

Course Three: Academic Achievement Appendix



SEPTEMBER 2019

Getting to Know You; Getting to Know Me

Directions: My young, gifted, and talented students, I am really excited about our journey of learning this year.

I want you to know that teaching the Theory of Knowledge to my 9th graders and coaching beginning teachers are my passions. I enjoy making this course interesting, interactive, thought provoking, challenging, and relevant to your daily lives. One of the first activities that I engage in with my students is a reflective writing activity so that I can better understand who you are, how you learn, your interests, hobbies, etc.

Please complete the following phrases below. I will read your responses very carefully and meet with each of you to discuss them. You may be creative in the way that you complete these phrases by using art, storyboards, videos, PPT presentations, etc. Enjoy this assignment!

Getting to Know You; Getting to Know Me phrases to complete

- I get excited about learning and working in class when. . . .
- If I could bring something to class that would support my learning experience that the teacher could incorporate when appropriate, it would be. . . .
- I am interested in. . .
- I learn best when. . .
- My favorite hobby or hobbies are. . .
- When I get frustrated, angry, upset, or sad, it would be helpful if my teacher would. . . .
- I would describe my neighborhood and community as . . .
- The ways in which I am smart are. . .
- I learn best by. . . (e.g. doing, listening, seeing, discovering, learning with others, etc.)
- The adults in my life are. . . and they support my learning by. . .

Finally, what else would you like to share about yourself or ask me to help ensure that you have a successful learning experience in this class daily?

Access and Equity in Mathematics Education

A Position of the National Council of Teachers of Mathematics

Question

What is required to create, support, and sustain a culture of access and equity in the teaching and learning of mathematics?

NCTM Position

Creating, supporting, and sustaining a culture of access and equity require being responsive to students' backgrounds, experiences, cultural perspectives, traditions, and knowledge when designing and implementing a mathematics program and assessing its effectiveness. Acknowledging and addressing factors that contribute to differential outcomes among groups of students are critical to ensuring that all students routinely have opportunities to experience high-quality mathematics instruction, learn challenging mathematics content, and receive the support necessary to be successful. Addressing equity and access includes both ensuring that all students attain mathematics proficiency and increasing the numbers of students from all racial, ethnic, linguistic, gender, and socioeconomic groups who attain the highest levels of mathematics achievement.

Practices that support access and equity require comprehensive understanding. These practices include, but are not limited to, holding high expectations, ensuring access to high-quality mathematics curriculum and instruction, allowing adequate time for students to learn, placing appropriate emphasis on differentiated processes that broaden students' productive engagement with mathematics, and making strategic use of human and material resources. When access and equity have been successfully addressed, student outcomes—including achievement on a range of mathematics assessments, disposition toward mathematics, and persistence in the mathematics pipeline—transcend, and cannot be predicted by students' racial, ethnic, linguistic, gender, and socioeconomic backgrounds.

To close existing learning gaps, educators at all levels must work to achieve equity with respect to student learning outcomes. A firm commitment to this work requires that all educators operate on the belief that all students can learn. To increase opportunities to learn, educators at all levels must focus on ensuring that all students have access to high-quality instruction, challenging curriculum, innovative technology, exciting extracurricular offerings, and the differentiated supports and enrichment necessary to promote students' success at continually advancing levels. Providing all students with access is not enough; educators must have the knowledge, skills, and disposition necessary to support effective, equitable mathematics teaching and learning.

Achieving access and equity requires that all stakeholders—

- ensure that all students have access to a challenging mathematics curriculum, taught by skilled and effective teachers who differentiate instruction as needed;
- monitor student progress and make needed accommodations; and
- offer remediation or additional challenges when appropriate.

Taking these steps requires that mathematics teachers work collaboratively with other education specialists, including those in special education, gifted education, instructional technology, and English language development. This collaboration is essential to ensure that all students have the necessary support to maximize their success in the mathematics classroom. In addition, teachers need to collaborate with colleagues to implement the mathematics teaching practices that promote a growth mindset in their classrooms and school. High-quality educational opportunities for teachers across the professional continuum are imperative for realizing this vision.

States, provinces, districts, and schools must review policies to ensure that systemic practices are not disadvantaging particular groups of students. This review should include an examination of the use and impact of tracking, protocols for student placement in mathematics, the availability of opportunities for both remediation and enrichment, and student outcomes, including persistence within the pre-K–12 mathematics pipeline over time.

Culturally Responsive Teaching and Leading Interactive Activity (Kay Toliver and her students' Math Trail project in East Harlem, NY)

1. Review the five characteristics of culturally relevant pedagogy in the boxes below.
2. Watch the Kay Toliver Math Trail video. As you watch the video, document using words or pictures when you see evidence that relates to each characteristic of a culturally relevant math classroom.

<p>Characteristic #1: Teacher promotes the use of multiple solution strategies for the same problem.</p> <div data-bbox="115 394 703 548" style="border: 1px solid black; height: 95px; width: 100%;"></div> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Characteristic #2: Teacher provides opportunities for students to develop mathematical reasoning skills and communication strategies.</p> <div data-bbox="751 394 1339 548" style="border: 1px solid black; height: 95px; width: 100%;"></div> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Characteristic #3: Teacher knows his or her students.</p> <div data-bbox="1388 394 1976 548" style="border: 1px solid black; height: 95px; width: 100%;"></div> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Characteristic #4: Teacher helps students make connections between the academic content and their own lives.</p> <div data-bbox="115 987 703 1166" style="border: 1px solid black; height: 110px; width: 100%;"></div> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Characteristic #5: Teacher uses students' culture as the basis for learning.</p> <div data-bbox="751 987 1339 1166" style="border: 1px solid black; height: 110px; width: 100%;"></div> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Additional Notes</p> <div data-bbox="1388 987 1976 1166" style="border: 1px solid black; height: 110px; width: 100%;"></div> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Science: Academic Achievement

In the videos, Dr. Nehm will cover aspects of science achievement and show it intersects with culturally responsive practice. He will share how to use three core ideas to increase student interest and achievement in science.

Instructions: Use the following template to take notes during the Science Achievement videos.

1. Funds of Knowledge	2. Inquiry	3. Naïve Ideas

The 10 ELP Standards are organized according to a schema that represents each standard's importance to ELLs' participation in the practices called for by college- and-career-ready ELA & Literacy, mathematics, and science standards (G. Bunch, personal communication, August 15, 2013; Bunch, Kibler, & Pimentel, 2013).

Table 1. Organization of the ELP Standards in Relation to Participation in Content-Area Practices

1	construct meaning from oral presentations and literary and informational text through grade-appropriate listening, reading, and viewing
2	participate in grade-appropriate oral and written exchanges of information, ideas, and analyses, responding to peer, audience, or reader comments and questions
3	speak and write about grade-appropriate complex literary and informational texts and topics
4	construct grade-appropriate oral and written claims and support them with reasoning and evidence
5	conduct research and evaluate and communicate findings to answer questions or solve problems
6	analyze and critique the arguments of others orally and in writing
7	adapt language choices to purpose, task, and audience when speaking and writing
8	determine the meaning of words and phrases in oral presentations and literary and informational text
9	create clear and coherent grade-appropriate speech and text
10	make accurate use of standard English to communicate in grade-appropriate speech and writing

Standards 1 through 7 involve the language necessary for ELLs to engage in the central content-specific practices associated with ELA & Literacy, mathematics, and science. They begin with a focus on extraction of meaning and then progress to engagement in these practices.

Standards 8 through 10 hone in on some of the more micro-level linguistic features that are undoubtedly important to focus on, but only in the service of the other seven standards.

The ELP Standards are interrelated and can be used separately or in combination. (In particular, as shown above, Standards 8–10 support the other seven standards.) The standards do not include curriculum statements, nor do they privilege a single approach to the teaching of social and expressive communication or the teaching of grammar; instead, the standards and descriptors for each proficiency level leave room for teachers, curriculum developers, and states to determine how each ELP Standard and descriptor should be reached and what additional topics should be addressed.

*Council of Chief State School Officers. (2013). English language proficiency (ELP) standards. Washington, DC: CCSSO. Available April 21, 2015, from http://www.elpa21.org/sites/default/files/Final%204_30%20ELPA21%20Standards_1.pdf.

Module Thirteen: English Language Proficiency Levels Handout

Pre-activity 1:

Ohio is a member of the English Language Proficiency Assessment for the 21st Century (ELPA21) consortium which developed the English language proficiency assessment based on the English Language Proficiency Standards. The test administered in Ohio is the Ohio English Language Proficiency Assessment (OELPA) and is based on the Ohio English Language Proficiency Standards. The OELPA scores can be used as a general guide to understand an English learner's (EL) proficiency level at the time of testing and provides both an overall score and scores for each domain area.

A student will receive a numeric performance level for each of the four domain tests (Reading, Writing, Speaking & Listening).

Level 1 – Beginning Level

Level 2 – Early Intermediate Level

Level 3 – Intermediate Level

Level 4 – Early Advanced Level

Level 5 – Advanced

Review the following: Understanding OELPA Reports 2017-2018 (Individual Student Report sample, p. 15):

<http://education.ohio.gov/getattachment/Topics/Testing/Ohio-English-Language-Proficiency-Assessment-OELPA/2018UnderstandingOELPARReports8-13-18.pdf.aspx?lang=en-US>

*Please note that students may score at different proficiency levels for different domain areas (Reading, Writing, Speaking & Listening - see sample ISR) and this information is important to remember when working with individual students.

Discuss or determine how this information can be obtained in your district for students in your classes.

Pre-activity 2:

Review the Achievement Level Descriptors (ALD's) found on page 16 of the Understanding OELPA reports document. "Achievement level descriptors (ALDs) describe the knowledge, skills, and processes that students demonstrate at pre-determined levels of achievement for each tested grade level." (definition adapted from: <https://www.k12.wa.us/student-success/assessments/state-testing-overview/scores-and-reports/achievement-level-descriptors>)

- Locate the ALD that is appropriate to your grade level.
- Read the achievement level descriptors for Listening, Reading, Speaking and Writing for your appropriate grade level.

Discuss how knowing and understanding these levels can be used within your classroom.

Post-activity:

Now that you have reviewed the ELP Standards based on an English learner's participation related to the four domains, and have had the chance to review proficiency levels based upon domain areas and grade levels, the following document, *Instructional Guidelines and Resources for English Language Learners*, provides examples of how content-based participation goals can be set for English learners at different proficiency levels at each grade level.

Link to Instructional Guide: <http://education.ohio.gov/getattachment/Topics/Other-Resources/Limited-English-Proficiency/ELL-Guidelines/Ohio-English-Language-Proficiency-ELP-Standards/Instructional-Guide-and-Resources-for-English-Language-Learners-Dec-2015-FIN.pdf.aspx>

The charts found in the Instructional Guide document are organized in the following format:

- One of the ten ELP Standards
- Performance targets for each of the five proficiency levels based on the indicated ELP Standard (a complete list of standards by grade, domain and proficiency level can be found in the Ohio English Language Proficiency Standards: <http://education.ohio.gov/getattachment/Topics/Other-Resources/Limited-English-Proficiency/ELL-Guidelines/Ohio-English-Language-Proficiency-ELP-Standards/ELP-Content-Standards-20150824.pdf.aspx>)
- A vignette (short description of a content-based lesson or activity). The model curricula developed for Ohio's Learning Standards serve as the source for the vignette. For each grade level, there are at least two vignettes representing each of these four content areas: English Language Arts, Mathematics, Social Studies and Science. ****Vignettes are based upon model curriculum, which has been revised and therefore, the links to the specific lesson will not work. You are encouraged to refer to the vignette context (lesson overview) and match it to a similar context (lesson) in your setting.**
- Based on the indicated ELP Standard, and using the vignette as a context, participation goals for each of the five proficiency levels have been developed.
- For each vignette samples of instructional strategies and supports are provided for each of the five proficiency levels.

Locate and review the chart that is applicable to their grade level and content area. Charts begin on page 17 of the Instructional Guide document.

- **Reflect on the following questions:**
 - How does the knowledge of the information available in these resources support you as a culturally responsive educator?
 - As a culturally responsive educator, what are your next steps?
 - How do you plan for incorporating this information into your classroom?

Resources for Teaching English Learners

The following resources are not endorsed by the Ohio Department of Education but are referred to in the course videos. This list is not all inclusive but provides quick access to the resources mentioned in the videos.

¡Colorín Colorado!

A bilingual site for educators and families of English Language Learners

<http://www.colorincolorado.org/>

Iris Center – Teaching English Language Learners: Effective Instructional Practices

This module helps teachers understand second language acquisition, the importance of academic English, and instructional practices that will enhance learning for English Learners.

<https://iris.peabody.vanderbilt.edu/product/ell/> (please note that you will need to sign up for an account with IRIS to view)

Parent Teacher Home Visits

PTHV increases student and school success by building and sustaining a national network of partners who effectively implement and advance the relationship-based home-visit model of family and teacher engagement in public schools across the United States.

<http://www.pthvp.org/>

American Federation of Teachers – Share My Lesson

The premier digital platform where educators can collaborate and share standards-aligned learning resources such as lesson plans, classroom strategies and professional development webinars—at no cost.

<https://www.aft.org/education/share-my-lesson>

Racial Equity Tools

Racial Equity Tools is designed to support individuals and groups working to achieve racial equity. This site offers tools, research, tips, curricula and ideas for people who want to increase their own understanding and to help those working toward justice at every level – in systems, organizations, communities and the culture at large.

<https://www.racialequitytools.org/home>

Teaching Tolerance

Teaching Tolerance provides free resources to educators—teachers, administrators, counselors and other practitioners—who work with children from kindergarten through high school. Educators use materials to supplement the curriculum, to inform their practices, and to create civil and inclusive school communities where children are respected, valued and welcome participants.

<https://www.tolerance.org/>

Culture Crossing Guide

A community built resource for cross-cultural etiquette and understanding.

<http://guide.culturecrossing.net/index.php>

Archive of English Learner Resources – Sheltered Instruction Observation Protocol (SIOP) Webinars

The SIOP Review and Renew series supported Ohio educators who coach teachers who work with English learners. Language and learning experts Marybelle Marrero-Colon and Annie Duguay from the [Center for Applied Linguistics](#) lead participants through discussion of specific features of the Sheltered Instruction Observation Protocol (SIOP).

<https://w.taskstream.com/ts/villareal/ReviewandRenewHelpingEducatorsWorkEffectivelywithEnglishLearners>