Gr. 5: Cycles and Patterns in the Solar System (includes Earth Systems) Gr. 7: Cycles and Patterns of Earth and the Moon (includes Relative Position and Movement of Earth, Sun, and Moon) Phys. Sci: The Universe	

Alignment of OAE Middle Grades Social Studies Framework Assessment with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Social Studies (4-6)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
<u>History</u>					
0001	Understand historical concepts, terms, sources, perspectives, and research skills.	A.II; B.1	2	Regions and People of the Western Hemisphere/Historical Thinking and Skills Regions and People of the Eastern Hemisphere/Historical Thinking and Skills	2; 4; 6-8
0002	Understand major developments in world history from the beginnings of human society to 1350 CE.	A.II; B.1	2	Regions and People of the Western Hemisphere/Early Civilizations Regions and People of the Eastern Hemisphere/Early Civilizations	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Social Studies (4-6)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0003	Understand major developments in world history from 1350 to 1850.	A.II; B.1	2	Regions and People of the Western Hemisphere/Heritage	
0004	Understand major developments in world history from 1850 to the present.	A.II; B.1	2		
0005	Understand major developments in early U.S. history from the precontact period to 1789.	A.II; B.1	2	Regions and People of the Western Hemisphere/Heritage	
0006	Understand major developments in U.S. history from 1789 to 1877.	A.II; B.1	2		
0007	Understand major developments in U.S. history from 1877 to 1929.	A.II; B.1	2		
0008	Understand major developments in U.S. history from 1929 to the present.	A.II; B.1	2		
<u>Geography and Culture</u>					
0009	Understand geographic terms, concepts, sources, and research skills.	A.III; B.2	2	Geography/Spatial Thinking and Skills	2; 4; 6-8
0010	Understand physical features, physical systems, and the interaction between the environment and human societies.	A.III, VIII-IX; B.2	2	Geography/Places and Regions	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Social Studies (4-6)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0011	Understand human systems.	A.I, III, IX; B.2	2	Geography/Human Systems	
<u>Government</u>					
0012	Understand political science concepts, terms, perspectives, and research skills.	A.VI; B.3	2	Government/Civic Participation and Skills	2; 4; 6-8
0013	Understand the foundations of U.S. government, the U.S. political process, and the rights and responsibilities of U.S. citizenship.	A.VI, X; B.3	2	Government/Civic Participation and Skills Government/Rules and Laws	
0014	Understand the structure, organization, and operation of different levels of government in the United States.	A.VI; B.3	2	Government/Roles and Systems of Government	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Social Studies (4-6)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
<u>Economics</u>					
0015	Understand basic economic concepts, microeconomics, and consumer economics and personal finance.	A.VII; B.4	2	Economics/Economic Decision Making and Skills Economics/Production and Consumption Economics/Financial Literacy Economics/Scarcity Economics/Markets	
0016	Understand macroeconomics and international economics.	A.VII, VIII, IX B.4	2	Economics/Markets	

Alignment of OAE Middle Grades Social Studies Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
History						
0001	Understand historical concepts, terms, sources, perspectives, and research skills.	A.II; B.1	2	World Studies/ Historical Thinking and Skills U.S. Studies/Historical Thinking and Skills	American History/ Historical Thinking and Skills American History/ Historic Documents Modern World History/Historical Thinking and Skills	2; 4; 6-8

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0002	Understand major developments in world history from the beginnings of human society to 1350 CE.	A.II; B.1	2	Regions and People of the Western Hemisphere/Early Civilizations Regions and People of Eastern Hemisphere/Early Civilizations World Studies/Early Civilizations World Studies/ Feudalism and Transitions		
0003	Understand major developments in world history from 1350 to 1850.	A.II; B.1	2	World Studies/First Global Age	Modern World History/Age of Enlightenment (1600-1800) Modern World History/Age of Revolutions (1750-1914) Modern World History/Imperialism (1800-1914)	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0004	Understand major developments in world history from 1850 to the present.	A.II; B.1	2		<p>Modern World History/Age of Revolutions (1750-1914)</p> <p>Modern World History/Imperialism (1800-1914)</p> <p>Modern World History/Achievements and Crisis (1900—1945)</p> <p>Modern World History/The Cold War (1945-1991)</p> <p>Modern World History/Globalization (1991-Present)</p> <p>Contemporary World Issues/Civil and Human Rights</p> <p>Contemporary World Issues/National Security and International Diplomacy</p> <p>Contemporary World Issues/The World Economy</p>	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0005	Understand major developments in early U.S. history from the precontact period to 1789.	A.II; B.1	2	U.S. Studies/ Colonization to Independence U.S. Studies/A New Nation		
0006	Understand major developments in U.S. history from 1789 to 1877.	A.II; B.1	2	U.S. Studies/A New Nation U.S. Studies/ Expansion U.S. Studies/Civil War and Reconstruction		
0007	Understand major developments in U.S. history from 1877 to 1929.	A.II; B.1	2		American History/Industrialization and Progressivism (1877-1920) American History/Foreign Affairs from Imperialism to Post-World War I (1898- 1930) American History/Prosperity, Depression, and the New Deal (1919-1941)	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0008	Understand major developments in U.S. history from 1929 to the present.	A.II; B.1	2		<p>American History/Foreign Affairs from Imperialism to Post-World War I (1898-1930)</p> <p>American History/Prosperity, Depression, and the New Deal (1919-1941)</p> <p>American History/From Isolation to World War (1930-1945)</p> <p>American History/The Cold War (1945-1991)</p> <p>American History/Social Transformation of the United States (1945-1994)</p> <p>American History/United States and the Post-Cold War World (1991 to Present)</p>	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
Geography and Culture						
0009	Understand geographic terms, concepts, sources, and research skills.	A.III; B.2	2	Geography/ Spatial Thinking Skills	World Geography/Spatial Thinking and Skills	2; 4; 6-8
0010	Understand physical features, physical systems, and the interaction between the environment and human societies.	A.III, VIII, IX; B.2	2	Geography/ Places and Regions	Contemporary World Issues/Sustainability World Geography/Environment and Society World Geography/Region World Geography/Globalization	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0011	Understand human systems.	A.I, III, IX; B.2	2	Geography/ Human Systems	Contemporary World Issues/Global Connections Contemporary World Issues/Sustainability World Geography/Movement World Geography/Region World Geography/Human Settlement World Geography/Globalization	
Government						
0012	Understand political science concepts, terms, perspectives, and research skills.	A.VI; B.3	2	Government/Civic Participation and Skills	American Government/Civic Participation and Skills	2; 4; 6-8

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0013	Understand the foundations of U.S. government, the U.S. political process, and the rights and responsibilities of U.S. citizenship.	A.VI, X; B.3	2	Government/Civic Participation and Skills Government/ Rules and Laws	American Government/Civic Involvement American Government/Civic Participation and Skills American Government/Basic Principles of the U.S. Government American Government/Role of the People American Government/Public Policy	
0014	Understand the structure, organization, and operation of different levels of government in the United States.	A.VI; B.3	2	Government/ Roles and Systems of Government	American Government/Structure and Functions of the Federal Government American Government/Ohio's State and Local Governments American Government/Public Policy American Government/Government and the Economy	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
Economics						
0015	Understand basic economic concepts, microeconomics, and consumer economics and personal finance.	A.VII; B.4	2	Economics/ Economic Decision Making and Skills Economics/ Production and Consumption Economics/ Financial Literacy Economics/ Scarcity Economics/ Markets	Economics/Economic Decision Making and Skills Economics/Fundamentals of Economics Economics/Working and Earning Economics/Saving and Investing Economics/Credit and Debt Economics/Risk Management	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards		
Social Studies (4-9)		NCSS National Standards for Social Studies Teachers (revised 2002)	Ohio Standards for the Teaching Profession	Ohio's New Learning Standards: K-8 Social Studies	Ohio's New Learning Standards: High School Social Studies	CCSS: Reading Standards for Literacy in History/Social Studies
0016	Understand macroeconomics and international economics.	A.VII, VIII, IX; B.4	2	Economics/ Markets	Economics/Government and the Economy Economics/Global Economy Contemporary World Issues/Technology Contemporary World Issues/The Global Economy World Geography/Globalization	

Alignment of OAE Music Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Music		Multi-Age Music: 2007 Modified Ohio/NASM Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Music
<u>Aural Analysis Skills</u>				
0001	Understand elements of music presented in recorded examples.	2	2	Creating (CE) 1-5, HS 1; Responding/Reflecting (RE) 5-8, HS 1-2
0002	Understand characteristics of Western, U.S., and world music presented in recorded examples.	2	2	(CE) K-7, HS I-IV; Producing/Performing (PR) 3, 4, 6-8, HS I; Responding/Reflecting (RE) K, 2, 5, 6, 9
0003	Understand elements of a musical performance presented in recorded examples.	2	2; 7	(CE) 5, 7-8; (RE) 1, 4-6, HS IV
<u>Music Theory and Composition</u>				
0004	Understand musical notation.	2; 4	2	(PR) K-8, HS I-IV
0005	Understand melodic, rhythmic, and harmonic elements.	2; 4	2	(CE) K-7, HS I-IV; (PR) K, 5-8, HS I-IV
0006	Understand musical composition, arrangement, and improvisation.	2; 4	2; 7	(PR) 1-8, HS I-IV; (RE) 6-8

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Music		Multi-Age Music: 2007 Modified Ohio/NASM Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Music
<u>Music History and Culture</u>				
0007	Understand the history of Western music from the Middle Ages to 1750.	3	2	(CE) K-2, 7, HS I-IV; (RE) 2, HS III
0008	Understand the history of Western music from 1750 to the present.	3	2	(CE) 1, 4-8, HS I-IV; (RE) II
0009	Understand U.S. and world music.	3	2; 7	(CE) K-7; (PR) 1-8, HS I, HS II, HS IV; (RE) K-2, HS I
<u>Music Methodology and Performance</u>				
0010	Understand principles of music methodology.	1; 4-5	2; 7	
0011	Understand vocal and choral performance techniques.	1; 3; 5	2; 7	(CE) 1; (PR) 1-8, HS I- HS IV
0012	Understand instrumental performance techniques.	1; 3; 5	2; 7	(CE) 1-6, HS I, HS IV; (PR) K-8, HS I-IV
0013	Understand conducting techniques, score reading, and repertoire.	1; 3; 5	2; 7	(CE) 3, 6-8, HS I-IV; (PR) 3-8, HS I-IV; (RE) K, 2-8, HS I-HS IV

Alignment of OAE Physical Education Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Physical Education (PK-12)		2008 National Initial Physical Education Teacher Education Standards (NASPE)	Ohio Standards for the Teaching Profession	Ohio Physical Education Academic Content Standards
<u>Growth and Motor Development</u>				
0001	Understand stages and characteristics of human growth and development.	1	2	1; 6
0002	Understand concepts and principles of anatomy and physiology as they relate to movement and physical fitness.	1	2	1-2; 4
0003	Understand principles, sequences, and characteristics of motor development and motor learning.	1	2	1-2
<u>Movement Activities</u>				
0004	Understand fundamental movement concepts and skills and principles of biomechanics.	1-2	2	1-2
0005	Understand principles, techniques, skills, activities, organizational strategies, and safety practices for sports and recreational activities.	1-2	2	1-3; 5

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Physical Education (PK-12)		2008 National Initial Physical Education Teacher Education Standards (NASPE)	Ohio Standards for the Teaching Profession	Ohio Physical Education Academic Content Standards
0006	Understand principles, techniques, skills, activities, organizational strategies, and safety practices for rhythmic movement and dance; stunts, tumbling, and educational gymnastics; and cooperative, group, and adventure activities.	1-2	2	1-3; 5
<u>Lifelong Physical Fitness</u>				
0007	Understand principles and components of health-related physical fitness, including activities for promoting cardiorespiratory endurance, flexibility, muscular strength and endurance, and body composition.	1-2	2	3-4
0008	Understand principles, procedures, and resources for developing and maintaining physical activity/fitness and weight management plans.	1-2	2	3-4; 6
0009	Understand the relationship between physical activity and the development of responsible personal and social behaviors and traits.	1; 4; 6	2	5-6

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Physical Education (PK-12)		2008 National Initial Physical Education Teacher Education Standards (NASPE)	Ohio Standards for the Teaching Profession	Ohio Physical Education Academic Content Standards
<u>The Physical Education Program</u>				
0010	Understand how children and adolescents learn and how to provide them with physical education opportunities that support their psychomotor, cognitive, social, and emotional development.	1--6	1-2; 5	
0011	Understand how to plan, implement, and evaluate physical education instructional activities, including how to adapt activities for diverse learning needs	3-6	1-5	
0012	Understand ethical, legal, professional, and safety guidelines and practices related to physical education.	4-6	1-2; 5-7	

Alignment of OAE Physics Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Physical Sciences: Physics (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
<u>Nature of Science</u>					
0001	Understand principles and procedures of scientific inquiry.	Unifying Concepts: A.1-3; Phys: A.10; B.21	2	Science Inquiry and Application	Gr. 6-12: 2-4; 7-8
0002	Understand the history of science, its connections with other sciences, and the relationships among science, technology, and society.	Unifying Concepts: A.1-A.2; A.4-A.5 Chem: B.25 Phys: A.11; B.19-B.20; Bio: B.19 Earth/Space Sci: B.20	2	Science Inquiry and Application	Gr. 6-12: 1-2; 4
<u>Mechanics</u>					
0003	Understand motion in one and two dimensions.	Phys: A.2	2	Phys: Motion	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Physical Sciences: Physics (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0004	Understand forces as interactions and their effects on motion.	Phys: A.2-A.3	2	Phys: Motion; Forces, Momentum, and Motion	
0005	Understand the conservation of energy and linear momentum.	Phys: A.1; A.3-A.4	2	Phys: Energy	
0006	Understand simple harmonic motion and rotational dynamics.	Phys: A.2; B.14	2	Phys: Motion; Forces, Momentum, and Motion	
<u>Electricity and Magnetism</u>					
0007	Understand properties of the electric field.	Phys: A.4; A.9; B.18	2	Phys: Electricity and Magnetism	
0008	Understand properties of the magnetic field and electromagnetic induction.	Phys: A.5; A.9; B.18	2	Phys: Forces, Momentum, and Motion; Electricity and Magnetism	
0009	Understand properties of electric circuits.	Phys: A.1-A.2; A.9; B.18	2	Phys: Electricity and Magnetism	
<u>Waves</u>					
0010	Understand the fundamental properties of waves.	Phys: A.1-A.2; A.8	2	Phys: Waves (wave properties)	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards	
Physical Sciences: Physics (7-12)		NSTA 2012 Standards for Science Teacher Preparation: Secondary Science Content Analysis Form	Ohio Standards for the Teaching Profession	Ohio Revised Science Standards and Model Curriculum: High School	CCSS - Reading Standards for Literacy in Science and Technical Subjects
0011	Understand the characteristics of light and electromagnetic radiation.	Phys: A.8; B.17	2	Phys: Waves (light phenomena)	
<u>Modern Physics</u>					
0012	Understand thermal energy and the kinetic theory of matter.	Phys: A.1; A.5-A.6; B.12	2	Phys: Energy	
0013	Understand fundamental ideas of modern physics.	Phys: A.6-A.7; B.12; B.15; B.16-B.17	2	Phys: Energy	
0014	Understand the fundamental principles of nuclear physics.	Phys: A.6-A.7; B.12-B.13; B.16	2	Phys: Energy	

Alignment of OAE Prekindergarten Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Prekindergarten		Prekindergarten Endorsement— 2008 Ohio/NAEYC/Ohio's Early Learning Content Standards Ages 3-5	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards (2012)
<u>Subtest I</u>				
<u>Professionalism and Building Relationships</u>				
0001	Understand the foundations of programs and services for young children (birth to five) and issues, laws, and policies that affect children, families, and programs.	1, 6	2	
0002	Understand the roles and responsibilities of members of the early childhood profession.	5-6	7	
0003	Understand the characteristics of families and communities and their roles in the development and learning of young children (birth to five).	5	6	
0004	Understand how to establish and maintain positive, collaborative relationships with families, other professionals, and community agencies and organizations.	5	6	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Prekindergarten		Prekindergarten Endorsement— 2008 Ohio/NAEYC/Ohio's Early Learning Content Standards Ages 3-5	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards (2012)
<u>Subtest I</u>				
<u>Promoting Child Development and Learning</u>				
0005	Understand growth and development in early childhood and the characteristics and needs of young children (birth to five).	1	1	Social-Emotional Development, Approaches Toward Learning, Physical Well-Being and Motor Development, Cognitive Development and General Knowledge, Language and Literacy Development
0006	Understand factors that influence the development and learning of young children (birth to five).	1	1	
0007	Understand basic health, nutrition, and safety management practices for young children (birth to five).	1-2	5	
0008	Understand human diversity and how to create an environment that is inclusive and respectful of individual differences.	2	1, 5	
0009	Understand communication and language development in young children (birth to five).	1	1-2	Language and Literacy Development
0010	Understand how to create and maintain environments that are healthy, respectful, supportive, and challenging for all young children (birth to five).	2	5	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Prekindergarten		Prekindergarten Endorsement— 2008 Ohio/NAEYC/Ohio's Early Learning Content Standards Ages 3-5	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards (2012)
<u>Subtest II</u>				
<u>Teaching and Learning</u>				
0011	Understand how young children (birth to five) learn and construct knowledge and how to use this understanding to create opportunities for young children to explore and learn.	1-3	1-2, 4	Approaches Toward Learning
0012	Understand how to plan effective and appropriate learning goals and experiences for young children (birth to five).	3	2, 4	
0013	Understand appropriate instructional practices for promoting positive development and learning in all young children (birth to five).	3	4-5	
0014	Understand strategies for promoting positive relationships and supportive interactions.	2-3	4-5	
0015	Understand the characteristics, goals, benefits, and uses of various assessment strategies.	4	3	
<u>Subtest II</u>				
<u>Building a Meaningful Curriculum</u>				
0016	Understand how to facilitate physical development in young children (birth to five).	1-3	2, 4-5	Physical Well-Being and Motor Development

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Prekindergarten		Prekindergarten Endorsement— 2008 Ohio/NAEYC/Ohio's Early Learning Content Standards Ages 3-5	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards (2012)
0017	Understand how to facilitate emotional and social development in young children (birth to five).	1-3	2, 4-5	Social-Emotional Development
0018	Understand how to facilitate language and literacy development in young children (birth to five).	1-3	2, 4-5	Language and Literacy Development
0019	Understand how to facilitate cognitive development in young children (birth to five).	1-3	2, 4-5	Cognitive Development and General Knowledge
0020	Understand how to facilitate creative development in young children (birth to five).	1-3	2, 4-5	Approaches Toward Learning

Alignment of OAE Prekindergarten Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Associate Prekindergarten		Prekindergarten Associate— 2008 Ohio/CEC-DEC/NAEYC Ohio Core Body of Knowledge and Competencies Program Standards	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards (2012)
<u>Subtest I</u>				
<u>Professionalism and Building Relationships</u>				
0001	Understand the foundations of programs and services for young children (birth to five) and issues, laws, and policies that affect children, families, and programs.	1, 6	2	
0002	Understand the roles and responsibilities of members of the early childhood profession.	6	7	
0003	Understand the characteristics of families and communities and their roles in the development and learning of young children (birth to five).	2, 5	6	
0004	Understand how to establish and maintain positive, collaborative relationships with families, other professionals, and community agencies and organizations.	5	6	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Associate Prekindergarten		Prekindergarten Associate— 2008 Ohio/CEC-DEC/NAEYC Ohio Core Body of Knowledge and Competencies Program Standards	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards (2012)
<u>Subtest I</u>				
<u>Promoting Child Development and Learning</u>				
0005	Understand growth and development in early childhood and the characteristics and needs of young children (birth to five).	1	1	Social-Emotional Development, Approaches Toward Learning, Physical Well-Being and Motor Development, Cognitive Development and General Knowledge, Language and Literacy Development
0006	Understand factors that influence the development and learning of young children (birth to five).	1-2	1	
0007	Understand basic health, nutrition, and safety management practices for young children (birth to five).	2	5	
0008	Understand human diversity and how to create an environment that is inclusive and respectful of individual differences.	2	1, 5	
0009	Understand communication and language development in young children (birth to five).	1, 3	1-2	Language and Literacy Development

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Associate Prekindergarten		Prekindergarten Associate— 2008 Ohio/CEC-DEC/NAEYC Ohio Core Body of Knowledge and Competencies Program Standards	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards (2012)
0010	Understand how to create and maintain environments that are healthy, respectful, supportive, and challenging for all young children (birth to five).	2	5	
<u>Subtest II</u>				
<u>Teaching and Learning</u>				
0011	Understand how young children (birth to five) learn and construct knowledge and how to use this understanding to create opportunities for young children to explore and learn.	1-3	1-2, 4	Approaches Toward Learning
0012	Understand how to plan effective and appropriate learning goals and experiences for young children (birth to five).	2-5	2, 4	
0013	Understand appropriate instructional practices for promoting positive development and learning in all young children (birth to five).	3	4-5	
0014	Understand strategies for promoting positive relationships and supportive interactions.	3	4-5	
0015	Understand the characteristics, goals, benefits, and uses of various assessment strategies.	4	3	

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Associate Prekindergarten		Prekindergarten Associate— 2008 Ohio/CEC-DEC/NAEYC Ohio Core Body of Knowledge and Competencies Program Standards	Ohio Standards for the Teaching Profession	Ohio's Early Learning and Development Standards (2012)
<u>Subtest II</u>				
<u>Building a Meaningful Curriculum</u>				
0016	Understand how to facilitate physical development in young children (birth to five).	1, 3	2, 4-5	Physical Well-Being and Motor Development
0017	Understand how to facilitate emotional and social development in young children (birth to five).	1-3	2, 4-5	Social-Emotional Development
0018	Understand how to facilitate language and literacy development in young children (birth to five).	1, 3	2, 4-5	Language and Literacy Development
0019	Understand how to facilitate cognitive development in young children (birth to five).	1, 3	2, 4-5	Cognitive Development and General Knowledge
0020	Understand how to facilitate creative development in young children (birth to five).	1, 3	2, 4-5	Approaches Toward Learning

Alignment of OAE Reading Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Student Standards
Reading (Endorsement)		Reading Endorsement 2007 Modified Ohio/IRA Program Standards (Grades PreK–12)	Ohio Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects
<u>Subtest I: Reading Assessment</u>			
0001	Understand formal and informal techniques for assessing reading.	3.1	
0002	Understand how to interpret and communicate the results of reading assessments.	3.1-3.2; 3.4	
0003	Understand the use of assessment data to plan and guide instruction for readers at all skill levels.	3.3	
<u>Subtest I: Foundations of Reading Development</u>			
0004	Understand language acquisition, reading processes, and theories of reading development.	1.1-1.3	
0005	Understand the role of phonological awareness in reading development and strategies for promoting phonological awareness skills.	1.4; 2.1–2.3; 2.5	RF.K–1.2
0006	Understand the role of phonemic awareness in reading development and strategies for promoting phonemic awareness skills.	1.4; 2.1–2.3; 2.5	RF.K–1.2

Competencies		Ohio Educational Preparation Standards	Ohio Student Standards
Reading (Endorsement)		Reading Endorsement 2007 Modified Ohio/IRA Program Standards (Grades PreK–12)	Ohio Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects
0007	Understand methods for promoting literacy as a lifelong skill.	4.1–4.4; 5.1	
<u>Subtest I: Reading Development</u>			
0008	Understand how to promote students' understanding of concepts about print and the alphabetic principle.	1.4; 2.1–2.3; 2.5	RF.K–1.1
0009	Understand the role of phonics and other word-analysis skills in promoting reading development.	1.4; 2.1–2.3; 2.5	RF.K–5.3
0010	Understand strategies for promoting fluency at the word level and text level.	1.4; 2.1–2.3; 2.5	RF.K–5.4
<u>Subtest II: Comprehension</u>			
0011	Understand factors that affect reading comprehension.	1.1; 1.4; 2.1–2.5	
0012	Understand methods, activities, and techniques for applying comprehension strategies throughout the reading process.	1.4; 2.1–2.5; 4.1–4.2	
0013	Understand the selection and use of reading materials for different purposes, including materials for introducing or reviewing various comprehension skills and strategies.	2.3; 2.5; 4.1–4.2	
<u>Subtest II: Reading and Literature</u>			

Competencies		Ohio Educational Preparation Standards	Ohio Student Standards
Reading (Endorsement)		Reading Endorsement 2007 Modified Ohio/IRA Program Standards (Grades PreK–12)	Ohio Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects
0014	Understand the characteristics of a variety of genres and types of literature and informational texts.	1.4; 2.3; 2.5; 4.1–4.2	RL.K–5.5; RI.K–5.5; RH.6–12.5; RST.6–12.5
0015	Understand literary texts from various genres, cultures, and time periods and how to use evidence and main ideas as the basis for interpretation.	1.4; 2.3; 2.5; 4.1–4.2	RL.K–5.1–7; 9
0016	Understand strategies for developing and reinforcing students' reading comprehension skills as they relate to literary texts.	1.4; 2.1–2.5; 4.1–4.2	RL.K–5.1–7; 9
<u>Subtest II: Reading Across the Curriculum</u>			
0017	Understand strategies for developing and reinforcing students' reading comprehension skills as they relate to informational texts.	1.4; 4.1–4.2	RI.K–5.1–9; RH.6–12.1–9; RST.6–12.1–9
0018	Understand strategies for promoting content-area knowledge through reading and for improving research habits and study skills.	1.4; 2.1–2.5; 4.1–4.2	RI.K–5.1–9; RH.6–12.1–9; RST.6–12.1–9
0019	Understand various methods for promoting and expanding vocabulary development.	1.4; 2.1–2.5	L.K–12.4–6
0020	Understand how to vary reading strategies for different texts and purposes for reading and how to facilitate students' use of various reading materials.	1.4; 2.2–2.3; 4.1–4.2	

Alignment of OAE School Counselor Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	
School Counselor		Council for Accreditation of Counseling and Related Educational Programs (CACREP) Standards (2009)	Council for Accreditation of Counseling and Related Educational Programs (CACREP) Standards (2009), Common Core Curricular Experiences
<u>Student Development and Learning</u>			
0001	Understand human development from early childhood to young adulthood.	Foundations; Assessment	3
0002	Understand the learning process and factors that affect learning.	Foundations; Diversity and Advocacy; Assessment	2-4
<u>Comprehensive School Counseling Program</u>			
0003	Understand the development and implementation of a guidance curriculum.	Foundations; Counseling, Prevention, and Intervention; Assessment; Diversity and Advocacy; Academic Development; Collaboration and Consultation; Leadership	2-5; 8
0004	Understand methods for individual planning to help students establish goals and develop future plans.	Counseling, Prevention, and Intervention; Assessment; Academic Development	4; 7

Competencies		Ohio Educational Preparation Standards	
School Counselor		Council for Accreditation of Counseling and Related Educational Programs (CACREP) Standards (2009)	Council for Accreditation of Counseling and Related Educational Programs (CACREP) Standards (2009), Common Core Curricular Experiences
0005	Understand methods for providing responsive services to meet students' needs.	Foundations, Counseling, Prevention, and Intervention; Assessment; Collaboration and Consultation	1-3; 5-6
0006	Understand principles of leadership to support the educational system.	Foundations; Collaboration and Consultation; Leadership	1-2
<u>Professional Knowledge and Practice</u>			
0007	Understand applications of testing and assessment.	Assessments; Research and Evaluation	6-8
0008	Understand strategies for developing effective relationships with students, their families, professionals, and the community.	Foundations; Diversity and Advocacy; Assessment; Collaboration and Consultation; Leadership	1; 5
0009	Understand roles, responsibilities, and professional standards of school counselors.	Foundations; Counseling, Prevention, and Intervention; Diversity and Advocacy; Research and Evaluation; Leadership	1-2; 8

Alignment of OAE School Library Media Specialist Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Library/Media (PK-12)		ALA/AASL Standards for Initial Preparation of School Librarians, 2010	Ohio Standards for the Teaching Profession
<u>The Library Media Program</u>			
0001	Understand the role of the library media program and its relationship to the total school program and to information resources and services beyond the school.	4-5	2
0002	Understand the roles and responsibilities of the school library media specialist and strategies for ongoing professional growth and development.	4	2
0003	Understand strategies for communicating and collaborating with members of the school community to promote information literacy.	1; 4-5	2

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Library/Media (PK-12)		ALA/AASL Standards for Initial Preparation of School Librarians, 2010	Ohio Standards for the Teaching Profession
<u>Promoting Information Literacy Skills</u>			
0004	Understand basic principles of child development, curriculum development, and instructional design and how to apply this understanding to provide appropriate information resources and services for diverse groups of students.	1-3	2
0005	Understand strategies for creating a student-centered library environment that promotes the habit of lifelong learning and facilitates intellectual and physical access for all students to information, literature, and ideas.	2	2
0006	Understand the types, characteristics, and uses of various information and technological resources; the types and characteristics of literature for children and young adults; and strategies for promoting literacy.	2	2
0007	Understand information literacy skills and methods and materials for facilitating the development of these skills.	2	2

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Library/Media (PK-12)		ALA/AASL Standards for Initial Preparation of School Librarians, 2010	Ohio Standards for the Teaching Profession
<u>Program Administration</u>			
0008	Understand principles and procedures of collection development and the management and organization of information, materials, equipment, and technological resources in the library media program.	3	2
0009	Understand principles, policies, and procedures related to the management of human, financial, and physical resources of the library media program.	5	2
0010	Understand methods for engaging in comprehensive and collaborative planning, assessment, and evaluation of the library media program.	1; 4-5	2

Alignment of OAE School Psychologist Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards
School Psychologist		National Association of School Psychologists Standards for Graduate Preparation of School Psychologists (2010)
<u>Understanding Human Development, Diversity, and Learning</u>		
0001	Understand human development and behavior.	2.3-2.4; 2.7-2.8
0002	Understand processes of learning and learning environments that are responsive to the strengths and needs of students.	2.3; 2.5; 2.7-2.8
0003	Understand curricula and instruction that promote learning, achievement, and competence in students with diverse strengths and needs.	2.3; 2.5; 2.8
<u>Assessing and Addressing Individual and Schoolwide Needs</u>		
0004	Understand how to select, adapt, and develop assessments that provide accurate, useful information for determining appropriate interventions and making educational recommendations for students with diverse strengths and needs.	2.1; 2.3-2.4; 2.8
0005	Understand how to conduct assessments of students who have diverse strengths and needs.	2.1; 2.3-2.4; 2.8
0006	Understand how to interpret assessment results to increase knowledge about students' individual strengths and needs.	2.1; 2.3-2.4; 2.8

Competencies		Ohio Educational Preparation Standards
School Psychologist		National Association of School Psychologists Standards for Graduate Preparation of School Psychologists (2010)
0007	Understand how to use assessment information within the multidisciplinary team process to make recommendations and develop interventions that respond to students' identified educational and mental health needs and enhance students' educational functioning.	2.1-2.4; 2.6; 2.8
0008	Understand prevention and intervention techniques and resources for addressing individual, group, and schoolwide needs.	2.2; 2.4; 2.6
0009	Understand research methods, program evaluation, and principles of data-based decision making and accountability.	2.1-2.3; 2.7; 2.9
<u>Working in the Professional Environment</u>		
0010	Understand effective communication, consultation, and collaboration processes for working with education and other professionals, families, and community agencies to provide students with appropriate educational services.	2.2; 2.4-2.9
0011	Understand the roles and responsibilities of school psychologists.	2.2; 2.5-2.10
0012	Understand the historical, legal, and ethical foundations of the school psychology profession.	2.10

Alignment of OAE Special Education Specialist: Deaf/Hard of Hearing Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Hearing Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Deaf or Hard of Hearing (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession, 2005
<u>Understanding Children and Youth Who Are Deaf or Hard of Hearing</u>				
0001	Understand human growth and development and factors that affect development and learning.	2-3; 6	1	1
0002	Understand the processes involved in hearing and the types and degrees of hearing loss.	2	1	1
0003	Understand the effects of hearing loss on development and learning.	2-3; 6	1	1
0004	Understand the development of language and cognition in children and youth who are deaf or hard of hearing.	2-3; 6	1	1

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Hearing Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Deaf or Hard of Hearing (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession, 2005
		<u>Assessing Children and Youth Who Are Deaf or Hard of Hearing and Developing Individualized Programs</u>		
0005	Understand types, characteristics, and procedures for conducting assessments that address the individual needs of children and youth.	8; 10	4	3
0006	Understand and apply procedures for assessing the receptive and expressive spoken language skills of children and youth who are deaf or hard of hearing.	6; 8; 10	4	3
0007	Understand and apply procedures for assessing the receptive and expressive American Sign Language (ASL) skills of children and youth who are deaf or hard of hearing.	6; 8		
0008	Understand and apply procedures for assessing reading and writing skills of children and youth who are deaf or hard of hearing.	7-8; 10	4	3

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Hearing Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Deaf or Hard of Hearing (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession, 2005
0009	Understand procedures for developing and implementing Individualized Family Service Plans (IFSPs), Individualized Education Programs (IEPs), and Communication Plans.	6-10	5	1; 3
<u>Promoting Development and Learning in Children and Youth Who Are Deaf or Hard of Hearing</u>				
0010	Understand strategies for planning and managing the learning environment for children and youth who are deaf or hard of hearing.	3-7; 10	2	5
0011	Understand principles and methods for individualizing instruction for children and youth who are deaf or hard of hearing.	3-7; 10	1; 5	3-4
0012	Understand the development of language and literacy skills in children and youth who are deaf or hard of hearing.	2; 4; 6; 8	5	2
0013	Understand how to meet the overall communication needs of children and youth who are deaf or hard of hearing.	4-6; 8	5	4

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Hearing Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Deaf or Hard of Hearing (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession, 2005
0014	Understand how to promote life skills for children and youth who are deaf or hard of hearing.	4-5; 7	2	2
0015	Understand how to promote positive social interactions and self-advocacy skills in children and youth who are deaf or hard of hearing.	3-7	2	3; 5
<u>Foundations and Roles and Responsibilities of the Deaf Education Professional</u>				
0016	Understand how to communicate and collaborate with children and youth who are deaf or hard of hearing and their families to help them achieve desired learning outcomes.	1; 10	2; 5	6
0017	Understand how to establish partnerships with professionals, organizations, and community agencies to enhance learning opportunities for children and youth who are deaf or hard of hearing.	1; 10	7	6

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Hearing Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Deaf or Hard of Hearing (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession, 2005
0018	Understand the philosophical, historical, and legal foundations of education for children and youth who are deaf or hard of hearing.	1; 10	6	1
0019	Understand the professional, ethical, and legal roles and responsibilities of the teacher of the deaf and hard of hearing.	1; 9	6	1

Alignment of OAE Special Education Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Mild/Moderate Needs (K-12)		Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
<u>Students with Disabilities</u>			
0001	Understand characteristics of students with disabilities.	1	1
0002	Understand factors that affect development, learning, and daily living in students with disabilities.	1	1
<u>Assessment and Program Planning</u>			
0003	Understand procedures for selecting, adapting, modifying, designing, and using various types of formal and informal assessments.	4	3
0004	Understand strategies and procedures for developing, implementing, and monitoring individualized programs.	3-5	3-4; 6

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Mild/Moderate Needs (K-12)		Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
<u>Learning Environments and Instructional Practices</u>			
0005	Understand strategies and procedures for planning, managing, and modifying the learning environment for students with disabilities.	2; 5; 7	1; 4-5
0006	Understand effective instructional practices for promoting students' success in the general curriculum.	3-5	2-4
0007	Understand strategies for developing students' communication and social skills and for providing effective behavioral interventions for students with disabilities.	2; 5	2; 4-5
0008	Understand strategies for teaching functional living skills and promoting successful transitions for students with disabilities.	2-3; 5	4
<u>Foundations and Professional Practice</u>			
0009	Understand the historical, legal, and ethical foundations of the field of special education.	6	7
0010	Understand the professional roles and responsibilities of the special education teacher.	6-7	6-7

Alignment of OAE Special Education Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Moderate/Intensive Needs (K-12)		Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
<u>Students with Disabilities</u>			
0001	Understand characteristics of students with disabilities.	1	1
0002	Understand factors that affect development, learning, and daily living in students with disabilities.	1	1
<u>Assessment and Program Planning</u>			
0003	Understand procedures for selecting, adapting, modifying, designing, and using various types of formal and informal assessments.	4	3
0004	Understand strategies and procedures for developing, implementing, and monitoring individualized programs.	3-5	3-4; 6

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards
Moderate/Intensive Needs (K-12)		Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
<u>Learning Environments and Instructional Practices</u>			
0005	Understand strategies and procedures for planning, managing, and modifying the learning environment for students with disabilities.	2; 5; 7	1; 4-5
0006	Understand effective instructional practices for promoting students' success in the general curriculum.	3-5	2-4
0007	Understand strategies for developing students' communication and social skills and for providing effective behavioral interventions for students with disabilities.	2; 5	2; 4-5
0008	Understand strategies for teaching functional living skills and promoting successful transitions for students with disabilities.	2-3; 5	4
<u>Foundations and Professional Practice</u>			
0009	Understand the historical, legal, and ethical foundations of the field of special education.	6	7
0010	Understand the professional roles and responsibilities of the special education teacher.	6-7	6-7

Alignment of OAE Special Education Specialist: Visually Impaired Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Visually Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Blind and/or Visually Impaired (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
<u>Knowledge of Human Development, Vision, and Visual Impairments</u>				
0001	Understand typical processes of human growth and development and the developmental significance of disabilities.	2-3; 6	1	1
0002	Understand learning processes and the significance of disabilities for learning.	2-3	1	1
0003	Understand the visual system and characteristics of all types and degrees of visual impairments.	1-2		1
0004	Understand the implications of visual impairments for cognitive and communicative functioning.	2-3; 6	1	1
0005	Understand the implications of visual impairments for social/emotional and physical/motor functioning and for the development of daily living and functional life skills.	2-3	1	1, 5

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Visually Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Blind and/or Visually Impaired (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
0006	Understand principles of optics and the use of low vision aid.	2		
<u>Assessing Students with Visual Impairments</u>				
0007	Understand assessment procedures for evaluating individual differences and making placement and programming decisions for students with disabilities.	7-8	4-5	3
0008	Apply procedures for assessing students' functional vision.	8	4	3
0009	Apply procedures for assessing the intellectual performance and academic achievement of students with visual impairments.	8	4	3
0010	Apply procedures for assessing the motor functioning, communicative competence, and functional living skills of students with visual impairments.	8	4	3

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Visually Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Blind and/or Visually Impaired (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
<u>Fostering Student Growth and Development</u>				
0011	Apply procedures for developing and implementing an Individualized Education Program (IEP) for students with visual impairments.	7-8; 10	4-5	1
0012	Understand how to establish a positive and productive learning environment for all students.	5; 7	2	5
0013	Understand how to foster the orientation and mobility skills of students with visual impairments.	4	5	
0014	Understand sensory training techniques used with students with visual impairments.	4	5	
0015	Understand strategies for fostering communicative skills development in students with visual impairments.	4-6	5	
0016	Understand how to foster academic achievement in students with visual impairments.	4; 6-7	2; 5	4
0017	Understand how to address the social and emotional needs of students with visual impairments.	4-5	2	1

Competencies		Ohio Educational Preparation Standards		Ohio Educator Standards
Visually Impaired (PK-12)		CEC Program Standards Initial Special Education Teachers of Individuals With Exceptional Learning Needs Who are Blind and/or Visually Impaired (2009)	Council for Exceptional Children (CEC): Initial Level Special Educator Preparation Standards (Updated 2012)	Ohio Standards for the Teaching Profession
0018	Understand how to foster daily living and functional life skills and vocational/career skills in students with visual impairments.	4-5	2; 5	
<u>Professional Knowledge</u>				
0019	Understand how to establish partnerships with other members of the school community to enhance learning opportunities for students with visual impairments.	7; 9-10	6-7	6-7
0020	Understand how to foster strong school-home relationships.	3; 10	5; 7	6
0021	Understand how to encourage school-community interactions that enhance learning opportunities for students with visual impairments.	1; 10	7	2; 6
0022	Understand requirements, responsibilities, and constraints associated with teaching special needs populations.	9	6	2; 4; 7
0023	Understand the history and philosophy of special education and key issues, trends, and research relating to the education of students with visual impairments.	1;9	6	

Alignment of OAE Technology Education Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Technology Education		NCATE/ITEA/CTTE Program Standards (2003) - Programs for the Preparation of Technology Education Teachers	Ohio Standards for the Teaching Profession	Ohio's 2003 Academic Content Standards in Technology
<u>Subtest I</u> <u>Nature of Technology</u>				
0001	Understand innovation and design.	3-4	2	1
0002	Understand careers and employability skills.		2	1, 4-7
0003	Understand safety and the environment.	1-5; 8	2	2
0004	Understand the role of technology in society and globalization.	1-2	2	2
0005	Understand the universal systems model.	4	2	1
0006	Understand integration with other academic disciplines.	1; 6	2	1

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Technology Education		NCATE/ITEA/CTTE Program Standards (2003) - Programs for the Preparation of Technology Education Teachers	Ohio Standards for the Teaching Profession	Ohio's 2003 Academic Content Standards in Technology
<u>Subtest II</u> <u>The Designed World: Power, Energy, and Transportation</u>				
0001	Understand power, energy, and transportation processes.	5	2	6-7
0002	Understand power, energy, and transportation systems.	5	2	6-7
0003	Understand power, energy, and transportation resources.	5	2	6-7
<u>The Designed World: Information and Communication</u>				
0004	Understand information and communication design processes.	3-5	2	4-5
0005	Understand information and communication systems.	5	2	4-5
0006	Understand information and communication resources.	5	2	4-5
0007	Understand security and privacy.	2; 5	2	5

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Technology Education		NCATE/ITEA/CTTE Program Standards (2003) - Programs for the Preparation of Technology Education Teachers	Ohio Standards for the Teaching Profession	Ohio's 2003 Academic Content Standards in Technology
<u>The Designed World: Manufacturing and Construction</u>				
0008	Understand engineering principles.	3-4	2	3; 6-7
0009	Understand manufacturing and construction processes.	5	2	7
0010	Understand manufacturing and construction resources.	5	2	7
0011	Understand quality control and quality assurance.	5	2	7

Alignment of OAE Theater Assessment Framework with Ohio-specified Standards

This alignment study identifies the national and/or Ohio educational standards that are addressed in whole or in part by each competency of the assessment framework. An indication of alignment does not necessarily imply complete congruence of the content of an OAE test competency with the relevant standard. The information in this document is subject to change if revisions are made to the assessment framework. Any changes will fully supersede the information contained in this document.

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Drama/Theater		Multi-Age Drama/Theater: 2008 Modified Ohio/NAST Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Drama/Theatre
<u>Playwriting, Performance, and Direction of Dramatic Works</u>				
0001	Understand principles of playwriting and dramatic structure.	2	2	Perceiving/Knowing Creating (CE) 3, 5, 8, HS I- IV; Producing/Performing (PR) 7; Responding/Reflecting (RE) K, 1-2, 8, HS II-IV
0002	Understand principles of acting.	2	2	(CE) 6, 8, HS I; (PR) 2, 4-5, 7-8, HS I-IV; (RE) 2, 4, 6
0003	Understand principles of directing.	2	2	(CE) 8, HS I; (PR) 3-4, 7, HS II- IV; (RE)
<u>Design, Production, and Management of Dramatic Works</u>				
0004	Understand principles of producing and managing theatrical performances.	2	2	(PR) HS II
0005	Understand set, costume, and lighting design and execution.	2	2	(CE) 6; (PR) 2-6, 8, HS III-IV; (RE) 2

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Drama/Theater		Multi-Age Drama/Theater: 2008 Modified Ohio/NAST Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Drama/Theatre
<u>Theater History and Dramatic Literature</u>				
0006	Understand the history of drama and theater.	1	2	(CE) 6, HS II-IV; (PR); (RE)
0007	Understand British and other European dramatic literature from ancient times through the present.	1	2	(CE) K, 2, 5, HS I, III; (PR) 1, 8; (RE) 3, HS I
0008	Understand the dramatic literature of the United States.	1	2	(CE) K, 2, 5, HS I, HS III; (PR) 1, 8; (RE) 3, HS I
0009	Understand dramatic literature from other cultural traditions.	1	2	(CE) K, 2, 5, HS I, III; (PR) 1, 8; (RE) 3, HS I
<u>Theater Education</u>				
0010	Understand principles of theater education for children and adolescents.	6	2	
0011	Understand the interdisciplinary nature of theater.	4	2	(PR) HS II-IV; (RE) HS III

Competencies		Ohio Educational Preparation Standards	Ohio Educator Standards	Ohio Student Standards
Drama/Theater		Multi-Age Drama/Theater: 2008 Modified Ohio/NAST Program Standards (Grades PreK-12)	Ohio Standards for the Teaching Profession	2012 Revised Fine Arts Standards - Drama/Theatre
<u>Integration of Knowledge and Understanding</u>				
0012	Prepare an organized, developed analysis on a given topic related to one or more of the following: playwriting, performance, direction, design, production, or management of dramatic works; theater history; dramatic literature; and theater education.	3	2	(CE) K-HS IV; (PR) K-HS IV; (RE) K-HS IV

**Appendix B:
Content Validation Survey Results**

Appendix B: Content Validation Survey Results

Content validation surveys were conducted to gather evidence that showed each OAE assessment framework adequately reflects the knowledge and skills it is intended to measure. Survey participants (practicing teachers and faculty preparing teachers) were asked to rate the importance of the knowledge and skills described by each competency and accompanying descriptive statements on a 5-point scale. The following table depicts the mean ratings for all assessments in the OAE program.

Ohio Assessments for Educators (OAE)
Spring 2013 Content Validation Survey
Overall Mean Rating Report
Final Results – Spring 2013

Field	Mean Competency Importance Ratings ¹		Mean Descriptive Statement Ratings ²		Mean Composite Ratings ²	
	Teachers	Faculty	Teachers	Faculty	Teachers	Faculty
001 Assessment of Professional Knowledge: Early Childhood (PK-3)	4.42	4.46	4.02	4.07	4.13	4.13
002 Assessment of Professional Knowledge: Middle Childhood (4-9)	4.23	4.58	4.04	3.90	3.96	3.77
003 Assessment of Professional Knowledge: Adolescence to Young Adult (7-12)	4.21	4.41	3.90	4.06	3.93	4.07
004 Assessment of Professional Knowledge: Multi-Age (PK-12)	4.16	4.38	3.89	4.28	3.91	4.33
006 Art	4.09	4.31	3.87	3.69	4.06	3.80
007 Biology	4.21	4.46	3.89	4.08	4.00	4.13
008 Business Education	3.80	-	3.72	-	3.73	-
009 Chemistry	4.10	4.59	3.82	4.02	3.97	4.17
010 Computer Information Science	3.21	5.00	3.34	5.00	3.17	5.00
016/017 Computer/Technology (Subtests I & II)	4.15	4.09	3.93	3.93	3.95	3.71
011 Dance	4.27	4.28	4.13	2.83	4.50	4.00
012 Early Childhood Education	4.32	4.42	4.01	3.94	4.04	3.96
013 Early Childhood Special Education	4.46	4.65	3.98	4.40	4.33	4.29
014 Earth and Space Science	4.04	4.24	3.72	3.68	3.78	3.60
015 Educational Leadership	4.27	4.33	3.96	3.90	4.19	3.83
018/019 Elementary Education (Subtests I & II)	4.14	4.47	4.04	4.41	4.11	4.50
020 English Language Arts	4.19	4.19	3.93	3.81	3.93	3.85
021 English to Speakers of Other Languages	4.46	4.77	3.96	4.28	4.07	4.50
022 Family and Consumer Sciences	4.34	4.91	4.20	4.36	4.27	5.00
024 Integrated Science	4.07	4.55	3.89	3.85	4.00	4.00
025 Integrated Social Studies	4.09	4.35	3.90	3.89	4.00	3.83
026 Marketing	4.33	3.89	4.16	3.65	4.31	3.00
027 Mathematics	3.93	4.33	3.54	3.91	3.71	4.13
028 Middle Grades English Language Arts	4.20	-	4.08	-	3.93	-

Ohio Assessments for Educators (OAE)
 Spring 2013 Content Validation Survey
 Overall Mean Rating Report
 Final Results – Spring 2013
 Continued

Field	Mean Competency Importance Ratings ¹		Mean Descriptive Statement Ratings ²		Mean Composite Ratings ²	
	Teachers	Faculty	Teachers	Faculty	Teachers	Faculty
030 Middle Grades Mathematics	4.11	4.32	3.87	4.01	4.04	3.73
029 Middle Grades Science	4.25	4.28	4.09	3.84	4.11	3.80
031 Middle Grades Social Studies	4.10	4.56	3.61	4.52	3.87	4.67
032 Music	3.94	4.55	3.69	4.05	3.52	4.40
034 Physical Education	4.14	4.05	3.84	3.70	3.87	3.88
035 Physics	4.12	4.50	4.03	4.27	4.23	4.00
036/037 Prekindergarten (Subtests I & II)	4.61	4.78	4.28	4.83	4.47	4.80
038/039 Reading (Subtests I & II)	4.47	4.57	4.25	4.14	4.34	4.31
040 School Counselor	4.23	4.68	3.96	4.03	3.91	4.14
041 School Library Media Specialist	4.45	-	4.20	-	4.29	-
042 School Psychologist	4.51	4.33	4.19	4.42	4.33	3.50
043 Special Education	4.49	4.10	4.10	3.87	4.12	3.81
044 Special Education Specialist: Deaf/Hard of Hearing	4.37	4.58	4.21	5.00	4.29	5.00
045 Special Education Specialist: Visually Impaired	4.25	-	3.73	-	3.63	-
046/047 Technology Education (Subtests I & II)	3.87	3.98	3.42	3.81	3.50	3.33
048 Theater	4.22	-	4.12	-	4.24	-

¹ (1 = No importance, 2 = Little importance, 3 = Moderate importance, 4 = Great importance, 5 = Very great importance)

²(1 = Poorly, 2 = Somewhat, 3 = Adequately, 4 = Well, 5 = Very well)

Ohio Assessments for Educators (OAE)
 Spring 2014 Content Validation Survey
 Overall Mean Rating Report
 Final Results – Spring 2014

Field	Mean Competency Importance Ratings ¹		Mean Descriptive Statement Ratings ²		Mean Composite Ratings ²	
	Teachers	Faculty	Teachers	Faculty	Teachers	Faculty
005 Agriscience	4.07	4.33	3.71	3.61	3.73	4.33
023 Health	4.01	4.24	3.89	3.87	4.01	3.82

¹ (1 = No importance, 2 = Little importance, 3 = Moderate importance, 4 = Great importance, 5 = Very great importance)

²(1 = Poorly, 2 = Somewhat, 3 = Adequately, 4 = Well, 5 = Very well)