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Why Bridge Programs?

Adult education programs have long been the places adults come to earn their High School Equivalency or to improve their basic English, reading, writing, and numeracy skills. However, adult education programs are rarely viewed as stepping stones to a pathway that allows adults to attain the post-secondary education and credentials needed to secure employment with family-sustaining wages.

National research on adult education participation show that a student who attends 100 or more hours in an adult education program with support tend to earn their High School Equivalency at a higher rate (36% versus 16% for students with fewer hours) and after several years these students earn a premium of $10,000 more a year in salary. (Source: http://sites.ed.gov/octae/2015/03/27/impact-data-on-adult-ed-program-participation/#more-2580.)

Prior to the introduction of City Colleges of Chicago Bridge and Gateway programs, less than four percent of students transitioned to the post-secondary level. Bridge students transition to college credit at a rate of 63 percent, and Gateway students earned 282 certificates and degrees between 2011 and Spring 2015.

Research from the Community College Research Center has shown that there is an added value to teaching adult learners using contextualized instruction related to students’ industry sector of choice. In 2012, City Colleges of Chicago (CCC) developed the Bridge program to provide an accelerated pathway for students to meet their goals, earn their high school equivalency (HSE), improve their workforce outcomes, and/or increase their language skills. The City Colleges of Chicago Healthcare Bridge is designed for these students.

Introduction to Daily Lesson Plans

Welcome to the Early Childhood Education Career Bridge Semester 2 Reading and Writing lessons! These lessons are designed to improve the basic reading and writing skills of High Adult Secondary Education (ASE) students who enter City Colleges of Chicago (CCC) at the tenth- to twelfth-grade literacy level, while exposing those students to key early childhood education issues that are simultaneously relevant to their lives and the field. This intensive sixteen-week course will prepare students to:

- Advance to a twelfth-grade reading level as measured by the Tests of Adult Basic Education (TABE).
- Meet Illinois ABE/ASE Content Standards for Reading; Social Studies; Science; Writing; Language, Vocabulary, and Usage; and Speaking and Listening for the National Reporting System (NRS) Levels 5 & 6. All skills for this level are correlated with GED and High School Equivalency (HSE) skills.
- Pass the Reading and Writing portions of an HSE test which is a prerequisite for financial aid for college-level courses.
- Progress to college level Early Childhood Education certificate and degree programs.

These ASE lesson plans, as well as the whole three-part Early Childhood Education Career Bridge series, were created through a collaborative project between City Colleges of Chicago and Women Employed.

Defining Bridge Programs

The Illinois Community College Board (ICCB) defines bridges as programs that prepare adults with limited academic or limited English skills to enter and succeed in credit-bearing postsecondary education and
training leading to career-path employment in high-demand, middle- and high-skilled occupations. The goal of bridge programs is to sequentially bridge the gap between the initial skills of individuals and what they need to enter and succeed in postsecondary education and career-path employment. Bridge programs must include three core elements:

- **Contextualized instruction** that integrates basic reading, math, and language skills and industry/occupation knowledge.
- **Career development** that includes career exploration, career planning, and understanding the world of work.
- **Transition services** that provide students with information and assistance to successfully navigate the process of moving to transfer or occupational programs. Services may include academic advising, tutoring, study skills, coaching, and referrals to individual support services.

**Bridge Program Student Qualifications**

The Early Childhood Education Career Bridge Semester 2 is designed for:

- ASE students who score at the 10.0 to 12.9 level on the TABE test in reading and math.
- English as a Second Language (ESL) and English Language Acquisition (ELA) students in high intermediate ESL or above who score 10.0 to 12.9 on the TABE. Note that valid TABE pre-tests (and post-tests) for the fiscal year are required in the bridge, even for ESL and ELA students.
- Highly motivated students who are interested in entering or advancing in an Early Childhood Education career and are able to devote at least 20 hours per week plus homework time for the duration of the program.

Before enrollment, City Colleges transition specialists or other trained staff members should have already talked to students about any life situations that would interfere with their ability to succeed in a bridge program, such as work schedule, lack of child care, lack of time to study and do homework outside of class, or difficulties that can arise in passing a background check. Other potential barriers include discharging current debt to the college before entering this course. Should any issues arise after classes begin, students should be referred to the transition specialist or a trained staff member who can help address them.

**Expectations of Bridge Program Students**

Through the recruitment and orientation process, students are made aware of and agree to meet the following expectations:

- Attend all classes. If a student must be absent, they must notify the instructor and request missed work.
- Arrive to class on time and stay until class ends.
- Respect instructor, classmates, and self.
- Complete all assigned work; ask questions when not sure.
- Meet with a transition specialist and college advisor and prepare to eventually transfer into a credit/career program.

**Early Childhood Education Career Bridge Structure – Bridge Semesters 1 and 2**

This Early Childhood Education Career Bridge Semester 2 Reading and Writing course is one component of the larger bridge structure which includes contextualized math instruction and incorporates a college credit class at the third level. Here is a representation of the full bridge structure.
Early Childhood Education Career Bridge

Bridge Semester 1

<table>
<thead>
<tr>
<th>(First 8 wks.)</th>
<th>(Second 8 wks.)</th>
<th>Bridge Semester 2 (16 wks.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contextualized Lang Arts – High Adult Intermediate Education 4 credits</td>
<td>Contextualized Lang Arts – Low Adult Secondary Education 4 credits</td>
<td>Contextualized Lang Arts – High Adult Secondary Education 4 credits</td>
</tr>
<tr>
<td>Computer Skills 2 credits</td>
<td>Positive Communication Skills 2 credits</td>
<td>Child Development 107 Credit Course 3 credits</td>
</tr>
</tbody>
</table>

Bridge Program Benefits to Students and to City Colleges of Chicago

During this Bridge Semester 2 Reading and Writing course, students will:

- Develop reading and writing skills for HSE attainment and college readiness using materials related to the Early Childhood Education industry.
- Engage in interactive learning, including group activities, giving and getting peer feedback, and utilizing evaluation and editing to rewrite rough drafts. Because these lessons do not call on the instructor to lecture from the front of the class, students may need time to become comfortable with the active learning activities and contextualized nature of these lessons.
- Gain experience with computers, as a number of classes will take place in a computer lab.
- Learn the skills employers want, such as communication, teamwork, dependability, problem-solving, and technology skills.

After Healthcare Career Bridge Semester 2 or another short-term ASE Level class, students should be able to pass the Reading and Writing portions of the 2014 GED or HSE test, which is a prerequisite for financial aid for college-level courses. In addition, these courses provide relevant learning experiences using Social Studies and Science materials that are also covered by GED or HSE test. After Healthcare Career Bridge Semester 2, students should also be able to score high enough on the college entrance test to enter college-level courses and earn credit toward degrees or certificates.

Additional resources available for bridge program students include:

- Free tutoring.
- Transition specialists who will meet with students to work through challenges and make future plans.
- Academic, financial aid, and/or career advisors who will help students enroll in college occupational programs and learn about available jobs in their chosen occupations.

The graphic on the following page illustrates how the Career Bridge Semester 2 program relates to college-level credentials and degrees.
**FALL AND SPRING BRIDGE STRUCTURE**

**Bridge Semester 1- High Intermediate Adult Basic Education***

First 8-Weeks | Second 8-Weeks
---|---
**Language Arts- Lesson Set #1**
Theme: Early Childhood Education Career Exploration

**Language Arts- Lesson Set #2**
Theme: Child Development and Social Emotional Learning

**Computer Skills Course**
Microsoft Office and Career Exploration

**Test-Taking Skills Course**
Take TABE Test/ Take Practice HSE Test

Certifications and/or Terminology
Food Sanitation for Culinary, Forklift Driving for TDL; Healthcare Terminology

**Math**
Decimals, Fractions, Percent/ Functions

**Bridge Semester 2- Adult Secondary Education**

First 8 Weeks | Second 8 Weeks
---|---
**Language Arts Bridge-Lesson Set #3**
Theme: The Role and Importance of Play to Healthy Early Childhood Development

HSE Prep (4 weeks):
- Reading
- Writing
- Social Studies
- Science

Math
Geometry and Measurement/ Algebra +

HSE Prep: Math

**College Credit Class**

**Fall**
- Computer Skills and Test-Taking courses
- Certifications and/or Terminology

**Spring**
- 4-week HSE preparation blocks
- College credit course offered, whenever possible

---

**Early Childhood Education Career Bridge Semester 2 Correlation with State and National Standards**

To ensure that the Bridge Semester 2 lessons meet state and national learning standards, curriculum designers compared the *Illinois ABE/ASE Content Standards* in Reading, Writing and Language, and Speaking and Listening with the NRS (National Reporting System) descriptors for the ASE level (sometimes referred to as Levels 5 & 6). This comparison was then condensed into a document called the “Condensed NRS Levels 5 & 6 Standards,” which is contained within these lessons. These condensed standards can be used to:

- Understand the relationship between each lesson and the required standards. To do this, this curriculum document lists associated standards at the beginning of each lesson.
- Connect classroom activities and assignments to formal standards that describe the skills students are learning.
- Understand the relationship between Bridge Semester 2 skill-building standards and GED/HSE skill requirements.

While specific GED/HSE skills are not explicitly incorporated in the Condensed NRS Levels 5 & 6 Standards, this framework is directly tied to the GED/HSE skills. Therefore, what students learn in the Bridge Semester 2 course lays the foundation students will need for specific GED/HSE learning covered in Bridge Semester 2.

At the end of this introduction is a condensed chart of the NRS Levels 5 & 6 skills covered in these lessons.

---

1 The *Illinois ABE/ASE Content Standards* were created to ensure students receive the same level of preparation that high schools are expected to deliver, and that they are ready for the new GED test and for college-level work.

2 As a state and federally funded program, City Colleges of Chicago’s adult education programs must use the National Reporting System in classifying instructional levels and student performance and in demonstrating student progress.
Principles for Lesson Plans

The principles that these lessons are based on include:

- All work must be grounded in students’ experience, decisions, and goals.
- Teachers must ask, not tell. Teachers should avoid having the answers. They should instead set up situations where students can pose questions, find their own answers, and propose ways to discover additional information. This will help students develop the critical skills to do well on the GED/HSE and in college-level courses.
- Classrooms must incorporate visual, auditory, and kinesthetic techniques in each activity or set of activities to make sure all students can be tuned in.
- Activities must encourage students with varying skill levels to bring their thoughts and experience to the table as equals with other students in the classroom.
- Students must work in pairs and groups to hear, see, and work with material before they present considered answers to the class.
- Students can learn to teach and learn from each other through pair and group work.
- Writing first drafts must be free of worry. Work on penmanship, spelling, and grammar must be part of the rewriting process, not the initial drafting process.
- Grammar is best learned in the context of a writing project in which students are invested in communicating something important to them.

Strategies for Building Contextualized Themes

The strategies for building contextualized themes for these ASE lessons, chosen with a focus on key GED/HSE requirements, include:

- Science and social studies topics customized to key issues in the Early Childhood Education industry.
- Primary and secondary sources used as the basis for students’ own thinking and writing.
- Strategies for reading more difficult materials including: reading for a purpose, highlighting, small group and class analysis of readings in a broader context, and vocabulary development.
- Analysis of both reading and writing in terms of thesis, evidence, and conclusions/recommendations.
- Activities designed to show how to compare points of view between readings.
- Activities designed to have students determine their own points of view and use multiple sources to support their claims.
- The Internet as a research tool to answer questions and find information that can strengthen students’ own points of view.
- Activities that show students how to outline ideas, facts, and citation materials in preparation for the 45-minute essay.
- The 45-minute essay as the basis for formal writing projects.
- Complex charts and graphs that inform or are incorporated into writing projects.
- Activities that show students how to quote sources and use statistics in persuasive writing.
- Activities that ask students to present their research and ideas in formal settings.
- Note-taking on class discussions, readings, and video presentations.
- Activities designed to develop good editors and evaluators of each other’s work.

Lesson Plan Layout

Within each of these high-interest topics, we have chosen weekly themes that culminate in a final project that will be presented in Weeks 15-16. Please see the ASE Outline on the following pages for a list of the themes and activities for this course.
## ASE Lesson Plan Outline
**Contextualized for Early Childhood Education**

<table>
<thead>
<tr>
<th>THEME</th>
<th>PURPOSES</th>
<th>READING</th>
<th>WRITING</th>
<th>PRESENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weeks 1-2:</strong> The Importance of Play</td>
<td>• Establish course goals.</td>
<td>• Videos and a podcast that present the universality and importance of play.</td>
<td>• Take organized notes on chosen on-line resources.</td>
<td>• Groups present their coordinated on-line research to give a full definition of play and its importance.</td>
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<tr>
<td></td>
<td>• Learn about controlled experiments and the importance of study finding to making an argument.</td>
<td>• A variety of on-line resources on the importance of play.</td>
<td>• Write an in-class essay that defines play and describes and cites studies that show why it is important.</td>
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<td></td>
<td>• Conduct coordinated research on play that leads to a group presentation &amp; in-class essay.</td>
<td>•</td>
<td>• Write an in-class essay on how important play is to learning, citing studies from course readings.</td>
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<tr>
<td><strong>Weeks 3-4:</strong> The Science of Play</td>
<td>• Understand the effect of play on the brain.</td>
<td>• Watch videos &amp; listen to a podcast describing studies on brain science and play.</td>
<td>• Write an in-class essay on the impact of poverty on access to play.</td>
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<tr>
<td></td>
<td>• Describe studies and findings on play in relation to thesis statements.</td>
<td>• Read articles that describe studies on play.</td>
<td>• Groups present portions of a major report on the impact of poverty on access to play.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rate thesis statements about the importance of play on a continuum.</td>
<td>• Read articles about the health benefits of play.</td>
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<tr>
<td><strong>Weeks 5-6:</strong> The Impact of Poverty on Play and Language Development</td>
<td>• Investigate the reasons why low-income Americans don't have equal access to play.</td>
<td>• Read a report that details the impact of poverty on the opportunities for play.</td>
<td>• Write an in-class essay on the Word Gap and how preschools can address the problem.</td>
<td>• Groups report out on Word Gap articles.</td>
</tr>
<tr>
<td></td>
<td>• Understand the link between play and language development.</td>
<td>• Watch videos on the link between language development and play.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Understand why the Word Gap exists for low-income Americans.</td>
<td>• Read articles and watch videos on the Word Gap and how programs in Chicago are addressing it.</td>
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<tr>
<td><strong>Weeks 7-8:</strong> The Politics of Play</td>
<td>• Understand that there are two sides to the debate about play to understand why there is less play in school than ever.</td>
<td>• Read and watch videos about why some people are against play and how it is affecting schools.</td>
<td>• Write an in-class essay on the “play” debate and the values that drive each side of the debate.</td>
<td>• Present with a partner on the two sides of the debate about play.</td>
</tr>
<tr>
<td></td>
<td>• Understand why it is so important for society to raise creative children.</td>
<td>• Read about differences in values between those focused on performance &amp; those focused on creativity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>THEME</td>
<td>PURPOSES</td>
<td>READING</td>
<td>WRITING</td>
<td>PRESENTATION</td>
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<td>-------------------------------</td>
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<td>----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Weeks 9-10: The Problem of Childhood Obesity | • Identify facts about childhood obesity.  
  • Identify causes or obesity and its effect on learning, development, and health. | • Read articles and watch videos on the facts and the many impacts of childhood obesity. | • Write an in-class essay on how obesity harms children and how preschools can address the problem. | • Groups report on facts on childhood obesity. |
| Weeks 11-12: The Impact of Outdoor Play on Health | • Understand the powerful effect of outdoor play on health.  
  • Identify practices for heightening preschool children’s environmental awareness. | • Read a major report on the positive effects of outdoor play on health.  
  • Read about ways to promote environmental awareness in the preschool classroom. | • Organize notes in preparation for the final project. | • Groups present their analyses of portions of longer reading. |
| Weeks 13-14: Final Project Research and Writing | • Complete a final project that utilizes classroom readings on obesity, health, and outdoor play and on-line research to answer a chosen research question. | • Develop a plan for completing the final project.  
  • Create a detailed outline for the final project, identify additional readings, and select appropriate quotes. | • Complete a final project that cites reading used in the classroom and readings found on-line based on a chosen set of research questions. | |
| Weeks 15-16: Final Project Presentations | • Students formally present their final projects and classmates provide feedback. |                                                                                   |                                                                                   | • Present final projects. |
Assumptions about Program Delivery

The lesson plan activity instructions contain full descriptions of the activities down to what questions teachers can ask and what information should be recorded on the board. These instructions are intended to help the teacher understand the intention and flow of the activity. However, they are not intended to be a script and in fact have more detail than can be brought into the classroom. To adapt the lesson plans to a useable outline, we suggest that teachers use the following process for preparing for each day:

- Familiarize yourself with the materials and issues in whole units before teaching them.
- Read all assigned material; view all videos; work through all charts and graphs so that you understand all that is to be presented.
- Go through all the activities to make sure you can answer any study questions or would feel comfortable leading any of the activities presented there.
- Highlight the specific portions of the activity that will help you remember the full flow of the activity.
- Make adjustments to the size or the emphasis of each activity to best fit the needs of your class.
- Bring a highlighted outline or create a separate outline that can remind you of how to implement the activity and will be simple for you to follow.
- Prepare all handouts and projection materials so presentation of each activity can go smoothly.

Although suggested time durations for each activity are included, the time devoted to any given activity in the daily lesson plans may vary. Teachers must decide how to adapt the activities to meet the needs of their actual students. The following guidelines should help teachers decide how to customize the curriculum for their own classrooms:

- Select and use grammar materials as needed to support student essay editing.
- Include short vocabulary quizzes as needed to ensure that students learn new words that they select from the readings. Some classes will need more work on vocabulary than others.
- Ask that students rewrite at least three of the course essays using the evaluation materials they have collected from fellow students and the teacher.
- Use these materials in the order they are presented. The activities in this curriculum build on one another and lead to subsequent discussions, readings, and writing assignments. Because the lesson plans have a cumulative structure, it is important that teachers familiarize themselves with the materials and issues in whole units before teaching them.
- Make decisions to modify, eliminate, or change lessons carefully. While teachers can adapt these lessons for their own students, they should do so with caution because of the cumulative structure of these lessons; decisions to modify one activity could result in students being unprepared for later activities. Therefore, it is important that teachers familiarize themselves with the materials and issues in whole units before modifying a lesson or activity.

This document begins with the condensed NRS standards for reference. Each section that follows presents the full curriculum for each week, including the standards the week covers and daily lesson plans that include activities and worksheets.

City Colleges instructors and staff with questions about the design of the bridge program or customization of the lessons should contact Lauren Hooberman, Bridge Director, City Colleges of Chicago, at lhooberman@ccc.edu or Stephanie Sommers, Curriculum Specialist, at ssommers11@gmail.com.
KEY IDEAS AND DETAILS

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.
   a. Comprehend explicit details and main ideas in text.
   b. Summarize details and ideas in text.
   c. Make sentence level inferences about details that support main ideas.
   d. Infer implied main ideas in paragraphs or whole texts.
   e. Determine which detail(s) support(s) a main idea.
   f. Identify a theme, or identify which element(s) in a text support a theme.
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text.

3. Analyze how individuals, events, and ideas develop and interact over the course of a text.
   a. Order sequences of events in texts.
   b. Make inferences about plot/sequence of events, characters/people, settings, or ideas in texts.
   c. Analyze relationships within texts, including how events are important in relation to plot or conflict; how people, ideas, or events are connected, developed, or distinguished; how events contribute to theme or relate to key ideas; or how a setting or context shapes structure and meaning.
   d. Infer relationships between ideas in a text (e.g., an implicit cause and effect, parallel, or contrasting relationship).
   e. Analyze the roles that details play in complex literary or informational texts.

CRAFT AND STRUCTURE

4. Interpret words and phrases that appear frequently in texts from a wide variety of disciplines, including determining connotative and figurative meanings from context and analyzing how specific word choices shape meaning or tone.
   a. Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context.
   b. Analyze how meaning or tone is affected when one word is replaced with another.
   c. Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author’s intent to convey information or construct an argument.

5. Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.
   a. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.
   b. Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).
   c. Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author’s purpose.
   d. Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose.
6. Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.
a. Determine an author’s point of view or purpose of a text.
b. Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and responds to conflicting evidence or viewpoints.
c. Infer an author’s implicit as well as explicit purposes based on details in text.
d. Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose (e.g., analogies, enumerations, repetition and parallelism, juxtaposition of opposites, qualifying statements).

INTEGRATION OF KNOWLEDGE AND IDEAS

7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.
a. Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author’s argument.
b. Compare two passages that present related ideas or themes in different genres or formats (e.g., a feature article and an online FAQ or fact sheet) in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact when comparing.
c. Compare two passages that present related ideas or themes in different genres or formats in order to synthesize details, draw conclusions, or apply information to new situations.

8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
a. Delineate the specific steps of an argument the author puts forward, including how the argument’s claims build on one another. Identify specific pieces of evidence an author uses in support of claims or conclusions.
b. Evaluate the relevance and sufficiency of evidence offered in support of a claim.
c. Distinguish claims that are supported by reasons and evidence from claims that are not.
d. Assess whether the reasoning is valid; identify fallacious reasoning in an argument and evaluate its impact.
e. Identify an underlying premise or assumption in an argument and evaluate the logical support and evidence provided.

9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
a. Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline).
b. Compare two passages in similar or closely related genres that share ideas or themes, focusing on similarities and/or differences in perspective, tone, style, structure, purpose, or overall impact.
c. Compare two argumentative passages on the same topic that present opposing claims (either main or supporting claims) and analyze how each text emphasizes different evidence or advances a different interpretation of facts.
1. Drawing Conclusions and Making Inferences
   a. Determine the details of what is explicitly stated in primary and secondary sources and make logical inferences or valid claims based on evidence.
   b. Cite or identify specific evidence to support inferences or analyses of primary and secondary sources, attending to the precise details of explanations or descriptions of a process, event, or concept.

2. Analyzing Events and Ideas
   a. Identify the chronological structure of a historical narrative and sequence steps in a process.
   b. Analyze in detail how events, processes, and ideas develop and interact in a written document; determine whether earlier events caused later ones or simply preceded them.
   c. Analyze cause-and-effect relationships and multiple causation, including action by individuals, natural and societal processes, and the influence of ideas.
   d. Compare differing sets of ideas related to political, historical, economic, geographic, or societal contexts; evaluate the assumptions and implications inherent in differing positions.

3. Reading and Interpreting Graphs, Charts and Other Data Representation
   a. Interpret, use, and create graphs (e.g., scatterplot, line, bar, circle) including proper labeling. Predict reasonable trends based on the data (e.g., do not extend trend beyond a reasonable limit).
   b. Represent data on two variables (dependent and independent) on a graph; analyze and communicate how the variables are related.
   c. Distinguish between correlation and causation.

4. Measuring the Center of a Statistical Dataset
   a. Calculate the mean, median, mode, and range of a dataset.

5. Interpreting Meaning of Symbols, Words and Phrases
   a. Determine the meaning of words and phrases as they are used in context, including vocabulary that describes historical, political, social, geographic, and economic aspects of social studies.

6. Analyzing Purpose and Point of View
   a. Identify aspects of a historical document that reveal an author’s point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts).
   b. Identify instances of bias or propagandizing.
   c. Analyze how a historical context shapes an author’s point of view.
   d. Evaluate the credibility of an author in historical and contemporary political discourse.
   e. Evaluate authors’ differing points of view on the same historical event or issue by assessing the authors’ claims, reasoning, and evidence.

7. Integrating Content Presented in Different Ways
   a. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.
   b. Analyze information presented in a variety of maps, graphic organizers, tables, and charts; and in a variety of visual sources such as artifacts, photographs, and political cartoons.
   c. Translate quantitative information expressed in words in a text into visual form (e.g., table or chart); translate information expressed visually or mathematically into words.

8. Evaluating Reasoning and Evidence
   a. Distinguish among fact, opinion, and reasoned judgment in a primary or secondary source document.
   b. Distinguish between unsupported claims and informed hypotheses grounded in social studies evidence.

9. Analyzing Relationships between Texts
   a. Compare treatments of the same social studies topic in various primary and secondary sources, noting discrepancies between and among the sources.
CONDENSED SCIENCE STANDARDS FOR NRS LEVELS 5 & 6

1. Determining Details and Making Inferences
   a. Cite specific textual evidence to support inferences, conclusions or analyses of technical texts, attending to the precise details of explanations or descriptions of a process, event, phenomenon, or concept.
   b. Understand and explain the basic features of a scientific hypothesis or investigation and verify claims made based on evidence provided.

2. Determining Central Ideas, Hypotheses, and Conclusions
   a. Determine the central ideas or conclusions of a stimulus.
   b. Identify the hypotheses, conclusions, and data in a technical text, verifying the evidence and data when possible and corroborating or challenging conclusions with other sources of information.
   c. Provide an accurate summary of the stimulus.
   d. Develop valid (testable, objective) questions, evaluate whether questions are testable and objective, and refine hypotheses.
   e. Make evidence-based generalizations based on data and results.
   f. Draw conclusions based on scientific evidence, and indicate whether further information is needed to support a specific conclusion or to discriminate among several possible conclusions.

3. Analyzing events and ideas
   a. Determine which explanation best accords with evidence.
   b. Analyze in detail a series of events or results described in a stimulus; determine whether earlier events/results caused later ones or are simply correlated with later events/results.
   c. Understand and analyze basic processes, methods, and tools in scientific concepts, theories, and designs of simple scientific experiments and investigations.
   d. Analyze key issues and assumptions in scientific models, theories, or experiments.

4. Interpreting Meaning of Symbols and Terms
   a. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context.
   b. Identify and interpret independent and dependent variables in investigations that have controls.
   c. Interpret and apply scientific terms and concepts, formulas, and other symbolic representations of data based on research provided.

5. Analyzing Structures
   a. Analyze the structure of the relationships among concepts in a stimulus, including relationships among key terms and concepts (e.g. force, friction, reaction force, energy).
   b. Determine how the value of one variable changes as the value of another variable changes in a complex data presentation.
   c. Predict the results of an additional trial or measurement in an experiment.
   d. Predict the future state of a model or system based on given information.

6. Integrating Content Presented in Diverse Ways
   a. Integrate quantitative or technical information expressed in words in a stimulus with a version of that information expressed visually (e.g. in a flowchart, diagram, model, graph, or table).
   b. Translate quantitative or technical information expressed in words in a stimulus into visual form (e.g. a table or chart) and translate information expressed visually or mathematically (e.g. in an equation) into words.
   c. Use numerical data to describe and compare experimental processes and results that are described in stimulus.
   d. Record and organize information in tables and graphs to communicate given scientific information, and identify relationships they reveal.
7. Evaluating Reasoning and Evidence
   a. Distinguish among facts, reasoned judgment based on research findings, and speculation in a stimulus.
   b. Assess the extent to which the reasoning and evidence in a stimulus support the author’s claim or recommendation for solving a technical problem.
   c. Identify discrepant results and identify possible sources of error or uncontrolled conditions.
   d. Evaluate whether information (data, model) supports or contradicts a hypothesis, prediction, or conclusion, and why.
   e. Design an experiment to test a given hypothesis.
   f. Define, predict, analyze, and alter experimental designs to reduce sources of error.

8. Analyzing Relationships Between Sources
   a. Compare findings presented in a stimulus to those from other sources, noting when the findings support or contradict other explanations or accounts.
   b. Identify strengths and weaknesses among one or more models or experiments.
   c. Identify similarities and differences between models and experiments.
   d. Determine which models or experiments would be supported or weakened by new data or evidence.

9. Reading and interpreting graphs, charts and other data representations
   a. Interpret, use, and create graphs (e.g. scatterplot, line, bar, circle) including proper labeling. Predict reasonable trends based on the data (e.g. do not extend trend beyond a reasonable limit).
   b. Represent data on two variables (dependent and independent) on a graph. Analyze and communicate how the variables are related.
   c. Describe patterns in a dataset such as clustering, outliers, positive/negative association, and linear/nonlinear association and describe their implications.
   d. Distinguish between correlation and causation (i.e. correlation does not imply causation)

10. Measuring the center of a statistical dataset
    a. Calculate the mean, median, mode, and range of a dataset.
    b. Calculate the average, given the frequency counts of all the data values.
    c. Calculate a weighted average and understand the effect of outliers.

11. Determining sample space and using probability models to interpret data
    a. Use counting techniques to solve problems and determine combinations and permutations.
    b. Determine the probability of simple and compound events.
    c. Recognize and explain probability in context.
    d. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest.
    e. Determine the probability of mutually exclusive, dependent, and independent events.
    f. Predict changes in probability based on changes in context.

12. Understanding and applying the appropriate tools, techniques and units in scientific investigations
    a. Identify and use proper measurement tools for each type of measurement.
    b. Identify, use, and describe proper units for each type of measurement (e.g. centimeters for length).
    c. Convert between metric units and between metric and non-metric systems of measure given data and conversion factors.
CONDENSED WRITING STANDARDS FOR NRS LEVELS 5 & 6

TYPES AND PURPOSES

1. Write arguments from a prompt in a formatted manner of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
   a. Introduce precise, knowledgeable claims, establish the significance of the claims, distinguish the claims from alternate or opposing claims, and create an organization that logically sequences claims, counterclaims, reasons, and evidence.
   b. Develop claims and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.
   c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claims and reasons, between reasons and evidence, and between claims and counterclaims.
   d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
   e. Provide a concluding statement or section that follows from and supports the argument presented.

2. Write informative/explanatory texts from a prompt in a formatted manner to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
   a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
   b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.
   c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.
   d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.
   e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
   f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

3. Write narratives from a prompt in a formatted manner to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.
   a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.
   b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.
   c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution).
   d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.
   e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
PRODUCTION AND DISTRIBUTION OF WRITING

4. Produce clear, varied, coherent, consistent, and engaging writing in which the development, organization, style, tone, and voice are appropriate to task, purpose, and audience. Write an analysis based on a given prompt.
   a. Differentiate between example and reason when given a writing prompt.
   b. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or evaluating and trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

5. Write internal and external business correspondence that conveys and/or obtains information effectively in order to communicate with other employees to clarify objectives and to communicate with customers and employees to foster positive relationships.

6. Use technology, including the Internet, to research, produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

RESEARCH TO BUILD AND PRESENT KNOWLEDGE

7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem.
   a. Narrow or broaden the inquiry when appropriate.
   b. Synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
   c. Gather relevant information from multiple authoritative print and digital sources using advanced searches effectively.
   d. Assess the strengths and limitations of each source in terms of task, purpose, and audience.
   e. Integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
   f. Draw evidence from literary or informational texts to support analysis, reflection, and research.

8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

RANGE OF WRITING

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific, purposes, and audiences.
CONDENSED LANGUAGE, VOCABULARY, AND USAGE STANDARDS FOR NRS LEVELS 5 & 6

CONVENTIONS OF STANDARD ENGLISH

1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.

   a. Edit to correct errors involving frequently confused words and homonyms, including contractions (passed, past; two, too, to; there, their, they’re; knew, new; it’s its).
   
   b. Edit to correct errors in straightforward subject-verb agreement.
   
   c. Edit to correct errors in pronoun usage, including pronoun-antecedent agreement, unclear pronoun references, and pronoun case.
   
   d. Edit to eliminate non-standard or informal usage (e.g., correctly use try to win the game instead of try and win the game).
   
   e. Edit to eliminate dangling or misplaced modifiers or illogical word order (e.g., correctly use to almost meet all requirements instead of to almost meet all requirements.)
   
   f. Edit to ensure parallelism and proper subordination and coordination.
   
   g. Edit to correct errors in subject-verb or pronoun antecedent agreement in more complicated situations (e.g., with compound subjects, interceding phrases, or collective nouns).
   
   h. Edit to eliminate wordiness or awkward sentence construction.
   
   i. Edit to ensure effective use of transitional words, conjunctive adverbs, and other words and phrases that support logic and clarity.

2. Demonstrate command of the conventions of standard English capitalization and punctuation when writing.

   a. Edit to ensure correct use of capitalization (e.g., proper nouns, titles, and beginnings of sentences).
   
   b. Edit to eliminate run-on sentences, fused sentences, or sentence fragments.
   
   c. Edit to ensure correct use of apostrophes with possessive nouns.
   
   d. Edit to ensure correct use of punctuation (e.g., commas in a series or in appositives and other non-essential elements, end marks, and appropriate punctuation for clause separation).

KNOWLEDGE OF LANGUAGE

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style.

   a. Vary syntax for effect, consulting references for guidance as needed.
   
   b. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

VOCABULARY USAGE

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies.

   a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.
   
   b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable).
   
   c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.
   
   d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

   a. Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text.
   
   b. Analyze nuances in the meaning of words with similar denotations.
6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

a. Demonstrate use of content, technical concepts, and vocabulary when analyzing information and following directions.
CONDENSED SPEAKING AND LISTENING STANDARDS
FOR NRS LEVELS 5 & 6

COMPREHENSION AND COLLABORATION

1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.
   a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
   b. Work with peers to promote civil, democratic discussions and decision-making; set clear goals and deadlines; and establish individual roles as needed.
   c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.
   d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.

2. Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

3. Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.

4. Demonstrate active listening skills.
   a. Interpret verbal and non-verbal cues and behaviors to enhance communication.

5. Comprehend key elements of oral information for:
   a. Cause and effect.
   b. Comparison/contrast.
   c. Conclusion.
   d. Context.
   e. Purpose.
   f. Charts, tables, and graphs.
   g. Evaluation/critiques.
   h. Mood.
   i. Persuasive text.
   j. Sequence.
   k. Summaries.
   l. Technical subject matter.

6. Identify and evaluate oral information for:
   a. Conclusions/solutions.
   b. Fact/opinion.
   c. Assumption.
   d. Propaganda.
   e. Relevancy.
   f. Accuracy/sufficiency.
   g. Appropriateness/clarity.
   h. Validity.
   i. Relationships of ideas.

7. Predict potential outcomes and/or solutions based on oral information regarding trends.
PRESENTATION OF KNOWLEDGE AND IDEAS

8. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning; alternative or opposing perspectives are addressed; and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.

9. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

10. Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.
   a. Present formal and informal speeches including discussion, information requests, interpretation, and persuasion.
<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Complete an ice-breaker and articulate student goals.</td>
<td>SPEAKING AND</td>
<td>1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics, texts, and issues appropriate to skill level, building on others’ ideas and expressing their own clearly.</td>
</tr>
<tr>
<td></td>
<td>LISTENING</td>
<td>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.</td>
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<td>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.</td>
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<td>c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.</td>
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<td>d. Pose questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.</td>
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<td>e. Pose questions that connect the ideas of several speakers and respond to others’ questions and comments with relevant evidence, observations, and ideas.</td>
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<td>f. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.</td>
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<td></td>
<td>g. Acknowledge new information expressed by others and, when warranted, modify their own views.</td>
</tr>
<tr>
<td>• Introduce the importance of play.</td>
<td>READING</td>
<td>7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.</td>
</tr>
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<td></td>
<td></td>
<td>a. Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author’s argument.</td>
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<td>9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline).</td>
</tr>
<tr>
<td>• Reading homework.</td>
<td>READING</td>
<td>1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.</td>
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<tr>
<td></td>
<td></td>
<td>a. Summarize what has been read.</td>
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<td>b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.</td>
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<td></td>
<td>c. Identify the implied main idea and supporting details from an instructional level passage.</td>
</tr>
<tr>
<td>• Writing homework.</td>
<td>WRITING</td>
<td>2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</td>
</tr>
</tbody>
</table>
THEME: The Importance of Play

OBJECTIVES

- Complete an ice-breaker and articulate student goals.
- Introduce the course goals and compare to student goals.
- Introduce the importance of play.

MATERIALS

Activity #2:
- Handout (attached): Make one copy for each student. Early Childhood Education Career Bridge Semester 2 Reading and Writing: Goals and Course Features
- Handout (attached): Make one copy for each student. Self-Assessment for Early Childhood Education Bridge Semester 2

Activity #3:
- Classroom Resource: A few squishy balls—different sizes if possible.
- Video: Animals at Play https://www.dropbox.com/l/scl/AAA1X3r-JkSThcJyxKcAeuAqsknliRnNtgg (running time: 01:12)
- Video: Goat Kids at Play! https://www.youtube.com/watch?v=zATtp3dcCyU (running time: 0:35)
- Video: Dr. Stuart Brown the National Institute of Play on the Importance of Play https://www.youtube.com/watch?v=xPM8C1_Cvxk (running time: 03:57)
- Online Resource: How Does Play Shape Our Development?: Listen to the Story – Podcast (Choose the Listen to the Story podcast link on this page, not the video.) http://www.npr.org/2015/03/27/395065944/how-does-play-shape-our-development (running time: 11:59)
- Video: How Does Play Shape Our Development?: Play Is More Than Just Fun (Students may wish to listen to this longer video on the same webpage on their own time.) http://www.npr.org/2015/03/27/395065944/how-does-play-shape-our-development (running time: 26:30)

HOMEWORK:

ACTIVITY #1: Ice-breaker: Articulate Student Goals – 30 minutes

- Welcome students to the Early Childhood Education Bridge Semester 2 Reading and Writing Course and tell them the course will be focused on indoor and outdoor play and how it can positively impact child development and health. The course will require lots and lots of reading, note taking, writing, regular journaling to get their ideas out concerning class topics, five essays written in class based on notes and outlines prepared before hand, and a final research project to be written and presented. This course will focus on using important ideas from what they read to support their own thinking. These skills are key to both success on the GED/HSE and in college.
• Introduce yourself and explain how and why you are a strong and supportive teacher.

• Write the following questions on the board:
  o What did you achieve in Bridge Semester 1?
  o What did you most enjoy?
  o What do you want to achieve in Bridge Semester 2?

• Set up the board to record student goals in three categories: academic goals, career goals, and personal goals.

• Put students into pairs and have them take turns answering the three questions above as they prepare to introduce each other to the class. They can:
  o Use the questions to interview each other.
  o Ask additional questions to better understand the details.

• Have students introduce their partner by answering the three questions on the board. Write students’ goals in the appropriate categories. If a goal is stated more than one time, make checks next to it for each student that has that goal.

• After each person has been introduced, ask students if they have thought of other goals they would like to add to the lists. Add these to the appropriate categories on the board.

• Ask the class if there are any general statements they can make about the goals of the students in this class.

Activity #2: Compare Student Goals to Formal Course Goals – 40 minutes

• Tell students they are now going to compare the goals they have identified on the board with the formal written goals of the course.

• Pass out the Early Childhood Education Career Bridge Semester 2 Reading and Writing: Goals and Course Features attached to this lesson.

• Read each bullet on the handout aloud. For each, ask: Is this item already on the list of student goals on the board?
  o If yes, put a star next to the item on the board.
  o If no, ask, “What category does this item go in?” and write the item in the appropriate category.

• When all the course goals have been reviewed, ask:
  o How do the course goals compare to class goals?
  o How do you think this course will help you meet your goals?

• Pass out the Self-Assessment for Early Childhood Education Bridge Semester 2. Tell students that you want to use these self-assessments for Bridge Semester 2 like they did in Bridge Semester 1. Then, ask:
  o What were the rules we made for Bridge Semester 1 regarding:
    ▪ Punctuality?
    ▪ Attendance?
    ▪ Homework completion?
    ▪ Teamwork?
    ▪ Write these rules on the board.
  o Were these rules fair and useful or do we want to amend them for this class?
    ▪ Get students’ comments and recommendations.
    ▪ Amend the rules by consensus.
  o What student support strategies did we use in Bridge Semester 1?
    ▪ Were these successful?
    ▪ What might we do differently in this class to make sure as many students as possible are successful?
  o Which kinds of goals did you have for yourselves in Bridge Semester 1? Write these on the board.
  o Which goals did you meet? And, which goals helped you be successful in this class? Highlight these.
• Tell students to fill in the goal section of the “Self-Assessment” with goals that will have an impact on their success. Students should make sure that the goals are specific.

• Go round-robin to have each student read two goals that they think will make them successful. Encourage students to predict how many GED/HSE tests they think they will pass by the end of the semester. Help students make their goals as specific as needed.

ACTIVITY #3: Introduce the Importance of Play – 50 minutes

• Tell students that they are going to be doing a lot of studying of play this semester.

• Throw a squishy ball to one of the students and say:
  o Quick, quick, do something new with it!
  o Now pass it to someone new!

• Toss out another squishy ball and repeat the commands for both balls at the same time.

• Repeat this until the ball has been tossed around the room to everyone.

• When the game is over, ask:
  o What happened to the class when we played this little game?
  o How did people feel?
  o How did people express themselves?
  o How did people interact?
  o Any different than the way class usually feels?
  o Are you getting any ideas about why play may be important? What are they?

• Next, have students find a new partner, think of a short game they played as a kid and share it with one another.

• Tell student pairs that they have three minutes to choose a quick game and play it with each other.

• After students have played their games, ask pairs:
  o What did you play?
  o What did you have to talk about before you got started?
  o What were some of the things you had to decide before you got started?
  o How did the two of you need to interact?
  o What is interesting about the play situation?

• Ask the whole class:
  o Who in the world plays?
  o Who doesn’t play?
  o Why do you think people play?
    ▪ Write student answers on the board.

• Watch the Animals at Play and Goat Kids at Play! and answer these three questions again.
  o Who in the world plays?
  o Who doesn’t play?
  o Why do you think people play?
    ▪ Write student answers on the board.

• Watch Dr. Stuart Brown the National Institute of Play on the Importance of Play.
  o Based on this video, what do you think is the importance of play?
  o What does this cross-species play tell us about the way all species are wired?
  o Why does it start when people and animals are young?
  o Why is play so universal?
  o Why does he say depression is the opposite of play when most of us think of work as the opposite of play?

• Prepare for listening to the How Does Play Shape Our Development?: Listen to the Story by writing the following directions on the board: Take notes on:
  o Stuart Brown’s research on play.
  o The possible brain science of play.
  o Studies with animals about play.

• Listen to the How Does Play Shape Our Development?: Listen to the Story podcast. To do this:
Click on the “How Does Play Shape Our Development” link above.
Click on the “Listen to the Story” arrow near the top of the page.
  - The entire Stuart Brown TED talk is also on this page. Because it is over 25 minutes long, recommend that students listen to this longer talk on their own time.

- After the podcast ask: Why does Stuart Brown think play is so important?
- Tell students to use their notes to answer this question.

**HOMEWORK**

**JOURNAL WRITING:** Have students answer the following questions in their journals:
- What were some of the most important kinds of play you did when you were young. How about as an adult?
- What do you think has been the impact of play on your life?

**TEACHER NOTE #1:** Tell student that they will have a journal writing assignment as homework every night. In order to do journal writing they will need to:
  - Have a notebook they can write in with standard-sized lined paper.
  - They will need to write at least two pages on the homework journal question.
  - Their writing does not need to be composed; they just need to write what comes to their mind naturally. They do NOT need to worry about spelling, vocabulary, or penmanship. They should listen for that voice in their heads and just keep writing.
  - No one will read their journal work. They will be required to show you, however, that they have filled up the required number of pages.
  - Each journal writing exercise will ask students to write about something that will be needed for each formal paper. Thus, the thinking students do in their journals will make it easier to do their formal writing assignments.
  - The point of journal writing is to find out what they have to say on the topics being covered and also to learn to enjoy writing so that they can become independent thinkers—the key to success in these classes, on the GED/HSE, and in college.

**READ:** Have students read, *What Is a Controlled Experiment?* and underline those parts of the article that will help you explain the experiment examples in terms of control group and variables.

**TEACHER NOTE #2:** Remind students to bring both of the articles and their journals to class for the next lesson.
Early Childhood Education Career Bridge Semester 2: Goals and Course Features

ACADEMIC GOALS:

Become College Ready:
- Read longer and more complex articles that utilize experimental study results to build arguments significant to the Early Childhood Education field.
- Continue to use journal writing to connect ideas from readings to your own ideas.
- Use the Internet as a research tool to answer specific questions for a final research project.
- Learn to take good organized notes on your classroom readings and internet research.
- Learn to cite and quote sources that are significant to your own ideas.
- Take your first college-level course while working toward your GED/High School Equivalency (HSE).

Begin Passing GED/HSE tests:
- Improve your critical thinking skills in reading, writing, social studies and science for the GED/HSE test.
- Understand the Scientific Method and how studies in the social studies and science fields are constructed.
- Become skilled at understanding studies in the social sciences field and use their findings in your own arguments. This skill is key to both the social studies and science GED/HSE tests.
- Apply your skills learned in class to the Practice GED/HSE test, GED/HSE-specific materials in reading, writing, social studies, and science.
- Practice the 45-minute essay in-class regularly to prepare for the GED/HSE.

CAREER GOALS:
- Explore topics that are directly relevant to Early Childhood Education careers.
- Learn teamwork skills through class pairings and group work that are critical to good performance in the workplace.
- Learn more about specific preschool practices that will insure that children get enough indoor and outdoor play to develop to be creative, independent thinkers and doers.

Additional Course Descriptors:
- There are five essay assignments and a final research project for this class.
- The themes for this class are organized into two parts:
  - **Part 1** focuses on reading and understanding research in social studies that covers:
    - The definition of play
    - The importance of play
    - Brain science and play
    - The politics of play in the current academic climate.
  - **Part 2** starts with looking at the problem of childhood obesity and then focuses on a research project that will incorporate findings from classroom readings and Internet research. The three research topics students can choose from are:
    - The health benefits of outdoor play.
    - The impact of childhood obesity on learning.
    - The impact of poverty on childhood obesity and on long-term health.

Keep all of your reading assignments in a notebook. These reading assignments should be kept in order so that you can go back over them for review and use them in your final project.

Take careful notes on the readings and videos to use this material for your final project as well. You will get lots of practice and assistance with how to take notes that you can use as part of your thinking.

Have a journal that you bring to class and take home for journaling. Also, you can use your journal when you are trying to think through new ideas stimulated by your class work. These journal entries will also be very useful for the final project.
## Self-Assessment for Early Childhood Education Bridge Semester 2

### Goal Assessment

Write in your goals and provide per week rating:
1–Poor, 2–Satisfactory, 3–Good, 4–Excellent

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What Is a Controlled Experiment?

Adapted and paraphrased from original source: http://chemistry.about.com/od/scientificmethod/f/What-Is-A-Controlled-Experiment.htm

Original author: Anne Marie Helmenstine, Ph.D.

Question: What Is a Controlled Experiment?
One of the most common types of experiment is a controlled experiment. Here is a look at what a controlled experiment is and why this type of experiment is so popular in science.

Answer: A controlled experiment is one in which everything is held constant except for one variable. Usually a set of data is taken for a control group, which is commonly the normal or usual state, and one or more other groups are examined, where all conditions are identical to the control group and each other except this one variable. Sometimes it's necessary to change more than one variable, but all of the experimental conditions will be controlled so that only the variables being examined change and the amount or way they change is measured.

Example of a Controlled Experiment
Let's say you want to know if type of soil affects how long it takes a seed to germinate. You decide to set up a controlled experiment to answer the question. You might take five identical pots, fill each with a different type of soil, plant bean seeds in each pot, place the pots in a sunny window, water them, and measure how long it takes for the seeds in each pot to sprout. This is a controlled experiment because your goal is to keep every variable constant except the type of soil you use. You control these things!

Why Controlled Experiments Are Important
The big advantage of a controlled experiment is you can eliminate much of the uncertainty about your results. If you couldn't control each variable, you might end up with a confusing outcome. For example, if you planted different types of seeds in each of the pots, trying to determine if soil type affected germination, you might find some types of seeds germinate faster than others. You wouldn't be able to say, with any degree of certainty, that the rate of germination was due to the type of soil! Or, if you had placed some pots in a sunny window and some in the shade or watered some pots more than others, you could get mixed results. The value of a controlled experiment is that it yields a high degree of confidence in the outcome.

Are All Experiments Controlled?
No, they are not. It's still possible to obtain useful data from uncontrolled experiments, but it's harder to draw conclusions based on the data. An example of an area where controlled experiments are difficult is human testing. Say you want to know if a new diet pill helps with weight loss. You can collect a sample of people, give each of them the pill, and measure their weight. You can try to control as many variables as possible, such as how much exercise they get or how many calories they eat. However, you will have several uncontrolled variables, which may include age, gender, genetic predisposition toward a high or low metabolism, how overweight they were before starting the test, whether they inadvertently eat something that interacts with the drug, etc. Scientists try to record as much data as possible when conducting uncontrolled experiments so they can see additional factors that may be affecting their results. Although it is harder to draw conclusions from uncontrolled experiments, new patterns often emerge that would not have been observable in a controlled experiment. For example, you may notice the diet drug seems to work for female subjects, but not for male subjects. This may lead to further experimentation and a possible breakthrough. If you had been able to perform a controlled experiment, perhaps only on male clones, you would have missed this connection.
<table>
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<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
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<tr>
<td>Discuss experiences with play and define controlled experiments.</td>
<td>LANGUAGE/READING</td>
<td>LANGUAGE</td>
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<td>4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies.</td>
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<td>a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.</td>
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<td>b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable).</td>
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<td>c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.</td>
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<td>d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).</td>
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<td>6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</td>
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<td>a. Demonstrate use of content, technical concepts and vocabulary when analyzing information and following directions.</td>
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<td>1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.</td>
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<td>a. Summarize what has been read.</td>
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<td>b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.</td>
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<td>c. Identify the implied main idea and supporting details from an instructional level passage.</td>
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<td>d. Identify cause and effect implied in a paragraph.</td>
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<td>f. Cite several pieces of textual evidence that most strongly support analysis of what the text says explicitly as well as inferences drawn from the text; predict probable outcomes from knowledge of events obtained from a reading selection.</td>
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<td>Research articles to come up with a definition of play.</td>
<td><strong>WRITING</strong></td>
<td>4. Use technology, including the Internet, to research, produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.</td>
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<td>7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem.</td>
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<td>a. Narrow or broaden the inquiry when appropriate.</td>
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<td>b. Synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</td>
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<td>c. Gather relevant information from multiple authoritative print and digital sources using advanced searches effectively.</td>
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<td>d. Assess the strengths and limitations of each source in terms of task, purpose, and audience.</td>
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<td>e. Integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.</td>
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<td>f. Draw evidence from literary or informational texts to support analysis, reflection, and research.</td>
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<td><strong>READING</strong></td>
<td>1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.</td>
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<td>d. Identify cause and effect implied in a paragraph.</td>
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<td><strong>WRITING</strong></td>
<td>2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</td>
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**Writing homework.**

**Reading homework.**
THEME: The Importance of Play

Class to be held in the Technology Lab

OBJECTIVES

- Discuss experiences with play and define controlled experiments.
- Research articles to come up with a definition of play.

MATERIALS

Activity #1:

- Video: Controlled Experiments  
  https://www.youtube.com/watch?v=VhZyXmglFAo (running time: 2:34)
- Video: Experiments Explained: Clear and Simple! Learn the Basics  
  https://www.youtube.com/watch?v=tK2mBsSb3uw (running time: 7:40)

Activity #2:

These websites are to be made available to students for research in the technology lab. Please make sure you have previewed them and understand the assignments for each:

- Online Resource: Pattern of Play  
  http://www.nifplay.org/science/pattern-play/
- Online Resource: The Power of Play  
  http://www.bostonchildrensmuseum.org/power-of-play
- Online Resource: Play and Children’s Learning  
  http://www.naeyc.org/play

ACTIVITY #1: Discuss Experiences With Play and Define Controlled Experiments – 40 minutes

- Tell students they are going to develop a definition of play. For this activity, they will look at what they wrote about play in their journals and, then, define controlled experiments. Understanding controlled experiments is critical as they are a central focus on the GED/HSE test and in understanding the materials used in this course.
- Create five columns on the board with the following questions as the header for each column:
  - What kind of play did you remember engaging in as a child?
  - What impact did these play experience have on you?
  - What kinds of play do you engage in as an adult?
  - What impact do these play experiences have on you?
  - How do you see play impacting children in your life?
- Start with the first question, and explain that the play the class is talking about is the play that involves other children or people in an unstructured situation.
- Go round-robin to have students give an example from their lives and write these on the board in the first column. Keep going round until you have recorded a whole range of play activities and students have no more to contribute.
- Put students in pairs to answer the other questions on the board.
• Ask each of the questions and gather answers from the pairs. Write their answers in the appropriate column.
• When the pairs have given their answers and the board is full, ask:
  o Based on the experiences of this class, what seems to be the impact of play on our lives?
  o What conclusions could you draw about play based on the class evidence?
• Tell students they are now going to define controlled experiments.
• Write the following questions on the board:
  o What is a controlled experiment? Give examples.
  o What is a control group?
  o What is an independent variable?
  o What is a dependent variable?
  o Why is it so important to do controlled experiments?
• Tell students to get a new partner to figure out what they can and cannot answer based on the homework reading.
• Tell students to answer what they can.
• Watch Controlled Experiments and Experiments Explained: Clear and Simple! Learn the Basics and have student take notes on the missing information. (For Experiments Explained: Clear and Simple! Learn the Basics, tell students that it is straightforward and a little dull but it has all the information they will need for so many GED/HSE questions.)
• Fill in answers for all the questions and add to the list of examples based on the video.

ACTIVITY #2: Research Articles to Come Up With a Definition of Play – 80 minutes

• Tell students they are going to be looking at websites on play and choosing articles and videos to look at that can help inform a definition of play they need to write as homework and present during the next lesson. Explain that some care will be given to making sure that they are looking at different topics and articles so that their presentations can teach new materials and information to the class.
• Explain that they are going to also focus on getting good at citing their sources. Tell students they are not going to learn all the different formats for citing different kinds of materials, but they will be responsible for collecting basic information. For each article or video they look at, they will need to write down:
  o The name of the person or people who wrote the article (if an author or writer is listed.), and write it in a format that puts last name first.)
  o The name of the article or video in quotation marks.
  o The name of the website where you can access this information.
• Have students count off by three and organize themselves so they are sitting with their groups.
• Project each research website overhead one at a time and give each group the following assignments:
  o Group 1 will study the Pattern of Play website. They will need to:
    ▪ Read all of the sections and take notes on each. (There are seven sections listed in the menu on the left from Attunement Play to Creative Play.)
    ▪ Read the sample references listed at the end of each section and write three sources that have titles that spark their interest. They need to write down the authors and titles of the articles only.
  o Group 2 will study The Power of Play website. They will need to:
    ▪ Review each of the six sections listed in orange boxes at the bottom of the page (from Play and Learning through Play and Cultural Differences) and choose three that they are interested in working on. Students should prioritize which is their first, second, and third choice among their selections.
    ▪ Assign a different section to each group member. For each section, students will need to select two different sources from the lists under “Related Information” and take
good notes on each. These sources could be articles or videos, depending on what is available in the assigned section.

- Group 3 will study the *How Important is Play in Preschool* website. They will need to:
  - Review the articles and choose two that they are interested in reading. Students should prioritize which is their first and which is their second choice.
  - Assign two articles each, ensuring that each group member is reporting on different readings. The assigned articles should be the same subject if possible.

- Give the assignment:
  - Students are to take notes that will help them answer the following questions:
    - What did you learn about play from the reading?
    - What studies were used in the reading to demonstrate the importance of play?
      - What were the study’s finding and conclusions?
    - What is a memorable quote from the reading that best summarizes an important point the article or video is trying to get across?
  - For homework, students are to use their notes to report back to their classmates on what they learned from the reading and the studies that demonstrate the importance of play.

- Allow students to:
  - Set up their group processes.
  - Do research and come back to meet to make final assignments.
  - Go back to their computers to read the articles, take notes, and print them out or e-mail them to themselves for homework.

**HOMEWORK**

**READ:** Have students read the materials assigned by their group in Activity #2.

**WRITE:** Have students organize the notes from their reading to answer the following questions:
- What did you learn about play from the readings or videos?
- What studies, if any, were used in the reading to demonstrate the importance of play?
  - What were the study’s finding and conclusions?
- What is a memorable quote from the reading that best summarizes an important point the article or video is trying to get across?
<table>
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<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
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<tr>
<td>• Prepare presentations materials.</td>
<td>SPEAKING AND LISTENING</td>
<td>2. Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.</td>
</tr>
</tbody>
</table>
| • Give presentations.       | SPEAKING AND LISTENING   | 8. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.  
10. Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.  
a. Present formal and informal speeches including discussion, information requests, interpretation, and persuasion. |
| • Writing homework.         | WRITING                  | 1. Write arguments from a prompt in a formatted manner of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.  
b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.  
c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.  
d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.  
e. Provide a concluding statement or section that follows from and supports the argument presented. |
THEME: The Importance of Play

Class to be held in the Technology Lab

OBJECTIVES

- Prepare presentations materials.
- Give presentations.

MATERIALS

Activity #1:
- Classroom Resource: Flip chart paper and markers.

ACTIVITY #1: Prepare Presentation Materials – 40 minutes

- Tell students they are going to prepare their presentation materials. Good presentations, in this context, are those that get across good clear information that listeners can take notes on and use as part of their in-class essay for the next lesson. This essay will ask basically the same questions they are reporting on.
- Put students into pairs and tell them to answer this question:
  - What do you need from the presentations that will help you take good clear notes on the key questions?
    - What did you learn about play from the reading?
    - What studies, if any, were used in the reading to demonstrate the importance of play?
      - What were the study’s finding and conclusions?
    - What is a memorable quote from the reading that best summarizes an important point the article or video is trying to get across?
- Have pairs report out and come up with a consensus on the criteria the class is looking for.
- Make the preparation materials available and put students in their groups to:
  - Go round-robin to have each student remind the group on the topic they researched.
  - Decide the order of who should present.
  - Each create a flip chart page for their own presentation that includes:
    - The citation information at the top: author, title, website.
    - The key things they learned from their research.
    - Relevant studies and findings.
    - A memorable quote from a reading.

ACTIVITY #2: Give Presentations – 80 minutes

- Tell students they are going to go group-by-group to give their presentations.
- Reiterate that taking good notes on these presentations will help them with their in-class essay in the next lesson.
- After each presentation, ask listeners to ask for more details on:
  - Their presentation points.
HOMEWORK

WRITE: Have students write a detailed outline they can use as the basis of their in-class essay by answering the following questions:

- What is play?
- Why is play important to developing children?
- What are the studies that show that play is important?
  - What are their findings and conclusions?
- Why should play be incorporated into preschool education?
- You will be required to cite key texts and studies using:
  - The name of the author.
  - The title of the article or video.
  - The website where the article or video was found.
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<th>OBJECTIVES</th>
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</table>
| • Rehearse and write an in-class essay. | WRITING | 1. Write arguments from a prompt in a formatted manner of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
   a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.  
   b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.  
   c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.  
   d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.  
   e. Provide a concluding statement or section that follows from and supports the argument presented. |
| • Conduct the peer review process. | READING | 5. Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.  
   a. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.  
   b. Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).  
   c. Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author’s purpose.  
   d. Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose.  
   6. Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.  
   a. Determine an author’s point of view or purpose of a text.  
   b. Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and responds to conflicting evidence or viewpoints. |
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| **c.** Infer an author’s implicit as well as explicit purposes based on details in text.  
  **d.** Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose (e.g., analogies, enumerations, repetition and parallelism, juxtaposition of opposites, qualifying statements). | **C.** | **D.** |
|   | **Reading homework.** | **READING** |
| **1.** Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.  
  **a.** Summarize what has been read.  
  **b.** Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.  
  **c.** Identify the implied main idea and supporting details from an instructional level passage.  
  **d.** Identify cause and effect implied in a paragraph. | **WRITING** | **2.** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. |
THEME: The Importance of Play

OBJECTIVES

- Rehearse and write an in-class essay.
- Conduct the peer review process.
- Watch videos that connect the nature vs. nurture debate to early childhood development.

MATERIALS

Activity #1:
- Student Work: Students should bring hard copies of their essay outlines created for homework.

Activity #2:
- Handout (attached): Make two copies for each student.

AUDIENCE COMMENT PAGE

Homework:
- Handout (attached): Make one copy for each student.
- Brains at Play: 
  [Link](http://www.npr.org/sections/ed/2014/08/04/337387726/brains-at-play)
- Handout (attached): Make one copy for each student.
- The Cognitive Benefits of Play: Effects on the Learning Brain: 
  [Link](http://www.parentingscience.com/benefits-of-play.html)

ACTIVITY #1: Rehearse and Write an In-Class Essay - 60 minutes

- Ask students: What were the class criteria for essays in Bridge Semester 1?
- Tell students to come up with criteria for a good essay by answering the following questions. Ask these questions and then put their answers on the board:
  - What makes a good introduction?
    - Make sure the criteria include that the introduction has a thesis and it gets the attention and interest of the audience.
  - What is a thesis and why is it important?
  - What makes for good paragraphs that provide your reasons and evidence?
    - Make sure the criteria include that the paragraphs have a clear topic sentence, give clear explanations, and are easy to understand.
  - What makes a good conclusion?
    - Make sure the criteria include making recommendations to resolve the issues discussed in the essay.
  - Which questions prompt you to write about each of these parts of the essay?
- Clarify how you want students to cite any articles:
  - If they say something they learned from a specific article they should end the sentence with:
    - (author’s name, title, website).
  - They can open sentences that present someone else’s ideas with openings like:
    - According to (author’s name),
    - In the video (title),
• In the article (title),
• Tell students not to panic. All they need to do is the best they can. They will be working on how to cite sources in their writing the whole course, so, what they don’t quite get now, they will be getting soon.
• It is critical that students use their words to explain what they really have learned about play so far and what they think should be done in preschools to incorporate play. They should focus on what they have to say and see if information from their notes fits in.
• Tell students to get their homework outlines out.
• Put students into pairs to hear and respond to each other’s plans for the in-class essay.
• Tell pairs they are to take turns, assigning one person to be the questioner and one as the speaker. When the first questioner is finished, then pairs should switch roles and repeat the process so both students can be heard.
• Tell students to make any changes to their outline that will improve their essays.
• Time students as they write a 45-minute in-class essay using their notes.

ACTIVITY #2: Conduct the Peer Review Process - 60 minutes

• Tell students they will now provide constructive feedback on each other’s essay. They are to remember they must remain the audience that the writer is happy and comfortable with, meaning that the audience simply wants to understand what the essay is trying to say and to offer good suggestions for making the essay more interesting.
• Ask students: What kinds of things would happen when others are reading your work that would NOT make you feel happy and comfortable? Write what students say on the board.
• Put students into groups of three.
• Pass out two copies of the Audience Comment Page (attached) to each student. Explain that they will:
  o Read the essays written by the other two people in their group.
  o Fill out one Audience Comment Page for each of the essays they read.
  o They are NOT to comment on grammar or spelling yet. However, if they are not sure what something says, they can ask the writer for clarification.
  o They are to be friendly, encouraging, and genuinely helpful. Good comments on their partners’ work will help them when they have to rewrite their essay.
• Have students pass their essays to the left.
• After students have evaluated the first essay, they should pass the essay they have worked on to their left and evaluate a new essay.
• After students have evaluated two essays, they should give their evaluations to the authors, and the authors should read the comments and ask questions to the evaluators as needed.
• Tell students that you will also evaluate their essays so they will each have three reviews to help them with their rewrites. Have students hand in their essays along with the two evaluations from their peers.
• Collect student essays along with the Audience Comment Pages for them.

TEACHER NOTE #1: Evaluate the student essays handed in using a copy of the Audience Comment Page.
You will need to read both the essays and the student comments on those essays to see how perceptive the audiences for each essay were. Your comments should either reflect good suggestions or offer a different way to evaluate their essays that you think might be more helpful. Additionally, DO NOT correct everything in the students’ drafts. Only mark those errors in the text that would help the student make significant progress toward a better essay. In your comments, indicate a due date for rewrites of these drafts.

TEACHER NOTE #2: The criteria for a good essay used in Activity #1 will be used again in Week 4, Lesson 2.
HOMEWORK

JOURNAL WRITING: Have students answer the following questions in their journals:

- How do you think play stimulates the brain? Connect your answer to your own experience and to what you have learned about brain science thus far in the ECE Bridge. In other words, what is your hypothesis?

READING: Have students read the Brains at Play and The Cognitive Benefits of Play: Effects on the Learning Brain articles. For both articles, students should write up their notes for EACH experiment or study to answer the questions:

- What are the experiments?
- What are the findings?
- What are the conclusions?

For the second article (The Cognitive Benefits of Play: Effects on the Learning Brain) ONLY, have students read the “References” section and circle three articles that they might want to read to find out more on this topic.
1. What is working for you as the audience for this piece of writing?

2. As the audience, what do you need clarified or want to hear more about to make you more interested in what the writer has to say?

3. Do you have any questions for the writer?
This week at NPR Ed, our series Playing To Learn will explore questions about why people play and how play relates to learning.

Why do we humans like to play so much? Play sports, play tag, play the stock market, play duck, duck, goose? We love it all. And we're not the only ones. Dogs, cats, bears, even birds seem to like to play. What are we all doing? Is there a point to it all?

The scientist who has perhaps done more research on brains at play than any other is a man named Jaak Panksepp. And he has developed a pretty good hypothesis.

In a nutshell, he, and many others, think play is how we social animals learn the rules of being social. Sort of counterintuitive when you think about it: Play is how you learn rules.

You might learn what your fellow humans think is fun. And what they think isn't so fun. You might learn what your limits are. Or which of your friends likes what.

In fact, play seems so deeply wired by evolution into the brains of highly social animals that it might not be a stretch to say that play is crucial to how we and they learn much of what we know that isn't instinct. In one experiment (not Panksepp's), kittens deprived of play still could hunt perfectly well when they grew up, but they couldn't read other cats' social cues — they jumped to aggression much more quickly than normally raised cats.

Not surprisingly, Panksepp and others think the lack of play is a serious problem. Especially at younger ages. And particularly in school settings. Without play, we know that other species become quick to aggression and have trouble "fitting in." Panksepp thinks the rising rates of ADD and ADHD may in part be due to this problem. In trials where extra playtime was given to kids showing signs of these disorders, there was marked improvement in their behaviors as reported by teachers and parents.

"It's not just superfluous," says Panksepp. "It's a very valuable thing for childhood development. And we as a culture have to learn to use it properly and have to make sure our kids get plenty of it."
Science supports many of our intuitions about the benefits of play.

Playful behavior appears to have positive effects on the brain and on a child's ability to learn. In fact, play may function as an important, if not crucial, mode for learning.

Want specifics? Here are some examples.

**Animal experiments: Play improves memory and stimulates the growth of the cerebral cortex**

In 1964, Marion Diamond and her colleagues published an exciting paper about brain growth in rats. The neuroscientists had conducted a landmark experiment, raising some rats in boring, solitary confinement and others in exciting, toy-filled colonies.

When researchers examined the rats' brains, they discovered that the “enriched” rats had thicker cerebral cortices than did the “impoverished” rats (Diamond et al 1964).

Subsequent research confirmed the results—rats raised stimulating environments had bigger brains.

They were smarter, too—able to find their way through mazes more quickly (Greenough and Black 1992).

Do these benefits of play extend to humans? Ethical considerations prevent us from performing similar experiments on kids. But it seems likely that human brains respond to play and exploration in similar ways.

**Play and exploration trigger the secretion of BDNF, a substance essential for the growth of brain cells**

Again, no one has figured out an ethical way to test this on humans, so the evidence comes from rats: After bouts of rough-and-tumble play, rats show increased levels of brain-derived neurotrophic factor (BDNF) in their brains (Gordon et al 2003). BDNF is essential for the growth and maintenance of brain cells. BDNF levels are also increased after rats are allowed to explore (Huber et al 2007).

**Kids pay more attention to academic tasks when they are given frequent, brief opportunities for free play**

Several experimental studies show that school kids pay more attention to academics after they've had a recess—an unstructured break in which kids are free to play without direction from adults (see Pellegrini and Holmes 2006 for a review).

There is some circumstantial evidence, too: Chinese and Japanese students, who are among the best achievers in the world, attend schools that provide short breaks every 50 minutes (Stevenson and Lee 1990).

Note that physical education classes are not effective substitutes for free playtime (Bjorkland and Pellegrini 2000).
Physical exercise has important cognitive benefits in its own right. But physical education classes don’t deliver the same benefits as recess. Researchers suspect that’s because PE classes are too structured and rely too much on adult-imposed rules. To reap all the benefits of play, a play break must be truly playful.

How long should recess be? No one knows for sure, but there is some evidence for recesses between 10 and 30 minutes. In a small study of 4-5 year olds, researchers found that recesses of 10 or 20 minutes enhanced classroom attention. Recesses as long as 30 minutes had the opposite effect (Pelligrini and Holmes 2006).

**Language and the benefits of play**

Studies reveal a link between play—particularly symbolic, pretend play—and the development of language skills. For example:

Psychologist Edward Fisher analyzed 46 published studies of the cognitive benefits of play (Fisher 1999). He found that “sociodramatic play”—what happens when kids pretend together—“results in improved performances in both cognitive-linguistic and social affective domains.”

A study of British children, aged 1-6 years, measured kids’ capacity for symbolic play (Lewis et al 2000). Kids were asked to perform such symbolic tasks as substituting a teddy bear for an absent object. Researchers found that kids who scored higher on a test of symbolic play had better language skills—both receptive language (what a child understands) and expressive language (the words she speaks). These results remained significant even after controlling for the age of the child.

Recent research also suggests that playing with blocks contributes to language development. For more information, see this article about construction toys and the benefits of play.

**Evidence that play promotes creative problem solving**

Psychologists distinguish two types of problem—convergent and divergent. A convergent problem has a single correct solution or answer. A divergent problem yields itself to multiple solutions.

Some research suggests that the way kids play contributes to their ability to solve divergent problems.

For instance, in one experiment, researchers presented preschoolers with two types of play materials (Pepler and Ross 1981). Some kids were given materials for convergent play (i.e., puzzle pieces). Other kids were given materials for divergent play (blocks). Kids were given time to play and then were tested on their ability to solve problems.

The results? Kids given divergent play materials performed better on divergent problems. They also showed more creativity in their attempts to solve the problems (Pepler and Ross 1981).

Another experimental study hints at a causal connection between pretend play (discussed at more length below) and divergent problem-solving ability (Wyver and Spence 1999). Kids given training in pretend play showed an increased ability to solve divergent problems, and the converse was true as well: Kids trained to solve divergent problems showed increased rates of pretend play.

**Make-believe, self-regulation, and reasoning about possible worlds**

Divergent problem solving isn’t the only cognitive skill linked with make-believe. Pretend play has also been correlated with two crucial skill sets—the ability to self-regulate (impulses, emotions, attention) and the ability to reason counterfactually.

In the first case, studies report that kids who engage in frequent, pretend play have stronger self-
regulation skills. Although more research is needed to determine if the link is causal (Lillard et al. 2013), the data are consistent with this possibility, and the idea has intuitive appeal. You can't pretend with another person unless both of you agree about what you are pretending. So players must conform to a set of rules, and practice conforming to such rules might help kids develop better self-control over time.

In the second case, many researchers have noted similarities between pretend play and counterfactual reasoning, the ability to make inferences about events that have not actually occurred.

Alison Gopnik and her colleagues (Walker and Gopnik 2013; Buchsbaum et al. 2012) argue that counterfactual reasoning helps us plan and learn by permitting us to think through "what if" scenarios. Pretend play taps into the same skill set. So perhaps pretend play provides children with valuable opportunities to improve their reasoning about possible worlds.

In support of this idea, researchers found evidence of a link between counterfactual reasoning and pretend play in preschoolers, and this correlation remained statistically significant even after controlling for a child's ability to suppress her impulses (Buchsbaum et al. 2012).

**Math skills and the benefits of play**

Here's an intriguing story about play and mathematics:

A longitudinal study measured the complexity of children's block play at age 4 and then tracked their academic performance through high school (Wolfgang, Stannard, & Jones, 2001).

Researchers found that the complexity of block play predicted kids' mathematics achievements in high school. In particular, those who had used blocks in more sophisticated ways as preschoolers had better math grades and took more math courses (including honors' courses) as teenagers.

Of course, these results might merely tell us that kids who are smart in preschool continue to be smart in high school.

But it's not that simple. The association between block play and math performance remained even after researchers controlled for a child's IQ. It therefore seems plausible that block play itself influenced the cognitive development of these kids.

**Playful experiences are learning experiences**

Finally, lest anybody doubt that kids learn through play, we should keep in mind the following points.

1. Most play involves exploration, and exploration is, by definition, an act of investigation. It's easy to see how this applies to a budding scientist who is playing with magnets, but it also applies to far less intellectual pursuits, like the rough-and-tumble play in puppies. The animals are testing social bonds and learning how to control their impulses, so that friendly wrestling doesn't turn into anti-social aggression. Play is learning.

2. Play is self-motivated and fun. Thus, anything learned during play is knowledge gained without the perception of hard work. This is in contrast with activities that we perform as duties. When learning is perceived to be arduous, our ability to stay focused may feel like a limited resource that is drained over time (Inzlicht et al. 2014). And it's hard to achieve a state of flow, the psychological experience of being totally, and happily, immersed in what you are doing. Play is an obvious gateway to the state of flow.

3. These arguments aside, there is also empirical evidence that kids treat play as a tutorial for coping with real life challenges.
All around the world, children engage in pretend play that simulates the sorts of activities they will need to master as adults (Lancy 2008), suggesting such play is a form of practice. And when kids are fed information during pretend play—from more knowledgeable peers or adults—they take it in. Experiments on American preschoolers suggest that children as young as 3 understand make distinctions between realistic and fanciful pretending, and use information learned from realistic pretend scenarios to understand the real world (Sutherland and Friedman 2012; 2013).

The takeaway? Giving children play-breaks and making children's academic lessons more playful isn't mere sugar-coating. It might be a way to enhance kids' natural capacities for intense, self-motivated learning.

Here are the scientific studies cited in this article:
Sutherland SL and Friedman O. 2013. Just pretending can be really learning: children use pretend play as a source for acquiring generic knowledge. Dev Psychol. 49(9):1660-8.

Content last of the "Cognitive benefits of play" modified 2/2014 Image of Yaohnenan children playing by Choguet /wikimedia commons
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| • Enumerate experiments, findings, and conclusions from the homework articles. | READING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. |
| | | 2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. |
| • Look for more information based on studies in a video and a podcast. | READING | 7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.  
   a. Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author’s argument. |
| | | 9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.  
   a. Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline). |
| **Reading homework.** | **READING** | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.
   a. Comprehend explicit details and main ideas in text.
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   f. Identify a theme, or identify which element(s) in a text support a theme.
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. |
| **Writing homework.** | **WRITING** | 2. Write informative/explanatory texts from a prompt in a formatted manner to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. |
THEME: The Science of Play

OBJECTIVES

- Enumerate experiments, findings, and conclusions from the homework articles.
- Look for more information from studies discussed in a video and a podcast.

MATERIALS

Activity #1:
- Classroom Resource: Flip chart paper and markers.
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand. 
  *Brains at Play* (attached to Week 2, Lesson 2) 
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand. 
  *The Cognitive Benefits of Play: Effects on the Learning Brain* (attached to Week 2, Lesson 2) 

Activity #2:
- Video: *Brains at Play* 
- Online Resource: *Scientists Say Child’s Play Helps Build a Better Brain* – Podcast 

Homework:
- Handout (attached): Make one copy for each student. 
  *Dr. Jaak Panksepp - The Importance of Play* 
- Handout (attached): Make one copy for each student. 
  *7 Health Benefits of Laughter* 
  [https://www.gaiam.com/blogs/discover/7-health-benefits-of-laughter](https://www.gaiam.com/blogs/discover/7-health-benefits-of-laughter)
- Handout (attached): Make one copy for each student. 
  *Laughter is the Best Medicine: The Health Benefits of Humor and Laughter* 
  [http://www.helpguide.org/articles/emotional-health/laughter-is-the-best-medicine.htm](http://www.helpguide.org/articles/emotional-health/laughter-is-the-best-medicine.htm)

ACTIVITY #1: Enumerate Experiments, Findings, and Conclusions from the Homework Articles - 80 minutes

- Tell students that they are going to dig into the homework articles for clear understandings of the experiments and studies that the authors are using to make their case for why play is so important.
- Write the following guiding questions on the board:
  - Who are the authors and when was the experiment/study published?
  - What are the experiments/studies?
- Explain as many details as possible or, if the experiment is not described, describe the experiment that you think must have been done.
  - What are the findings?
  - What are the conclusions?
- Tell students to get out their notes on the first article, *Brains at Play*. Give them a few moments to answer these questions, explaining that not all the questions may be answered in the article.
- Ask each of the questions separately and take notes of student answers on the board.
- Tell students they will need to use these questions for the work they will do on the second, longer article.
- Have students get out their second article: *The Cognitive Benefits of Play: Effects on the Learning Brain*.
- Write the following sub-titles from the article on the board. These are only the first 2-3 words of each sub-title and the number after each indicates the number of studies cited in the section. These sections are also divided into groups:
  - **Group 1:**
    - Animal experiments... (2)
    - Play and exploration trigger... (2)
  - **Group 2:**
    - Kids pay more attention... (4)
  - **Group 3:**
    - Language and benefits... (2)
    - Evidence that play... (3)
  - **Group 4:**
    - Make believe... (3)
    - Math skills... (1)
- Create four different groups and make group assignments. Tell students that this exercise is highly relevant to the GED/HSE.
- Tell each group to:
  - Identify the different studies in their subsection(s).
  - Answer the questions on the board for each experiment or study.
  - Set up flip chart paper for each experiment or study with the questions and answers for each study.
  - Assign different group members to present different experiments or studies.
- Have each group present their studies.
  - Make sure students take complete notes on these studies. They will need to collect this information throughout the class as this information will be critical for their final project!
  - Ask clarifying questions to make sure students understand the linkage between experiments/studies, findings, and conclusions.
  - Be sure to emphasize the importance of control groups and independent variables in relevant experiments.
- After the presentations, ask:
  - What is the thesis of this article?
  - What are the concluding recommendations for this article?
  - How does using studies in this article make the author’s argument stronger?
  - Which articles did you choose for further reading?

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**ACTIVITY #2: Look for More Information from Studies Discussed in a Video & a Podcast - 40 minutes**

- Tell students they are now going to watch a video and listen to a podcast on play and they will need to take the same kind of notes as they have taken on the presented experiments/studies.
- Keep the following questions on the board as a guide:
  - Who are the authors of the experiment or study?
What are the experiments/studies?
- Explain as many details as possible or, if the experiment is not described, describe the experiment that you think must have been done.
- What are the findings?
- What are the conclusions?

Watch the video and have students take notes. Watch it twice if students want to go back to get more information.

Go over each of the questions for the experiments used in the video. Ask:
- Why do the makers of this video use Jaak Panksepp's work to make its points about play?

Listen to the podcast, twice if students ask for it, and review the questions for the podcast as well.

Ask: What are the new things you have learned about play today that you think are significant?

HOMEWORK

JOURNAL WRITING: Have students answer the following prompts in their journals:
- What are the new things you have learned about play today that you think are significant?
- How do the findings on play change your thinking about how best to deal with children?

READ: Have students read the Dr. Jaak Panksepp-The Importance of Play article. This article mostly highlights this scientist's conclusions; however, there are few descriptions of experiments thrown in. Tell students to take notes, as appropriate, using the questions from class. They should list the conclusions they find in the article in a numbered list. Students should take notes on the following:
- What are the experiments/studies?
  - Explain as many details as possible or, if the experiment is not described, describe the experiment that you think must have been done.
- What are the findings?
- What are the conclusions?
  - Have a numbered list for the answer to this question.

READ: Have students read the two other homework articles: 7 Health Benefits of Laughter and The Health Benefits of Humor and Laughter and underline what you think are the 10 most significant impacts of laughter.

TEACHER NOTE: There is a website called the Laughter On-Line University where you will find lots more information and research on the impact of laughter on our lives! Use of this website is optional:
- [http://www.laughteronlineuniversity.com/research/](http://www.laughteronlineuniversity.com/research/)
All people have emotions—although some are more in touch with them than others—but most people don’t know how emotions work. Dr. Jaak Panksepp, a neuroscientist, psychologist and psychobiologist, coined the term affective neuroscience to refer to the study of the neural mechanisms of emotion.

Panksepp, the Baily endowed chair of Animal Well-Being Science in the Department of Veterinary and Comparative Anatomy, Pharmacology and Physiology at Washington State University’s College of Veterinary Medicine and emeritus professor at the Department of Psychology at Bowling Green State University, wrote the book Affective Neuroscience: The Foundations of Human and Animal Emotions and has authored more than 400 scientific articles dealing with the physiological mechanisms that underlie motivated behavior. He also co-edited such works as Handbook of the Hypothalamus and Emotions and Psychopathology, serves as editor of the series Advances in Biological Psychiatry, and currently serves as research co-director of the Hope for Depression Research Foundation, which promotes research into the origins and treatment of depression. An expert on brain mechanisms of emotions, indeed laughter in non-human animals, Dr. Panksepp recently spoke with Brain World about the importance of fun, laughter and play for children.

Brain World: What exactly is play?
JP: I would say the only thing we can be sure about is the kind of physical play that animals enjoy. And, of course, we are animals, so our play is very similar. There is no ambiguity among young children; they instinctively know what play is. Academics get confused, parents get confused—calling what their children are doing “naughty,” “aggressive,” “being bad”—but kids are having fun, so we know that there is that one play system in the brain.

We know there is at least one that controls physical and social play. There is also exploratory play and object play, for instance a kitten playing with a ball of yarn, which require much more interpretation, because there are no demonstrated brain systems for these. And they are much harder to study in the laboratory. We were the first ones who developed standard techniques for studying play in the laboratory. They are robust, so anyone can now systematically study play, at least in laboratory rats.

BW: How did you create the robust environment for play?
JP: First of all, the animals have to be comfortable and safe. The animals also need to be young, and the animals need to be hungry for play. Just like when you study food intake or water intake, you have to be hungry or thirsty; likewise, we can induce a hunger or desire for play by depriving animals of play for a while. If you don’t make the animals hungry for play, they won’t be as motivated to play when you test them. Often they just explore. But if they haven’t played for a while, they are very eager for playful interactions.

BW: Kids like to play games, read books or go on the Internet and engage in social networking. Is that play?
JP: I think so. But the main kind of play is when animals physically engage each other in rough-and-tumble activities. Physical play is fun. But playing games is also fun. However, if we didn’t have a play instinct, maybe neither kind of play would exist. However, playing games is not primary-process play. The most primitive parts of the brain generate various primary process emotions, including physical play. Playing games is likely to be a secondary process, dependent on learning and memories. Few people are studying the primary processes. To do that, you must think in a very Darwinian way, and understand that emotions emerge first from very ancient regions of the brain, which connect up to more recent, higher brain regions that control learning and thought. This is a very important principle. Mother Nature built some important things into ancient regions of the brain—we don’t have the clear image of that, all the other knowledge of the brain is very weak, except senses such as vision. They are pretty straightforward.

BW: So you think play is a primary or primitive process. What are primary processes?

JP: These are “memories” that evolution built into our brain—various senses such as vision, various emotions and feelings. There are both primitive and modern parts in the brain. The primitive parts contain “tools” that all people need to live. On top of that all animals have learning and memory, and some even have thoughts. But to understand the brain we also have realize that certain experiences, such as emotions, arise from very ancient brain regions. Without those primitive brain systems, people wouldn’t survive; they would not have children or social attractions.

Animal research is needed to understand such ancient parts of mind. Indeed, in human brain imaging, up to 95% of neural activity is in a category called “dark energy,” with scientists only seeing maybe 5% of the fluctuating brain activities. The other 95% of the brain often is not seen, and many primary processes are happening there. They are easier to see in animal behavior than in human brain imaging.

BW: Can you tell me more about your research of laughing rats and the relationship between laughing and emotion?

JP: Without laughter there will not be much joy in life. It’s a little shocking how little we know about how brains generate positive feelings. When we discovered laughter-type sounds in rats, I think people laughed at us a bit. But now know more about the “laughter” of rats than humans. And we have learned that a study of these happy sounds can illuminate human problems, even drug addictions and depression. Even though we cannot do detailed research on these systems with humans, we have mapped out the brain networks in rats along with some of the controlling brain chemistries, and currently it is one of our major measures of depressive feelings in animals. This allows us to focus on the feelings of rats rather than just their behavioral changes. Laughter and joy are aspects of both brain and mind. We still have a science that respects animal behaviors and brain molecules more than mind functions they create. That should change as we learn to understand the minds of other animals.

BW: How do you recognize that the rats are laughing?

JP: We actually looked for it, first in the form of “play vocalizations.” Since rats communicate with very high (ultrasonic) sound frequencies, we need special equipment to listen in, and when we did there were lots of “chirps” when rats were playing, especially when they are very excited and chasing each other. We had already shown that play was somewhat dependent on hearing, and very dependent on touch. Of course hearing is special form of touch—we hear by sensing air pressure waves along our cochlear membranes vibrates. With our ultrasonic equipment we had been studying play vocalizations for half a dozen years, when I woke up one morning with the thought: What if that sound was laughter? And we promptly went ahead and tickled some rats, and those sounds were provoked very easily. We brought them under “experimental control.”
BW: Do you have a playground for rats? And what is the ideal play environment?
JP: We don’t really have a playground, just regular test boxes. We were interested largely in how the brain controls social play. “Playground” usually means there are objects. As soon as there are objects, the rats can be distracted by them, and real play goes down.

I think young children rarely get as much play as their brains need in our country. Physical play is at times considered bad behavior, and medications for ADHD, such as Ritalin, all reduce play. By doing this, we are taking the desire to play away from our children. Human problems need to be dealt with in human ways. We have to develop a society that understands play, and the many good things it does for children’s brains and minds. We developed the concept of having “play sanctuaries,” where children have safe environment to play and develop their own games. We have much to learn about how good play is for the brains of our children.

BW: What is a good age for play? Can the old play, too?
JP: I think many of these emotional systems have a natural developmental time course, and vigorous physical play occurs only in animals. It declines after puberty. Old rats certainly don’t play, but old humans can. Still, physical play is for the young. But if animals indulge in a lot of play when young, they tend to remain playful and friendlier when older.

For human children, I think the “terrible two’s” reflect the onset of strong play urges. At age 2, the desire for play becomes very intense. By age 6, most children develop enough cortical inhibition to be able to sit still in classrooms. Before then, no child can sit still for too long. All very young children behave as if they have ADHD.

BW: Did you do any play research with humans?
JP: We did perhaps the first systematic experimental research on human children. But human physical play still has not been extensively studied. Developmental psychologists usually only study play with toys and games. We studied the play of two friends—pairs of boys and girls at 47 years of age—in an empty room with mats on the floor but no toys. “Play and enjoy,” we told them, and videotaped their interactions for about half an hour. We scored about 20 behaviors such as running after each other, wrestling, pushing from the front, pushing from the back, laughing, and so forth.

Surprisingly, there was hardly any difference between the play of young girls and boys, as the human play literature led us to believe. A lot of people have claimed that boys play more, but we don’t see that in our rats or our human studies. We think many of the reported gender differences in play are a result of learning rather than any intrinsic differences.

BW: Are there negative aspects to play?
JP: Play does have a dark side. When you just allow your children to do as they please, then play often leads to disagreements, and perhaps even bullying. One function of play is to take you to the edge of your emotional knowledge, so you can learn what you can and cannot do to others. Thus in our studies of play in “play sanctuaries,” we always had young supervisors who would help young people get over such problems. Whenever something bad happened, then we quickly explained to the naughty child that they should be nice if they wanted to continue playing. They usually agreed, and readily learned to be good in order to have fun. We think children can learn many good social skills in this way. Thus play sanctuaries can be used to promote good behaviors.

BW: What is a play sanctuary?
JP: I think it is one of the most important things that children need to grow up well, perhaps even reduce the number of kids diagnosed with ADHD. In play sanctuaries caretakers could easily recognize childhood problems, those that may need special attention. Play sanctuaries could provide more children with the free play they often don’t get in the modern world. They are also places where children can be instructed “naturally” in good behaviors, and those who have
difficulty playing might be given special attention. We might also need to train new kinds of child clinicians—those who really know how to play, not just talk and talk, not just test-test-test, but play. A real play-master.

BW: What do you think about the move for children to be in more structured environments earlier? Does that hurt their ability to play?

JP: I am sure it does. Play corresponds to brain needs at a certain time in life, it has a special energy that influence brain maturation. Thus, we have to have places where that can happen. I like to live in a small town, where free, undirected, natural play can happen. I believe the proper words to describe the current educational policy of “no child left behind” may be closer to “every child left behind.” We are neglecting the power of natural play and the physical activity that every child has to have to mature. Instead, we are focusing on reading, writing or mathematics at earlier and earlier ages. But if you really understood the power of play, every child might learn to enjoy mathematics. Perhaps if we introduced children to mathematics in playful ways, every child would be more likely to love it. Perhaps we should understand that cognition is not everything; we have to institutionalize more positive playful opportunities for our children. Indeed, many Head Start programs do that.

BW: What is your plan for the future?

JP: I am currently most interested in depression research, especially from the focus that positive emotions can counteract negative emotions. Some current antidepressants have success rates as low as 28%, as in the famous STAR*D trial. Development of new medications has been slow because we know so little about the primary-process positive emotions by studying similar mechanisms in animals. Animals do experience basic emotions not so dissimilar from humans. Through such research we can understand that other animals are also feeling creatures with minds, and not just conglomerations of molecules.

I hope there will be more scientists with open minds willing to understand human feelings by studying shared neurochemical systems in animal brains. If you really want to help people with depression, we have to find what causes psychological pain first, and see if positive feelings can counteract negative ones. And I think the emotional vocalizations—including the laughing sounds of animal—are currently the best indicators of positive feelings in animals. Focusing on molecules and behavior alone cannot provide complete solutions. Thus we have to envision brain functions as mind functions, and initiate neuroscientific discussions of how the brain creates mind not only in humans but also other animals.

Mind is a natural function of the brain. Thus, what philosophers can contribute is as important as what scientists are doing, by encouraging the field of neuroscience to grow up. I think a richer discussion and study of the neuroscience of animal minds can make wonderful contributions right now to understanding the types of creatures that we are.
One of the best feelings in the world is the deep-rooted belly laugh. It can bring people together and establish amazing connections. Everything from a slight giggle to a side-splitting guffaw can change the temperature of a room from chilly unfamiliarity to a warm family-like atmosphere.

There is so much to love about laughter that it seems greedy to look for more, but that’s exactly what researchers Dr. Lee Berk and Dr. Stanley Tan at the Loma Linda University in California have done. These two doctors have researched the benefits of laughter and found amazing results. Get ready to get your giggle on!

1. **Laughing lowers blood pressure**
   People who lower their blood pressure, even those who start at normal levels, will reduce their risk of strokes and heart attacks. So grab the Sunday paper, flip to the funny pages and enjoy your laughter medicine.

2. **Reduces stress hormone levels**
   You benefit from reducing the level of stress hormones your body produces because hormone-level reduction simultaneously cuts the anxiety and stress impacting your body. Additionally, the reduction of stress hormones in your body may result in higher immune system performance. Just think: Laughing along as a co-worker tells a funny joke can relieve some of the day's stress and help you reap the health benefits of laughter.

3. **Fun ab workout**
   One of the benefits of laughter is that it can help you tone your abs. When you are laughing, the muscles in your stomach expand and contract, similar to when you intentionally exercise your abs. Meanwhile, the muscles you are not using to laugh are getting an opportunity to relax. Add laughter to your ab routine and make getting a toned tummy more enjoyable.

4. **Improves cardiac health**
   Laughter is a great cardio workout, especially for those who are incapable of doing other physical activity due to injury or illness. It gets your heart pumping and burns a similar amount of calories per hour as walking at a slow to moderate pace. So, laugh your heart into health.

5. **Boosts T cells**
   T cells are specialized immune system cells just waiting in your body for activation. When you laugh, you activate T cells that immediately begin to help you fight off sickness. Next time you feel a cold coming on, add chuckling to your illness prevention plan.

6. **Triggers the release of endorphins**
   Endorphins are the body's natural pain killers. By laughing, you can release endorphins, which can help ease chronic pain and make you feel good all over.

7. **Produces a general sense of well-being**
   Laughter can increase your overall sense of well-being. Doctors have found that people who have a positive outlook on life tend to fight diseases better than people who tend to be more negative. So smile, laugh and live longer!
Laughter is strong medicine for mind and body

“Your sense of humor is one of the most powerful tools you have to make certain that your daily mood and emotional state support good health.” ~ Paul E. McGhee, Ph.D.

Laughter is a powerful antidote to stress, pain, and conflict. Nothing works faster or more dependably to bring your mind and body back into balance than a good laugh. Humor lightens your burdens, inspires hopes, connects you to others, and keeps you grounded, focused, and alert.

With so much power to heal and renew, the ability to laugh easily and frequently is a tremendous resource for surmounting problems, enhancing your relationships, and supporting both physical and emotional health.

Laughter is good for your health:

- **Laughter relaxes the whole body.** A good, hearty laugh relieves physical tension and stress, leaving your muscles relaxed for up to 45 minutes after.
- **Laughter boosts the immune system.** Laughter decreases stress hormones and increases immune cells and infection-fighting antibodies, thus improving your resistance to disease.
- **Laughter triggers the release of endorphins, the body’s natural feel-good chemicals.** Endorphins promote an overall sense of well-being and can even temporarily relieve pain.
- **Laughter protects the heart.** Laughter improves the function of blood vessels and increases blood flow, which can help protect you against a heart attack and other cardiovascular problems.

The benefits of laughter:

Laughter and humor help you stay emotionally healthy

Laughter makes you feel good. And the good feeling that you get when you laugh remains with you even after the laughter subsides. Humor helps you keep a positive, optimistic outlook through difficult situations, disappointments, and loss.

More than just a respite from sadness and pain, laughter gives you the courage and strength to find new sources of meaning and hope. Even in the most difficult of times, a laugh—or even simply a smile—can go a long way toward making you feel better. And laughter really is contagious—just hearing laughter primes your brain and readies you to smile and join in the fun.

The link between laughter and mental health

- **Laughter dissolves distressing emotions.** You can't feel anxious, angry, or sad when you're laughing.
- **Laughter helps you relax and recharge.** It reduces stress and increases energy, enabling you to stay focused and accomplish more.
- **Humor shifts perspective, allowing you to see situations in a more realistic, less threatening light.** A humorous perspective creates psychological distance, which can help you avoid feeling overwhelmed.

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**The Health Benefits of Humor and Laughter**

Adapted and paraphrased from original source: [http://www.helpguide.org/articles/emotional-health/laughter-is-the-best-medicine.htm](http://www.helpguide.org/articles/emotional-health/laughter-is-the-best-medicine.htm)

Original authors: Lawrence Robinson, Melinda Smith, M.A., and Jeanne Segal, Ph.D.
The social benefits of humor and laughter:
Humor and playful communication strengthen our relationships by triggering positive feelings and fostering emotional connection. When we laugh with one another, a positive bond is created. This bond acts as a strong buffer against stress, disagreements, and disappointment.

Laughing with others is more powerful than laughing alone
Shared laughter is one of the most effective tools for keeping relationships fresh and exciting. All emotional sharing builds strong and lasting relationship bonds, but sharing laughter and play also adds joy, vitality, and resilience. And humor is a powerful and effective way to heal resentments, disagreements, and hurts. Laughter unites people during difficult times.

Incorporating more humor and play into your daily interactions can improve the quality of your love relationships—as well as your connections with co-workers, family members, and friends. Using humor and laughter in relationships allows you to:
• **Be more spontaneous.** Humor gets you out of your head and away from your troubles.
• **Let go of defensiveness.** Laughter helps you forget judgments, criticisms, and doubts.
• **Release inhibitions.** Your fear of holding back and holding on are set aside.
• **Express your true feelings.** Deeply felt emotions are allowed to rise to the surface.

Bringing more humor and laughter into your life:

**Want more laughter in your life? Get a pet...**
Most of us have experienced the joy of playing with a furry friend, and pets are a rewarding way to bring more laughter and joy into your life. But did you know that **having a pet is good for your mental and physical health**? Studies show that pets can protect you from depression, stress, and even heart disease.

Laughter is your birthright, a natural part of life that is innate and inborn. Infants begin smiling during the first weeks of life and laugh out loud within months of being born. Even if you did not grow up in a household where laughter was a common sound, you can learn to laugh at any stage of life.

Begin by setting aside special times to seek out humor and laughter, as you might with working out, and build from there. Eventually, you’ll want to incorporate humor and laughter into the fabric of your life, finding it naturally in everything you do.

Here are some ways to start:

• **Smile.** Smiling is the beginning of laughter. Like laughter, it’s contagious. Pioneers in “laugh therapy,” find it’s possible to laugh without even experiencing a funny event. The same holds for smiling. When you look at someone or see something even mildly pleasing, practice smiling.
• **Count your blessings.** Literally make a list. The simple act of considering the good things in your life will distance you from negative thoughts that are a barrier to humor and laughter. When you’re in a state of sadness, you have further to travel to get to humor and laughter.
• **When you hear laughter, move toward it.** Sometimes humor and laughter are private, a shared joke among a small group, but usually not. More often, people are very happy to share something funny because it gives them an opportunity to laugh again and feed off the humor you find in it. When you hear laughter, seek it out and ask, “What’s funny?”
• **Spend time with fun, playful people.** These are people who laugh easily—both at themselves and at life’s absurdities—and who routinely find the humor in everyday events. Their playful point of view and laughter are contagious.
• **Bring humor into conversations.** Ask people, “What’s the funniest thing that happened to you
Developing your sense of humor: Take yourself less seriously
One essential characteristic that helps us laugh is not taking ourselves too seriously. We've all known the classic tight-jawed sourpuss who takes everything with deathly seriousness and never laughs at anything. No fun there!

Some events are clearly sad and not occasions for laughter. But most events in life don't carry an overwhelming sense of either sadness or delight. They fall into the gray zone of ordinary life—giving you the choice to laugh or not.

Ways to help yourself see the lighter side of life:
• Laugh at yourself. Share your embarrassing moments. The best way to take yourself less seriously is to talk about times when you took yourself too seriously.
• Attempt to laugh at situations rather than bemoan them. Look for the humor in a bad situation, and uncover the irony and absurdity of life. This will help improve your mood and the mood of those around you.
• Surround yourself with reminders to lighten up. Keep a toy on your desk or in your car. Put up a funny poster in your office. Choose a computer screensaver that makes you laugh. Frame photos of you and your family or friends having fun.
• Keep things in perspective. Many things in life are beyond your control—particularly the behavior of other people. While you might think taking the weight of the world on your shoulders is admirable, in the long run it's unrealistic, unproductive, unhealthy, and even egotistical.
• Deal with your stress. Stress is a major impediment to humor and laughter.
• Pay attention to children and emulate them. They are the experts on playing, taking life lightly, and laughing.

Using humor and play to overcome challenges and enhance your life:
The ability to laugh, play, and have fun with others not only makes life more enjoyable but also helps you solve problems, connect with others, and be more creative. People who incorporate humor and play into their daily lives find that it renews them and all of their relationships.

Playing with problems seems to come naturally to children. When they are confused or afraid, they make their problems into a game, giving them a sense of control and an opportunity to experiment with new solutions. Interacting with others in playful ways helps you retain this creative ability.

Here are two examples of people who took everyday problems and turned them around through laughter and play:

Roy, a semi-retired businessman, was excited to finally have time to devote to golf, his favorite sport. But the more he played, the less he enjoyed himself. Although his game had improved dramatically, he got angry with himself over every mistake. Roy wisely realized that his golfing buddies affected his attitude, so he stopped playing with people who took the game too seriously. When he played with friends who focused more on having fun than on their scores, he was less critical of himself. Now golfing was as enjoyable as Roy hoped it would be. He scored better without working harder. And the brighter outlook he was getting from his companions and the game spread to other parts of his life, including his work.
Jane worked at home designing greeting cards, a job she used to love but now felt had become routine. Two little girls who loved to draw and paint lived next door. Eventually, Jane invited the girls in to play with all the art supplies she had. At first, she just watched, but in time she joined in. Laughing, coloring, and playing pretend with the little girls transformed Jane’s life. Not only did playing with them end her loneliness and mild boredom, it sparked her imagination and helped her artwork flourish. Best of all, it rekindled the playfulness and spark in Jane’s relationship with her husband. As laughter, humor, and play become an integrated part of your life, your creativity will flourish and new discoveries for playing with friends, coworkers, acquaintances, and loved ones will occur to you daily. Humor takes you to a higher place where you can view the world from a more relaxed, positive, creative, joyful, and balanced perspective.

Health and happiness help
- Managing Conflicts with Humor: Using Laughter to Strengthen Your Relationships and Resolve Disagreements
- How To Make Friends: Tips on Meeting People and Building Friendships
- The Health Benefits of Dogs (and Cats): Helping You Deal with Depression, Anxiety, and Stress
- Why should adults make time for play? How Play Benefits Your Health, Work, and Family Relationships
- How to Stop Worrying: Self-Help Strategies for Anxiety Relief
- Stress Management: How to Reduce, Prevent, and Cope with Stress

Resources and references:

General information about health and humor
Articles on Health and Humor – Psychologist and humor-training specialist Paul McGhee offers a series of articles on humor, laughter, and health. (Laughter Remedy)

Laughter as medicine
Laughter is the "Best Medicine" for Your Heart – Describes a study that found that laughter helps prevent heart disease. (University of Maryland Medical Center)

Laughter Therapy – Guide to the healing power of laughter, including the research supporting laughter therapy. (Cancer Treatment Centers of America)

The social benefits of laughter
The Benefits of Laughter – Article on the social benefits of laughter and the important role it plays in the relationships between people. (Psychology Today)

The Science of Laughter – Psychologist and laughter researcher Robert Provine, Ph.D., explains the power of laughter, humor, and play as social tools. (Psychology Today)

Bringing more laughter and humor into your life
Humor in the Workplace – Series of articles on using humor in the workplace to reduce job stress, improve morale, boost productivity and creativity, and improve communication. (Laughter Remedy)
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<th>OBJECTIVES</th>
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| • Analyze the homework articles.               | READING           | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  
   2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. |
| • Create thesis statements.                    | WRITING           | 4. Produce clear, varied, coherent, consistent, and engaging writing in which the development, organization, style, tone, and voice are appropriate to task, purpose, and audience.  
   Write an analysis based on a given prompt.  
   a. Differentiate between example and reason when given a writing prompt.  
   b. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or evaluating and trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. |
| • Create an outline based on the chosen thesis. |                   |                                                                                                                                                                                                          |
| • Reading homework.                            | READING           | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. |
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<td>e. Determine which detail(s) support(s) a main idea.</td>
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<td>f. Identify a theme, or identify which element(s) in a text support a theme.</td>
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<td>g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.</td>
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<td>h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text.</td>
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<table>
<thead>
<tr>
<th>• Writing homework.</th>
<th>WRITING</th>
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<tbody>
<tr>
<td>4. Produce clear, varied, coherent, consistent, and engaging writing in which the development, organization, style, tone, and voice are appropriate to task, purpose, and audience.</td>
<td></td>
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<tr>
<td>Write an analysis based on a given prompt.</td>
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<tr>
<td>a. Differentiate between example and reason when given a writing prompt.</td>
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<tr>
<td>b. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or evaluating and trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</td>
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</table>
THEME: The Science of Play

OBJECTIVES

- Analyze the homework articles.
- Create thesis statements.
- Create an outline based on the chosen thesis.

MATERIALS

Activity #1:
- Video: Baby Laughing While Getting Injection

Homework:
- Handout (attached): Make one copy for each student.
  [Research News You Can Use: Pretend Play is Important but Its Role in Learning is Complex](http://www.naeyc.org/content/research-news-pretend-play-is-important)

ACTIVITY #1: Analyze the Homework Articles - 40 minutes

- Tell students they are going to start the process of putting together an outline for the in-class essay in Lesson 2.4 that is research based.
- Ask:
  - How many conclusions on play did you find in the Jaak Panksepp interview?
- Go round-robin to have each student give the number they found.
- Put students into pairs and tell them to make a master list of the conclusions on play that Jaak Panksepp made in his article.
  - Also identify the experiments and findings he discussed in the interview.
- Go round-robin to state the conclusions Jaak Panksepp offers.
  - Write these on the board.
- Tell pairs to:
  - Provide a description of any experiments from the reading and the findings.
  - Match the experiments to one of the conclusions listed on the board.
  - Take notes on the experiments and findings for later use.
- Watch Baby Laughing While Getting Injection.
- Ask:
  - What does this video attempt to show?
- Go round-robin and have students read one of the significant impacts on laughter they circled in the readings.
  - Write these on the board.
- Write the following questions on the board:
  - What do you think is the relationship between play, laughter, and learning? For kids? For adults?
  - How important do you think play is to learning for preschoolers? Why do you think this way?
- Tell students to get out their journals to answer these open questions in 10-15 minutes.
• Come back as a class to discuss student insights.

ACTIVITY #2: Create Thesis Statements - 40 minutes

• Tell students they are going to share their ideas about play and put them in relationship to each other.
• Ask students about their answers to the two journal writing questions written on the board from the prior activity. They are:
  o What is the relationship between play, laughter, and learning? For kids? For adults?
  o How important do you think play is to learning for preschoolers? Why do you think this way?
• Referring to these questions, ask each student:
  o If you were to summarize your answer to the second question in one statement, what would that be?
  o Tell students to write their statements down.
• When everyone has a statement, draw a long scale on the board that looks like this:

<table>
<thead>
<tr>
<th>Play is the most significant learning tool for preschool children.</th>
<th>Play is an insignificant part of children's learning.</th>
</tr>
</thead>
</table>

• Tell students that there are many types of preschools that support each end of the spectrum and some in the middle. The question is where do they fit.
• Go round-robin and have students read their statements and have them tell you where they think their statement belongs on the spectrum and why.
  o Have student come to the board and put their names on the spectrum.
• When all the names are on the spectrum, ask:
  o What would you say about the opinions of this class in general?
  o Are their groups of students who have similar opinions?
  o What are those groups?
• Put students into their groups.

ACTIVITY #3: Create an Outline Based on a Chosen Thesis - 40 minutes

• Tell students they will now start to develop their essays further.
• Tell each student to write down three to five reasons they have for their thesis statements.
• Have the groups meet to:
  o Present their thesis statement.
  o Talk about their reasons for their thesis statement.
  o Answer group members questions about their reasons so that they are clear.
• Students should work individually to outline their essay:
  o Their thesis statement.
  o Their reasons.
  o The important points they want to make for each reason.

HOMEWORK

READ: Have students read Research News You Can Use: Pretend Play is Important But Its Role in Learning is Complex and do the following:
• Write down the author’s thesis statement.
• Answer the following question in writing:
o Where would you put this thesis statement on the “Play” spectrum we used in class today? Why?
o Underline the parts of the text that support their interpretation.

**COMPLETE:** Have students complete a draft outline.
As is often the case, it is important to go beyond the headlines and look more closely at the paper itself. That is challenging with this particular paper, because it is extensive, demanding, and provocative. But it offers an important opportunity to really delve into the complexities that surround play and the research trying to define its role in the lives of young children.

What Did This Paper Do?
Lillard and colleagues set out to review all the research they could find that looks at the relationship between pretend play and a range of early childhood outcomes (including cognitive and academic, as well as social outcomes; they did not find a sufficient number of studies in some areas, like emotion regulation). They find that the research to date is filled with potential weaknesses, which they present in a thorough way. But looking across a number of studies, even with weaknesses, does allow them to consider the pattern of findings, from which they can draw conclusions.

What is the Research Review Really Asking About Play?
The researchers offer three potential hypotheses. First, they consider the view that pretend play is the fundamental force in early childhood—pretend play carries the greatest power to support development. They recognize this as the “ethos of play.” Second, pretend play contributes to outcomes, but it is neither the only nor the strongest factor (they call this equifinality; see here for a technical description of this idea, or here for a very basic one). The third possibility is that pretend play is not really responsible for development in other areas. Instead, pretend play arises because of development in other areas—either directly due to that development or because the same factors that support development in one area also happen to support pretend play (this is called the epiphenomenal argument). In other words, is pretend play the essential force in development; is it one of many forces that affect development; or is it merely a by-product of development in other areas? Examining a range of studies, most of which did not directly test cause-effect relationships, the paper explores whether it is possible to find evidence that clearly rejects or supports any of these arguments.

The Conclusion: Play Has a Complex Role in Early Childhood Development
Lillard and colleagues conclude that the pattern of findings does not support a claim that pretend play is the primary driver of children’s development across a range of other areas of interest. As they point out, this argument may represent an extreme view, one that suggests that if children were allowed only to play, they would develop the range of skills, abilities, and competencies important for school and life success. Such an argument
represents one side of what we previously called a false dichotomy, a false either/or, and so it is not so surprising that the existing research cannot support it. Instead, the existing research supports two alternatives: (1) pretend play works in concert with other factors to support children's development, or (2) pretend play arises out of the relationships between certain experiences and other areas of development. In either case, pretend play is related to a number of early childhood learning and development outcomes; it simply cannot be argued that pretend play is the sole source of development in those areas.

What Does This Mean for Early Education?
At the end of their extensive review, Lillard and her colleagues argue that there is a role of pretend play in early childhood education, even if it is not central. It is perhaps significant that we perceive the need for play to predict other outcomes, presumably justifying its presence in the lives of children. However, this paper underscores the importance of play, even if it is not the strongest predictor of other outcomes. The authors point to the importance of playful learning and child-centered classrooms (for example, here and here) in supporting young children's development. They also note the importance of joyfulness—not typically assessed as an outcome in studies of play but surely present.

Their discussion of early education echoes the NAEYC position statement on developmentally appropriate practice, and elsewhere, which includes play as one of several instructional strategies, including more teacher-directed approaches, that combine to provide children with experiences that support development. This can be called the “play as action” approach (see here, for example). The authors also note that play can be a context for learning (“play as place,” for example, here); children like to play, it brings joy, and it is within this context that learning can occur. Children can learn while at play through their own experience, through their interaction with peers, and through their interactions with adults. The idea that play provides a context for learning and development in education is similar to the use of play therapy for children coping with traumatic experiences; in both cases, play as place provides a natural, comfortable setting for young children to develop. Froebel, Montessori, Paley, all the giants in our field, have said that play is children’s work, but it is also adult work. We in early education must work to better understand the role of play in the lives of young children, and how to nurture and utilize play in our work with children.
<table>
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<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
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</table>
| • Analyze the homework article. | READING           | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  

   2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text.  

   6. Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.  
   a. Determine an author’s point of view or purpose of a text.  
   b. Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and responds to conflicting evidence or viewpoints.  
   c. Infer an author’s implicit as well as explicit purposes based on details in text.
- Select studies that support your reasons for your thesis.
- Identify ways to use references in your writing.
- Writing homework.

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<th>WRITING</th>
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<tr>
<td><strong>2. Write informative/explanatory texts from a prompt in a formatted manner to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</strong></td>
</tr>
<tr>
<td>a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</td>
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<td>b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.</td>
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<tr>
<td>c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</td>
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<tr>
<td>d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.</td>
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<tr>
<td>e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</td>
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<tr>
<td>f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</td>
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THEME: The Science of Play

Class to be held in the Technology Lab

OBJECTIVES

• Analyze the homework article.
• Select studies that support your reasons for your thesis.
• Identify ways to use references in your writing.

MATERIALS

• None.

ACTIVITY #1: Analyze the Homework Article - 40 minutes

• Tell students they are going to analyze the homework reading with an eye to contrasting the author’s view with your own.
• Draw the “Play” spectrum on the board:

Play is the most significant learning tool for preschool children.                      Play is an insignificant part of children’s learning.

• Put students into pairs to prepare their answers for the two homework questions. Write them on the board:
  o Where would you put this thesis statement on the “Play” spectrum? Why?
  o Cite the parts of the text that support your interpretation.
• Go from pair to pair to see if their placement and citations are similar.
• After all the pairs have reported out, ask:
  o What are some important differences between this argument and yours?
  o What points would you make to this author that you think he/she is missing?

ACTIVITY #2: Select Studies that Support Your Reasons for Your Thesis - 60 minutes

• Tell students to complete the following set of tasks:
  o Review their notes and select the experiments or studies that would support the reasons for their thesis.
  o Write an outline on the computer that includes the studies they will cite per reason.
• Introduce the in-class essay prompts:
  o How important is play children’s learning?
  o What are your reasons for your position?
    ▪ Include at least three citations to make your argument stronger.
  o How would you incorporate play into your preschool teaching?
• Have a student share their thesis and reasons for their thesis and write these on the board.
Write these in clear outline form on the board leaving space to put in information from their notes.

- Ask the class:
  - What experiments or studies can you remember that support this writer’s thesis and reasons?
  - Make notes about the studies under the different reasons:
    - Tell students their notes must include:
      - Author’s name(s), Title of article or video, if available.
      - Findings and conclusions.
  - Repeat with a few students until the process and outline form is clear.
- Give students time to review their notes and type up their final outline.

ACTIVITY #3: Identify Ways to Use References in Your Writing - 20 minutes

- Tell students they need to be clear on simple ways of referring to or citing their sources.
- Put students in pairs to identify three different ways the authors they have read have cited sources.
- Have pairs share their findings and recommend a few simple ways they should use.
  - Do not require full citations. Just simple usages:
    - Use “According to” to introduce a scientist and his/her thinking.
    - Use parentheses and designate the author and the title for our purposes.
  - Explain that in a formal research paper students will need to provide full citations in a bibliography or footnote. However, this level of citation is not required for this essay.

HOMEWORK

WRITE: Have students prepare for an in-class essay with sources by creating an outline that includes answers to the following questions:
- How important is play to learning for preschool children?
- What are your reasons for your position?
  - Include at least three citations to make your argument stronger.
- How would you incorporate play into your preschool teaching?

TEACHER NOTE: The criteria for a good essay used in Week 2, Lesson 2 will be used again in Week 4, Lesson 2.
<table>
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<th>OBJECTIVES</th>
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</table>
| Rehearse and write an in-class essay. | WRITING | 1. Write arguments from a prompt in a formatted manner of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.  
b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.  
c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.  
d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.  
e. Provide a concluding statement or section that follows from and supports the argument presented. |

| Conduct the peer review process. | READING | 5. Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.  
a. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.  
b. Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).  
c. Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author’s purpose.  
d. Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose.  
6. Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.  
a. Determine an author’s point of view or purpose of a text.  
b. Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and... |
| Reading homework. | READING | 1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.  
   a. Summarize what has been read.  
   b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.  
   c. Identify the implied main idea and supporting details from an instructional level passage.  
   d. Identify cause and effect implied in a paragraph. |
| Writing homework. | WRITING | 2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. |
THEME: The Science of Play

OBJECTIVES

- Rehearse and write an in-class essay.
- Conduct the peer review process.

MATERIALS

Activity #1:
- Student Work: Students should bring hard copies of their essay outlines created for homework.

Activity #2:
- Handout: Make two copies for each student.
  Audience Comment Page (attached to Week 2, Lesson 2)

Homework:
- Handout: Make one copy of pages 204 to 209 for each student. (Note that the PDF accessed through this link begins on page 204.)
  The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on Poverty

ACTIVITY #1: Rehearse and Write an In-Class Essay - 60 minutes

- Tell students they are going to review criteria for a good essay by answering the following questions. Ask these questions and then put their answers on the board:
  - What makes a good introduction?
    - Make sure the criteria include that the introduction has a thesis and it gets the attention and interest of the audience
  - What is a thesis and why is it important?
  - What makes for good paragraphs that provide your reasons and evidence?
    - Make sure the criteria include that the paragraphs have a clear topic sentence, give clear explanations, and are easy to understand.
  - What makes a good conclusion?
    - Make sure the criteria include making recommendations to resolve the issues discussed in the essay.
  - Which questions prompt you to write about each of these parts of the essay?

- Have students get their homework outlines out.
- Put students into pairs to hear and respond to each other’s plans for the in-class essay.
- Tell pairs they are to take turns, assigning one person to be the questioner and one as the speaker. When the first questioner is finished, then pairs should switch roles and repeat the process so both students can be heard.
- Tell students to make any changes to their outline that will improve their essays.
- Time students as they write a 45-minute in-class essay using their notes.
ACTIVITY #2: Conduct the Peer Review Process - 60 minutes

- Tell students they will now provide constructive feedback to each other’s essay. They are to remember they must remain the audience that the writer is happy and comfortable with, meaning that the audience simply wants to understand what the essay is trying to say and to offer good suggestions for making the essay more interesting.
- Ask students: What kinds of things would happen when others are reading your work that would NOT make you feel happy and comfortable? Write what students say on the board.
- Put students into groups of three.
- Have students take out their essays.
- Pass out two copies of the Audience Comment Page (attached) to each student. Explain that they will:
  - Read the essays written by the other two people in their group.
  - Fill out one Audience Comment Page for each of the essays they read.
  - They are NOT to comment on grammar or spelling yet. However, if they are not sure what something says, they can ask the writer for clarification.
  - They are to be friendly, encouraging, and genuinely helpful. Good comments on their partners’ work will help them when they have to rewrite their final essay.
- Have students pass their essays to the left.
- After students have evaluated the first essay, they should pass the essay they have worked on to their left and evaluate a new essay.
- After students have evaluated two essays, they should give their evaluations to the authors, and the authors should read the comments and ask questions to the evaluators as needed.
- Tell students that you will also evaluate their essays so they will each have three reviews to help them with their rewrites. Have students hand in their essays along with the two evaluations from their peers.
- Collect student essays along with the Audience Comment Pages for them.

TEACHER NOTE: Evaluate the student essays handed in using a copy of the Audience Comment Page. You will need to read both the essays and the student comments on those essays to see how perceptive the audiences for each essay were. Your comments should either reflect good suggestions or offer a different way to evaluate their essays that you think might be more helpful. Additionally, DO NOT correct everything in the students’ drafts. Only mark those errors in the text that would help the student make significant progress toward a better essay. In your comments, indicate a due date for rewrites of these drafts.

HOMEWORK

JOURNAL WRITING: Have students write in their journal and answer the following prompts:
- What was your experience of doing this more technical writing that includes quotes and citing texts?
- Why do you think this will be important in college writing?
- Why do you think this is important in general?

READ: Have students read the first five pages (pages e204 – e208) of The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on Poverty, which includes the sections titled:
- Abstract
- Benefits of Play
- Reduced Access to Play in Schools
- Reduced Out-of-School Opportunities for Play
Family Considerations

Tell students that this is a difficult reading but “Do not feel intimidated!” Get a dictionary to look up those words that stop you from understanding the idea in what you are reading. Know that feeling confident enough to tackle difficult materials will be very helpful for doing well on the GED/HSE. Get what you can out of an article so we can use it in our class work!

WRITE: After reading the difficult article, tell students to write lists in their own words:
- Make a list of the benefits of play.
- Make a list of all the factors that interfere with poor children getting enough play.

TEACHER NOTE: The criteria for a good essay will be used again in Week 6, Lesson 2.
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<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
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</table>
| • Analyze the homework reading and prepare for a presentation. | READING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  
2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. |

| SPEAKING AND LISTENING | SPEAKING AND LISTENING | 8. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks. |

| READING | READING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  
2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme. |
THEME: The Impact of Poverty on Play and Language Development

OBJECTIVES

- Analyze the homework reading and prepare for a presentation.
- Groups present their analyses.

MATERIALS

Activity #1:

- Classroom Resource: Flip chart paper and markers.
- Handout: Students should have brought their copy of pages 204 to 209 to class. However, teachers may wish to have extra copies on hand.
  The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on Poverty

Homework:

- Handout: Students will be using additional material from the same article they used in class.
  The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on Poverty

ACTIVITY #1: Analyze the Homework Reading - 80 minutes

- Tell students that the whole class will be working on getting the most out of the homework article. While it is difficult, it can help us with more insights on how poverty impacts play and what might need to be done to help children living in poverty to thrive.
- Put students into four groups to look carefully at separate sections of the reading:
  - Group 1: Benefits of Play
  - Group 2: Reduced Access to Play in Schools - Part 1
    - This is a long section so it is to be cut in half for two different groups to handle separately.
    - End the first group’s section on e207 after the first paragraph break. That paragraph ends with the work “compromised”.
  - Group 3: Reduced Access to Play in School - Part 2
  - Group 4: Reduced Out-of-School Opportunities for Play and Family Considerations
- Have each group structure their presentations as follows:
  - Group 1:
    - List the benefits of play.
    - Summarize what they think are the impacts of play.
    - Make suggestions for how they think the benefits of play could be made more available to all children.
  - Groups 2, 3, and 4:
- List the factors that interfere with poor children getting enough play.
- Summarize what they think are the impacts of lack of play on children in your group’s own words.
- Make suggestions for how they think poor children could have more access to play.

- In their group, students should go through the following steps to prepare for their presentations:
  - Go round-robin to make a master list from their notes of the benefits of play or the factors that interfere with getting enough play (depending on which topic was assigned to their group).
  - Read each paragraph from their assigned section aloud and add additional items to their master list.
  - Talk through their group summary and suggestions as described above.
  - Put together three flip chart pages for presentation—one for each presentation item.
  - Give each group member a role in the presentation.

ACTIVITY #2: Groups Present Their Findings and Impacts - 40 minutes

- Tell students that they will need to take notes on the presentations. They must take notes on those parts of the reading that they were not assigned, so that they have access to all the information.
- After each presentation, ask:
  - What worked about the presentation?
  - What do you want clarified?
  - Is there anything you want to add?

HOMEWORK

READ: Have students read pages 208 – 209 of The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on Poverty, the sections titled Factors that Reduce Play for Children in Poverty and the Potential Implications and take notes that can answer the following questions in their own words:
- What are the solutions?
- What is the advice for pediatricians?
- What are the conclusions?
<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
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</thead>
<tbody>
<tr>
<td>• Paraphrase two recommendations sections of the homework reading.</td>
<td>READING</td>
<td>1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.</td>
</tr>
</tbody>
</table>
| • Make predictions and watch a video about the relationship between language and play. | READING            | 7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.  
   a. Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author’s argument.  
   b. Compare two passages that present related ideas or themes in different genre or formats (e.g., a feature article and an online FAQ or fact sheet) in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact when comparing. |
| • Make predictions and watch a video about the relationship between poverty and language development. | READING            | 9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.  
   a. Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline). |
| • Reading homework.                          | READING            | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  
   2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. |
THEME: The Impact of Poverty on Play and Language Development

OBJECTIVES

- Paraphrase two recommendations sections of the homework reading.
- Make predictions and watch a video about the relationship between language and play.
- Make predictions and watch a video about the relationship between poverty and language development.

MATERIALS

Activity #1:
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  *The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on Poverty*

Activity #2:
- Video: *Language Develops Through Play*
  [https://www.youtube.com/watch?v=fZwbK0-kVwQ](https://www.youtube.com/watch?v=fZwbK0-kVwQ) (running time: 4:01)

Activity #3:
- Video: *Childhood Language Development: The 30 Million Word Gap*
- Online Resource: *Closing The Word Gap Between Rich and Poor – Podcast*

**TEACHER NOTE:** The podcast for this activity can be found near the top of the page at the link above in a bar titled, “Listen to the Story, Weekend Edition Sunday.”

Homework:
- Handout (attached): Make one copy for each student.
  *The Earliest Intervention: How to Stop the Achievement Gap from Starting?*
  [http://hechingerreport.org/content/the-earliest-intervention-how-to-stop-the-achievement-gap-from-starting_12442/](http://hechingerreport.org/content/the-earliest-intervention-how-to-stop-the-achievement-gap-from-starting_12442/)
- Handout (attached): Make one copy for each student.
  *How Do you Make a Baby Smart? Word By Word, a Chicago Project Says*

ACTIVITY #1: Paraphrase Two Recommendations Sections of the Homework Reading – 50 minutes

- Tell students they are going to practice their paraphrasing skills today to make sure they get the most out of the last sections of the homework article.
• Ask: What is paraphrasing? Write the answers on the board and determine a good answer.
• Have students take out the homework article.
• Go round-robin to have students state one solution, in their own words, that they got from the “What are the Solutions?” section. They must make sure the statement is in their own words.
• Write students paraphrased recommendations on the board.
• Then, write the following instructions on the board:
  o Paraphrase the meaning in the paragraph.
  o State any recommendation in the paragraph.
  o Decide if the recommendation is already on the board or not.
  o Put the new statement on the board if it is not there.
• Read the first paragraph from the “What are the Solutions?” section aloud and have the class go through the process described above on the board.
• Put students in four groups (the number of remaining paragraphs in the section) and assign them each a paragraph to:
  o Read aloud.
  o Paraphrase each solution in a single statement.
  o Decide if the solution is already on the board or not and whether or not to add their statement.
• When groups are ready, tell them to:
  o Read their paragraph aloud, with feeling!
  o Paraphrase each solution in a single statement.
  o Decide if the solution is already on the board or not and whether or not their statement needs to be added.
• Add new statements to the list, as needed.
• Next, read each bulleted statement aloud in the "Advice for Pediatricians" section. After you read the statement, ask students to write down their paraphrase.
• For each statement, ask students to read their statements and choose the one that is clearest and most direct.
• List these on the board as well.
• Ask:
  o Were there any recommendations that you made in your presentation last class that were made in this article?
  o Which ones?
  o Are there any new good ideas worth noting?

ACTIVITY #2: Make Predictions and Watch a Video About the Relationship Between Language and Play – 30 minutes

• Tell students they are now going to apply their knowledge of play and poverty to language development. But we will start first with thinking about the relationship between language development and play.
• Before students see a video on this topic, ask:
  o What are your predictions?
  o What do you think is the relationship between language development and play?
  o Why do you think play is so important to language development?
• Write student answers on the board.
• Tell students they are going to watch a video to see how their predictions about these relationships between language development and play compare to what the experts are saying:
  o Click on the link: http://www.bostonchildrensmuseum.org/power-of-play
Scroll down the page and find the box marked: “Play and Language Development” and click on that box.

Scroll down below the box to find the video, Language Develops Through Play, and click on the video to watch.

- After the video, ask:
  - How accurate were our predictions?
  - Is there anything we want to change on the list based on the video?
  - Are there any additions we want to make to the list?

**ACTIVITY #3: Make Predictions and Watch a Video About the Relationship Between Poverty and Language Development – 40 minutes**

- Tell students that they will now look into the relationship between poverty and language development. We are going to look at a video and listen to a podcast to get an idea about what the relationship is.
- Before showing the video on this topic, ask:
  - What are your predictions?
  - Based on what you have learned about the relationship between language development and play, what would be the impact of poverty on this development?
  - Why?
- Before watching the video, tell students to take notes on:
  - The name of the study being discussed.
  - The numbers that the study found.
  - The conclusions that were made.
- Watch the video.
- Have students summarize the findings and state the conclusions.
- Before playing the podcast, tell students to take notes on:
  - The studies that are being done on the Word Gap.
  - The solutions being proposed.
- Listen to the podcast.
- After the podcast, ask:
  - What is the Word Gap?
  - What are some of the approaches to measuring the Word Gap?
  - What are some of the approaches to solving the Word Gap?

**HOMEWORK**

**READ:** Have students read How Do you Make a Baby Smart: Word By Word a Chicago Project Says and The Earliest Intervention: How to Stop the Achievement Gap From Starting? For each of the articles, students should:
- Underline issues and solutions.
- Choose the solutions that they think would have the most impact.
CHICAGO — On the third-floor hospital maternity ward at the University of Chicago, Bionka Burkhalter had just given birth to her first child, a 7-pound-4-ounce boy named Josiah. There was a knock on the door, and two women asked to give a presentation on how to build her baby's brain. The 21-year-old single mother put aside the blueberry muffin and fruit cup on her hospital breakfast tray and gave them her attention.

In the next 15 minutes, she heard about the importance of talking a lot to Josiah, whose thick dark hair poked out from under a swaddle blanket in a bassinet beside her bed. She heard about tuning into his cues and responding when he cries, and about giving him a chance to communicate back to her, even if just through eye contact.

Burkhalter is a test subject in one of many initiatives being piloted by the Thirty Million Words Project, which aims to prevent the achievement gap from starting with the power of parent-child talk — beginning at day one.

In this intervention with newborns, mothers still in the hospital learn research-based parenting practices less commonly known in poor households. There will soon be follow-up lessons at pediatric checkups. This winter, Thirty Million Words is embarking on a major longitudinal study of a home visiting program that teaches communication skills to parents of slightly older babies. Children will be trailed from approximately 15 months old through at least kindergarten.

Thirty Million Words was founded by University of Chicago pediatric surgeon Dana Suskind, who performs cochlear implant surgery on deaf children, allowing them to hear. Suskind was disturbed to discover that, after the same operation, some patients from poor families had more difficulty learning to speak than children from affluent homes. She became intrigued by a famous study finding that a hearing child born into poverty hears 30 million words fewer before age 4 than a middle-class peer.

This so-called “word gap” has been getting a lot of attention lately, thanks to Hillary Clinton making it a pre-campaign campaign of sorts. Her Too Small to Fail partnership has spurred a White House conference on the topic, public service announcements on Univision, and strategic dialogue on TV shows like Orange Is the New Black and The Fosters. The American Academy of Pediatrics released a policy in June asking its 62,000 member doctors to encourage parents to read to their babies daily.

In Too Small to Fail’s first target cities of Oakland, California, and Tulsa, Oklahoma, pediatric clinics and child care programs are giving out baby onesies and children’s T-shirts with messages like “Let’s Talk About Colors” as conversation-starters. And there are now text message campaigns to give parents talking reminders and tips.
Thirty Million Words has promising results from a small pilot home visiting program, and the national buzz has helped catapult the organization into a rapid expansion in Chicago. Suskind and her 13-member staff, plus graduate student interns and volunteers, are trying several approaches to reach families while measuring the impact for potential widespread replication. These strategies do not simply involve the quantity of words spoken; more fundamentally, they target parent-child relationships, in line with new research that the quality of communication is what matters most.

“Our obviously, language can in itself be a key part of building a child’s brain, but the parent relationship really is the basis for all of child development,” said Suskind, 46, a widowed mother of three school-age kids who sits on the Too Small to Fail advisory council. “We’re using the lever of parent talk to get into the parent-child relationship.”

Language, though, can be quantified where relationships can’t. In the long-term study that began in December, babies will wear a device recording how many words adults say to them in a day and how many chances they get to respond. Results will be collected for 200 children recruited from Early Head Start and other city programs. All families will receive six months of home visits, but parents won’t all learn about the same thing. Half in a control group will get lessons on nutrition. The other 100 will see the Thirty Million Words video curriculum, explaining scientifically backed communication skills.

“The ultimate answer is the whole society understanding how important parents are in their children’s development.” — University of Chicago pediatric surgeon Dana Suskind

Parents will be taught to weave back-and-forth conversation into daily activities, from diaper changing to cooking dinner, and to explain to children why they are being asked to do things, rather than just directing them. They’ll be urged to go on a “technology diet,” since children need human interaction; their brains don’t build connections with televisions and computers. And they’ll be prompted to praise their children’s efforts rather than the outcomes of their actions so they won’t be discouraged from taking chances when something doesn’t work out. (“I love how hard you worked on that!” would be preferable to “You’re so smart!”)

In partnership with the city of Chicago, Suskind’s team will follow all 200 children over time to measure their kindergarten readiness. Suskind also is in talks with the Chicago Children’s Museum to create targeted conversation points for the 400,000 children and parents who visit each year. She is applying for a grant to train low-income parents to be ambassadors promoting the cause. (Her organization gets a mix of public and private funding.)

“The ultimate answer is the whole society understanding how important parents are in their children’s development,” Suskind said. In low-income communities, “they’ve been told the opposite, that they’re not powerful.”
Burkhalter, who holds a GED and lives with her mother on the South Side, was one of 80 new moms who got the newborn presentation after giving birth at the University of Chicago in recent months. Feedback from these women will be incorporated into a video to roll out in the University of Chicago and Northwestern University’s maternity wards this summer, shown when newborns have their hearing tested. Similar videos are being developed to show parents on iPads while waiting to be seen at pediatric checkups.

Before her presentation began, Burkhalter filled out a survey. She checked “somewhat agree” to the statement, “How smart an infant will be depends mostly on their ‘natural’ intelligence at birth.” She then turned to Beth Suskind and Iara Fuenmayor Rivas, who led her through a 59-slide PowerPoint. Beth is Dana Suskind’s sister-in-law and runs Thirty Million Words’ daily operation.

Despite having just been through 17 hours of labor, Burkhalter listened attentively as Beth Suskind explained that 85 percent of baby Josiah’s brain will develop in the next three years. Her talking, responding and caring for him will make his brain grow strong. Every snuggle, every diaper change counts.

“He was born ready to learn, and you’re his most important teacher,” she said. Talking to him before he can talk back “might feel really strange at first, but it just becomes second nature.”

Beth Suskind debunked the common myth that infants can be spoiled with too much attention, explaining that their short-term memories are still developing for the first six months — so Josiah needs to be reminded that Mommy is there to comfort him when he’s upset.

“There are no perfect parents,” she said. “You’re teaching him he can count on you.” Asked for “brutally honest” feedback at the end of the presentation, Burkhalter didn’t have anything negative to say. She learned a lot. “I’m gonna talk to him when I’m changing his Pampers,” she said.

She then took the same survey again. Beside the statement “How smart an infant will be depends mostly on their ‘natural’ intelligence at birth,” she had a new answer: “Strongly disagree.”

*This story was produced by The Hechinger Report, a nonprofit, independent news website focused on inequality and innovation in education. Read more about early childhood education.*
CHICAGO—Her first baby, a boy she planned to call Jaidan, arrived stillborn on June 25, 2009, the same day Michael Jackson died. More than three years later, when a second chance at motherhood finally came her way, Dwana Harris was determined to do everything right.

So last fall, Harris was intrigued when she unexpectedly met a woman bearing information about healthy child development in the living room of a cousin with a newborn. Soon the woman was visiting her, too, in the meticulously clean one-bedroom apartment that she and her boyfriend share in a South Side public housing tower near Lake Michigan.

Harris, 28, had questions about what to ask at doctor’s appointments, what to eat and generally what to do to keep her unborn daughter on track. Her home visitor, Tammie Haltom, and a birthing coach named Sonia Collins had answers. They got her into a high-risk prenatal clinic at the University of Chicago, where Collins attended appointments with her. They persuaded her to cut back—way back—on the amount of Wild Cherry Pepsi she drank. They gave her children’s books like “Shades of People” and “The Itsy Bitsy Spider,” which she began reading to her belly.

The women work for the Ounce of Prevention Fund, a Chicago nonprofit that strives to stop the achievement gap for children in poverty from ever starting. That means beginning assistance at the first possible moment—in other words, before birth.

In recent months, President Obama has reignited the national conversation about early childhood education by proposing universal preschool for 4-year-olds from low- and moderate-income families. But with much of a child’s brain development occurring in the first three years of life, advocates at the Ounce and elsewhere say even that is too late, thrilled though they are by the preschool proposal. Poor babies as young as 9 months show a gap in cognitive development compared with wealthier peers, a gap that triples by the time they are 2 years old.

A less publicized part of the president’s plan would provide $15 billion over a decade for home visiting. The federal government has already provided $1.5 billion for home visitation under the 2010 Affordable Care Act, and states are funding the service for hundreds of thousands of families nationwide. But still only a small fraction of babies born into poverty receive this earliest intervention.

“We can remediate 3-year-olds and 4-year-olds, or we can get them right from the beginning,” said Diana Rauner, president of the Ounce, a $48.5 million organization that provides training and funnels public funding to 32 home visiting and doula (birth coaching) programs around Illinois, among numerous initiatives. “The remediation doesn’t work so well, even at that age.”

So how to get it right from the start? The crux of home visiting work is relationship building with a mother and, by extension, an entire family. To begin to alleviate poverty’s devastating effects on a child’s development, the thinking goes, a family needs a positive frame of reference for relationships. Provide a young mother whose life may be filled with chaos and drama with the opportunity to be heard and valued. Arm her with the information she needs to speak up in institutional settings, whether a hospital delivery room or a kindergarten class, and in personal relationships. Show her how to develop a baby’s vocabulary.
through reading, singing and stimulating conversation—starting in utero. Guide her to nurture her child and herself.

The result, if the strategy is successful, is that mothers in underserved communities are empowered to advocate for themselves and their children—and children grow up in more grounded, affectionate, engaging environments. Compare the school involvement of low-income parents versus affluent ones, and the differences lie in confidence levels and institutional knowledge. Look at children's academic performance and life outcomes in general, and the emotional stability and cognitive stimulation they get at home are undeniably enormous factors.

But as with all relationships, the terrain is delicate and messy. It challenges families’ values and cultural norms. Result can’t be measured immediately, and many forces compete to undermine success. This is, after all, Chicago, where the potential horrific consequences of an unstable childhood are painfully evidenced in the city’s violent crime statistics, including a murder rate now declining after a surge in 2012 but still impacting youth disproportionately.

“If it were cheap or easy, we would have done it already at a great scale,” said Rauner, whose husband is a Republican candidate for Illinois governor. “But clearly, we think it’s the beginning of this great opportunity to really affect parent behavior, which really, in the long run, is the answer for children’s school success... If there’s another way to do this, I don’t know what it is.”

The Ounce helped to pioneer the idea of using doulas, or coaches in birthing and newborn care, as an intervention for impoverished teen mothers in Chicago nearly two decades ago. Two of three pilot sites in the mid-1990s are still in operation.

A few years ago, the Ounce began operating the Healthy Parents and Babies program in which Dwana Harris now takes part. It is funded by a $543,025 Early Head Start grant.

The program, similar to others the Ounce supports around the state, relies on two people with distinct roles to form relationships with a family. A doula supports the mother before, during and after delivery, promoting the initial parent-child bonding in the context of a longer-term home visitation program. A home visitor is a parent resource who works with the family through other formative experiences that can be equally trying, from sleep training to potty training to temper tantrums. “It’s a journey where even the most highly degreed and highly resourced of us feel like we don’t know, we’re just barely getting by,” Rauner said. Participants are also invited to join parent support groups.

Ideally the relationships last for years, until the child is enrolled in a high-quality preschool. The Ounce runs a model program in a national network on the South Side where Harris is interested in someday sending her daughter.

One of the program’s oldest parents, Harris is in many ways an ideal participant: independent, determined, and open to receive the organization’s teachings. Despite a busy schedule balancing her job as a home aide to the elderly with an online associate’s degree program in medical records administration, she made time during her pregnancy to attend meetings on everything from child discipline to mothers’ self-care to early school readiness assessment. She’s also had a longtime partnership with her baby’s father, James Jones, 34, who works in waste collection for the city and is studying to become a carpenter. Jones seems more comfortable in front of his Black Ops game on the Xbox than helping with stretches and massage exercises the doula showed them to relieve Harris’s low back pain in the third trimester. But he helps nonetheless and is there when she needs him.

For all Harris has going for her, she was petrified about something going wrong again in her impending dive into parenthood. And she reached for the support being thrown her way like a lifeline.

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At the time of “my tragedy,” as Harris refers to her son’s stillbirth, she was newly back in Chicago after a year and a half in Iowa, where she worked at a meat processing plant and then on the assembly line at a cookie factory. She wanted her large family nearby during her pregnancy. She also liked the idea of her longtime doctor delivering her baby at Little Company of Mary Hospital and Health Care Center, near the Englewood community where she grew up.

But her experience was not what she had imagined. The doctor “was really busy,” said Harris, a soft-spoken perfectionist. “A lot of times I would come in and I couldn’t see him because he was out doing other things.”

She didn’t understand her options for pain medication during delivery, which was induced. “A lot of things went on that I didn’t like,” she said. “I didn’t know I had the option to tell them, ‘Hey, I don’t want that. I don’t want you doing that.’”

Nor does she understand what ultimately went wrong. “The actual cause of death that they told me [was] the baby didn’t have any fluid around him, any amniotic fluid,” she said. “I just thought that they probably should have noticed that a little sooner.” On her upper back, she got a tattoo of an angel holding a baby surrounded by the names of her son and his parents: Jaidan, Dwana and James.

Her second time around, at the University of Chicago’s high-risk clinic, she was relieved to get an update on her fluid levels during each of her monthly visits. Sonia Collins, her doula, eased some initial fears as well, dispelling the myth that reaching her arms overhead could cause the baby’s umbilical cord to wrap around her neck.

Still, she was scared, and for months, she refused to buy anything for the baby. On a Thursday afternoon in late March, eight weeks shy of her due date, Harris sat on her plush red couch with Collins, finally ready to pick out registry items in preparation for an April 27 shower her mother was planning at the family’s church. She didn’t want anyone feeling obliged to spend too much on her.

Harris was adamant about one thing she would not register for: bottles. She’d been won over on breastfeeding, even though it is not common among women in her family. The Ounce’s doulas and home visitors heavily promote the practice for its many documented benefits, including infant brain development and reduced risk of various diseases, allergies and possibly even SIDS. They often find resistance because of the cultural perception of breasts as sexual objects, the notion that breastfeeding is primitive, and the idea that if formula was good enough for them, it should be good enough for their children. It may help when the workers are the same race as the participant; the program often matches but doesn’t require it. Collins and Tammie Haltom, Harris’s home visitor, are both African-American, and Collins, 35, had a baby girl herself just over a year ago.

That day, Harris was proud of herself for having decided against a recommended amniocentesis test for Down Syndrome at a recent doctor’s appointment. Since she started getting more vocal with her doctors, she’s found, “a lot of times, their jaws drop, because they don’t understand how I know to ask these things.... Maybe it’s just a personal thing, but they sort of make you feel inferior.” She’ll know to ask questions now “if I decide to do daycare with [the baby], and when she goes to school, every aspect of her life where she can’t speak up for herself.”

Before becoming involved in the Ounce, Harris was already working to build a better life through education. She was due to get her associate’s degree from her online program at the University of Phoenix within weeks of her daughter’s birth. She wondered if it would be OK to take a newborn to a June 8 ceremony held locally for Midwest participants.

In the early 2000s, attendance problems made it hard for Harris to get through high school. She ended up finishing her degree at a National Guard-run boarding school 120 miles south of Chicago. She started community college to please her parents, who, though not together,
provided relative stability. But she soon traded school for work, eager to make money to stay in the latest fashion. (She still dresses up when she goes to doctor's appointments.) Over the years, she earned a pharmacy technician certificate but couldn't find long-term work in the field, and she started culinary school. Hooked on the Investigation Discovery channel, she now hopes to pursue a bachelor’s and a career in criminal justice.

“Most of the influence right now in the outside world is that it’s not necessary to go to college. You can just become famous or something,” she said. Her advice to her unborn daughter: “You still want to be educated. Even if you have a talent, you still want to have something to be a backbone, something that could support you no matter what.”

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Life circumstances are typically more overwhelming for the teenage mothers who were the original targets of the Ounce’s prenatal interventions and remain the majority of the 58 families served annually in Healthy Parents and Babies.

Celina Hernandez’s mother and grandmother were both teenage parents. Her mother was 15 when she was born, and Hernandez lived primarily with her grandmother growing up. She had lived with her mother for only one summer before last fall. By then she was 17 and pregnant. She needed her mom.

Her mom needed her, too, facing health problems while caring for three of Hernandez’s four younger siblings. They were seven under one roof—both Hernandez’s and her mother’s boyfriends had moved in as well—plus a little white dog named Oakley and a baby girl on the way. Their townhouse complex near Riverdale, in the southernmost part of the city, has been newly rebuilt by the Chicago Housing Authority. But Hernandez, who dreams of becoming a pediatrician but thinks a nurse is a more realistic goal, is pained by the sight of some neighborhood children in unwashed clothes. Her younger sisters and brother (the girls ages 12 and 7, the boy 5) are subject to teasing as some of the only Hispanics in a largely African-American area. And Hernandez’s commute to Kelly High School, which has provided important services for her learning disabilities, is miserable.

Before the birth of her daughter, she and her boyfriend, 28-year-old Alex Toledo, would leave at 5:30 a.m. to catch the No. 34 South Michigan bus, assuming it showed up. They would ride for 45 minutes to a Red Line train on the Chicago El. From there they could either transfer to another bus or switch trains and then make a final bus transfer, depositing Hernandez at school ideally by the 7:30 a.m. bell while Toledo continued another half hour to his job at a warehouse. Both were regularly late. Then Toledo lost his job, and Hernandez had to make the trip alone. The return ride takes even longer because of more frequent bus stops.

Hernandez, now 18, learned about the Ounce through a teen parenting support group at Kelly, where she is completing junior year primarily in self-contained special education classes. She was eager to give the doula and home visiting program a try, interested in learning about her baby’s development.

She liked how doula Patricia Ceja-Muhsen, 39 and Mexican-American like her, brought her fruit and granola bars and gave her tricks to ease low back pain. She appreciated being able to text her anytime. With a loving yet no-nonsense demeanor, Ceja-Muhsen offered information from years working with teen parents.

But Hernandez soon began to feel overwhelmed by everything the woman wanted her to do, even suggesting that she consider a natural childbirth with no pain medication. (Doulas are generally proponents of natural birth because it fosters an intense mother-child bond and sense of accomplishment, but they are trained to respect a mother’s wishes after providing the information. Most participants still get epidurals. Hernandez was no exception.)

The information Hernandez got from her doula sometimes conflicted with what her mother and even her doctor advised. Ceja-Muhsen said she emphasized that she wouldn’t judge her decisions. “I always tell my moms, ‘Whatever direction you go, I’m there to support you,’” she said.
Sofia Marie Toledo was born at 6:25 a.m. March 7 at Mt. Sinai Hospital after 23 hours of labor. She was 7 pounds and 13.2 ounces, with a full head of smooth dark hair like her mom's and a round, cherubic face like her dad’s. At about a half-hour old, the baby wasn’t latching on to Hernandez’s breast. Ceja-Muhsen, who was there for the birth and had left the room briefly, said she returned to find her getting a bottle with formula.

“Patricia was expecting me to do a lot more than what the doctors told me to do,” Hernandez said later, as the doula was continuing to encourage breastfeeding. “My doctor understands how hard it is. She knows how far my house is, and school. So she told me, ‘If you feel like you can do it, do it. If not, don’t even bother pumping...’ And Patricia kept telling me to pump.”

Her mother’s reaction to the doula’s advice? “That lady’s crazy,” Hernandez said. “My mom has a funny sense of humor. Sorry.”

Ceja-Muhsen was also expressing concern about the newborn being exposed to secondhand smoke. Hernandez said both her boyfriend and her mother’s boyfriend smoke outside and in the living room. “They don’t listen,” she said. “They think that smoke won’t go [upstairs] through the vents.” She was embarrassed about Sofia’s clothes smelling like smoke when she took her to meet some extended relatives. Of Toledo, she said, “He’s trying to stop smoking... He has to.”

Toledo said he’s doing the best he can. He took care of the baby while Hernandez went back to school this spring following six weeks of home instruction. “It’s a little rough. I don’t get much sleep,” said the father, who also has an 8-year-old daughter.

With service intermittently shut off on Hernandez’s cell phone, she did not keep multiple appointments with Ceja-Muhsen after Sofia’s birth. They finally met for a mandatory postnatal visit with a nurse in late March, when Hernandez recommitted to participating.

“They said that they’ll help her, you know, to develop her brain,” Hernandez said in an interview that week. “I want her to be a smart baby. So that’s why I want to stay with the program.”

But by early May, as Hernandez was ending her time with Ceja-Muhsen and transitioning to work with a home visitor, another problem emerged: Home visiting hours end at 5 p.m., and she was not getting back from school by then. She dropped out of the program.

She still refers to a handout she received about how to make Sofia feel loved. She and Toledo read the baby Spanish and English books the doula brought them. They sing her “Twinkle, Twinkle Little Star” and a tune Toledo made up that seems to make her smile. Hernandez still texts Ceja-Muhsen with photos and questions, and she still gets encouraging responses.

But she’s frustrated that the program couldn’t accommodate her schedule. “I think they should be more flexible with their time,” she said. “They’re supposed to be there to help teen moms.”

Program administrators say they do their best to accommodate families’ schedules, but they encourage home visitors—who are paid an average of $27,000 a year—not to travel at night into high-crime areas, and many have young children of their own to get home to.

Nick Wechsler, who was one of the creators of the Ounce’s initial pilot programs with doulas in the mid-1990s and remains involved in the initiatives today, said a common cause of attrition is resistance from a baby’s grandmother, who sees the home visitor and doula as threatening her role. “What must it feel like to have Patricia walk into the house—a bundle of knowledge and energy and self-confidence—and confront a grandma who’s somewhere in her mind thinking, ‘I’m losing my daughter, ... and you’re all...”
positive about it, and you’re telling her things that I’m supposed to be telling her.” At the same time, a worker can’t over-identify with the family elder, Wechsler said: “Then the teenager will discount you, because you’re lining up with the mom.”

Hernandez’s mother, who did not attend her appointments with Ceja-Muhsen but shared snacks with her during the delivery, declined to be interviewed.

***

Statewide in the programs the Ounce funds, 63 percent of participants stayed involved for six months or more, 45 percent stayed at least a year, 28 percent stayed at least two years, and 13 percent at least three.

While the goal is a long-term relationship, benefits can appear quickly. One study of two home visitation programs in Ohio found mothers had decreased depression and stress levels and an improved sense of competence in as few as 15 visits. The Ounce’s programs have high rates of breastfeeding, of teen mothers staying in high school and graduating, and of fathers present for babies’ births, which increases their likelihood of involvement in the children’s lives. The programs reduce teens’ chances of a second pregnancy within two years.

But can they close the achievement gap?

The University of Chicago is embarking on a major study of Ounce-funded programs that will measure their impact on parenting practices, maternal health and child health, including the family’s experience with domestic violence and the criminal justice system.

The one thing that the Chicago research won’t measure is a child’s later academic outcomes, since doing so would require tracking families over many years. So far no one has drawn the connections between doulas, home visitors and a child’s later test scores, but a link with school readiness seems not just plausible but obvious to those in the field.

A famous study in the 1990s showed that a child born into poverty hears 30 million fewer words than a child in an affluent family by the age of 3, producing a disparity in literacy preparedness that is often irreversible. Dana Suskind, a University of Chicago pediatric surgeon, is piloting something she calls the Thirty Million Words Project where home visitors train mothers to engage their babies in stimulating conversation and develop their vocabularies. “Babies aren’t born smart,” Suskind said. “They’re made smart by parents talking to them.”

If a child is playing with a toy horse, does someone point out a horse’s mane, a horse’s hooves and a horse’s fur? Does someone take an interest in what the child is doing and make him feel important?

When a young mother has everyone in her life—teachers, relatives, doctors, peers—talking at her in directives, she replicates those interactions with her child. “Who says, ‘Wow, how did you figure that out? That’s so cool; tell me about that....’ The art of the home visiting is how to develop deeper and deeper and more complex and more meaningful relationships with the families you work with to help give them experiences with language,” Nick Wechsler said.

Children’s “self-regulation,” or ability to control their behavior, predicts their educational outcomes and life outcomes generally. Landmark studies have shown that self-regulation skills develop through personal relationships and are often harmed by the stresses of poverty. The Berkeley researcher Mary Main documented that a trusting, secure relationship can make up for past breaches.

Getting any person—a mother, in this case—to change behavior is tricky business, but research documents that pregnancy is one of the most likely times for behavior change to occur. And Chicago Nobel laureate James Heckman has found that every dollar spent on preparing very young children to learn saves taxpayers $7 in the long run. The amount saved in social costs is already declining before kindergarten, and interventions
produce progressively less payoff as children get older.

Regardless of what the future holds, the resilience Dwana Harris is developing proved invaluable when, on Friday, April 19, she went to the Chicago clinic for a routine ultrasound, and the doctors didn’t detect enough motion. They directed her to the labor and delivery unit, a month early. Rather than going along without question, Harris called her doula, Sonia Collins. She put Collins on speakerphone with the doctors as Collins began driving to the hospital. Then Harris agreed to be induced.

Physicians tried to deliver vaginally, but Harris wasn’t dilating enough and the baby’s heart rate wasn’t recovering quickly enough after dropping with contractions. Harris consented to a Caesarean section.

Jaid Destini Jones was born at 1:43 p.m. on Sunday, April 21. At 4 pounds and 2 ounces, she went straight to neonatal intensive care while her mother went to adult intensive care, undergoing another surgery to remove a blood clot and receiving several transfusions. Two days passed before Harris was able to get up and hold her baby. Her boyfriend, who has three older children, was afraid to hold a person so tiny, but he took a video of her on his phone to show Harris at her bedside. Her parents were also there through it all, her father also too scared to carry little Jaid.

The new mother was discharged from the hospital on April 24. While Jaid remained, Harris finished her final exams less than a week after her Caesarean. The exams had been due on the 21st, and her professors granted an extension. She attended her baby shower on April 27.

She tried to pump as much breast milk as she could while the hospital gave Jaid a formula in her absence. Getting back to the hospital was difficult for Harris, driving over potholes with fresh surgical wounds. For the first few days, “I just called every 20 minutes,” she said. Then she couldn’t stand it anymore. Each morning she would go, armed with the children’s books that her doula and home visitor had given her.

Sitting by the incubator, she passed the days reading to her daughter.

On Saturday, May 4, at last, Jaid was scheduled to be released. Harris thought she had completed mandatory hospital training on feeding, bathing and changing premature babies, including a CPR class. Then that morning, she awoke to a call that Jaid would remain hospitalized until Monday because no one had showed Harris how to use a special car seat the hospital loans out for babies less than 5 pounds. The person responsible for that part of the training was off for the weekend.

Highly upset, Harris called Collins, who told her she had the right as a parent to discharge her baby. “Because I spoke up and demanded that something be done about it, the doctor actually went on Google and learned how to train me to put the seat in the car,” Harris said. “Because I was not leaving without her.”

By June 8, Jaid was up to 7 pounds, strong enough for her father and grandparents to hold her in the audience as her mother walked across a stage to collect her associate’s degree.
### OBJECTIVES

- Review issues and solutions from the homework articles.
- Add to list of solutions to the Word Gap by watching some videos.

### STANDARD CATEGORY

#### SPEAKING AND LISTENING

1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.
   - a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
   - b. Work with peers to promote civil, democratic discussions and decision-making, set clear goals and deadlines, and establish individual roles as needed.
   - c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.
   - d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.

- Begin your outline of the in-class essay.

#### WRITING

4. Produce clear, varied, coherent, consistent, and engaging writing in which the development, organization, style, tone, and voice are appropriate to task, purpose, and audience. Write an analysis based on a given prompt.
   - a. Differentiate between example and reason when given a writing prompt.
   - b. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or evaluating and trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

- Writing homework.

#### WRITING

2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
THEME: The Impact of Poverty on Play and Language Development

OBJECTIVES

• Review issues and solutions from the homework articles.
• Add to a list of solutions to the Word Gap by watching some videos.
• Begin your outline of the in-class essay.

MATERIALS

Activity #1:
• Handout (attached): Make one copy for each student.  
  Article: The Word Gap: The Early Years Make a Difference  
  http://www.naeyc.org/tyc/article/the-word-gap
• Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.  
  The Earliest Intervention: How to Stop the Achievement Gap from Starting? (attached to Week 5, Lesson 2)  
  http://hechingerreport.org/content/the-earliest-intervention-how-to-stop-the-achievement-gap-from-starting_12442/
• Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.  
  How Do you Make a Baby Smart? Word By Word, a Chicago Project Says (attached to Week 5, Lesson 2)  
  http://hechingerreport.org/make-baby-smart-word-word-chicago-project-says/

Activity #2:
• Video: 30 Million Words Initiative  
  https://www.youtube.com/watch?v=7qESE2GeZxo (running time: 7:11)
• Video: How to Talk with Your Lawmaker  
  https://www.youtube.com/watch?v=ErGf9au28Xg&index=2&list=PLoYCO2fwBJJpBAstlnYrZnh8F5WOMLpq2 (running time: 2:00)
• Video: It’s Possible  
  https://www.youtube.com/watch?v=sel65jFRZw (running time: 5:17)
• Video: Educare Teachers Prepare the Next Generation for Success  
  https://www.youtube.com/watch?v=x0o4HgacXA0 (running time: 5:10)
• Video: Don’t Worry, I Got This  
  https://www.youtube.com/watch?v=8N9ZI9A_nus (running time: 3:35)

ACTIVITY #1: Review Issues and Solutions from the Homework Articles – 50 minutes

• Tell students that before looking at issues and solutions concerning the Word Gap, they need to have a good working definition of the Word Gap.
• Pass out the Word Gap reading.
• Tell students to read it, underline the critical facts, and be clear on the study that is cited.
• After students have done the reading,
Go round-robin to have each student give a new fact. Have students explain the study from the article and how it helps to explain the Word Gap.

• Ask students for basic information about the article and write the information on the board:
  o Name of the author.
  o Name of the article.
  o Name of the website where the article came from.
  o Tell student to put away their articles, get out their journals, and write a response to the questions: What is the Word Gap and why is it important?
  o Students should reference the article that they got their information from somewhere in their response.

• Briefly, ask:
  o What is the Word Gap?
  o Why is it important?
  o Encourage students to speak in their own words only.

• Tell student their journal entry will help them with their in-class essay during the next lesson.
• Tell students they are now going to concentrate on looking at possible solutions to the Word Gap in this class.
• Tell students to count off by two and partner with someone with the same number as they have.
• Assign homework articles as follows:
  o Groups #1: How Do you Make a Baby Smart: Word By Word a Chicago Project Says
  o Group #2: The Earliest Intervention: How to Stop the Achievement Gap From Starting?

• Tell each group to review their assigned article and identify:
  o The issues and solutions offered in the readings.
  o The solutions they think would have the most impact and why.

• Start with pairs from Group #1 to:
  o Each report back on an issue and solution until all are accounted for. Take notes on the board.
  o Select the issue and solution they think would have the most impact and why.
  o Repeat for Group #2.

ACTIVITY #2: Add to the List of Possible Solutions to the Word Gap By Watching Some Videos – 40 minutes

• Tell students that they will watch a series of videos to take notes on (make two columns with these as headings on the board):
  o Additional issues and solutions (not already listed on the board).
  o Ways that teachers interact with students to improve language development.

• Watch the video series. Write the name of the video on the board before each video starts.
  o Encourage students to write down the names as a heading and put their notes under that heading so they can cite these videos if they need to in their in-class essay.

• After each video, ask:
  o What new issues and solutions did this video present?
  o If appropriate to the video, what ways do teachers interact with students to improve language development?
  o Write student answers on the board.

ACTIVITY #3: Begin Your Outline for the In-Class Essay - 30 minutes

• Tell students they are going to get their in-class essay writing assignment and will get some time to begin working on it.
• Provide students with the essay question prompts:
  o How does poverty impact children’s play?
  o How does poverty impact children’s language development at home?
  o Why do you think people with less economic resources talk to their children less?
  o What do you think preschools can do to help reduce the Word Gap?
• Tell students to work with their partners to determine which articles or videos can help them answer each one of these questions.
• Read each question and tell each pair to list one source they chose for that question.
• When all the questions have been matched with sources, ask:
  o What will be your approach to putting together an outline for your in-class essay during the next lesson?
  o What outlining approaches have helped you so far?
  o What are your questions for improving your outlines?
• Give students time to work on their outlines.

HOMEWORK

WRITE: Have students prepare for an in-class essay by completing an outline that responds to the questions below. Utilize at least three sources in this outline:
• How does poverty impact children’s play?
• How does poverty impact children’s language development at home?
• Why do you think people with less economic resources talk to their children less?
• What do you think preschools can do to help reduce the Word Gap?

TEACHER NOTE: The criteria for a good essay last used in Week 4, Lesson 2 will be used again in Week 6, Lesson 2.
Children's vocabulary skills are linked to their economic backgrounds. By 3 years of age, there is a 30 million word gap between children from the wealthiest and poorest families. A recent study shows that the vocabulary gap is evident in toddlers. By 18 months, children in different socio-economic groups display dramatic differences in their vocabularies. By 2 years, the disparity in vocabulary development has grown significantly (Fernald, Marchman, & Weisleder 2013).

The study, conducted by researchers at Stanford University, tested the language processing of 18- and 24-month-old toddlers using pictures, instructions, and eye response. Each toddler sat in her caregiver's lap as images of two familiar objects were shown on a screen. (The caregiver wore sunglasses so the child could not be influenced by the caregiver's responses to the questions or images.) A recorded voice identified one of the objects by name and used it in a sentence (Look at the doggy). The researchers filmed the child's eye movements, tracking which picture the child looked at (vocabulary) and how long this took in milliseconds (processing time). (Watch a two-minute video of the study at www.youtube.com/watch?v=I7HN5LJ0c-w)

Children from higher economic backgrounds looked at the identified object faster and spent more time looking at the correct image. At 24 months, children from the lower economic group were performing at the same level as the 18-month-olds from the high economic group in both speed and accuracy. The study also focused on the way children process new vocabulary. Here, too, young children from homes with low incomes lag behind children of the same age who are growing up in more affluent circumstances (Snow 2013).

This new information connects to what researchers discovered earlier. The landmark Hart and Risley study in 1995 identified “remarkable differences” in the early vocabulary experiences of young children. Researcher and author Betty Hart described the results of their observations: "Simply in words heard, the average child on welfare was having half as much experience per hour (616 words per hour) as the average working-class child (1,251 words per hour) and less than one-third that of the average child in a professional family (2,153 words per hour)” (Hart & Risley 2003, 8). This is important because vocabulary development during the preschool years is related to later reading skills and school success in general.

What this means for you
Eliminating this inequality will require early interventions that directly address the problem. Preschool teachers can build on what children already know and respond to their interests to introduce and reinforce new words. Here are some things you can do to help preschoolers build their vocabularies:
• Use new and interesting words in natural conversations. Try this at mealtimes or when presenting a new toy or material. Introducing a new word in context helps children learn what it means. For example, it’s easier for children to learn what a ukulele is when they can see and hear it as well as listening to you say the word.
• Use gestures and facial expressions to help children make sense of new words. For example, when introducing the word joyful, you might smile and wave your arms about to convey what it means.
• Sing with children and recite poetry and rhymes to playfully introduce vocabulary.
• Talk with children and encourage children to talk with one another. Keep the conversation going by asking questions, making comments, and inviting children to think and share their ideas.
• Read to children daily, taking time to go over new words. Look for books with illustrations that provide clues to word meanings.
• Think about new vocabulary words that might come up on a field trip as part of the experience. A trip to an art exhibit could introduce the word landscape, while a trip to a pizza restaurant might introduce kneading dough.
• Give children ample time to learn the meaning and uses of new words before moving onto other words.
• Help families understand how important it is to talk with their children and share new vocabulary words. Send home suggested conversation starters based on children’s interests and classroom projects. Include discussion questions in family literacy packs. Post videos of conversations between teachers and children.
• Advocate for equity. Make sure that all children have opportunities to learn and understand the meaning and uses of new words.

References

Resources
Too Small to Fail. Website. toosmall.org.
### OBJECTIVES

- Rehearse and write an in-class essay.

- Conduct the peer review process.

### STANDARD CATEGORY

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<th>OBJECTIVES</th>
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| - Rehearse and write an in-class essay. | WRITING | 1. Write arguments from a prompt in a formatted manner of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
  a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.  
  b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.  
  c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.  
  d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.  
  e. Provide a concluding statement or section that follows from and supports the argument presented. |

| - Conduct the peer review process. | READING | 5. Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.  
  a. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.  
  b. Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).  
  c. Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author’s purpose.  
  d. Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose.  

6. Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.  
  a. Determine an author’s point of view or purpose of a text.  
  b. Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and |
| • Reading homework. | **READING** | responds to conflicting evidence or viewpoints.  
c. Infer an author's implicit as well as explicit purposes based on details in text.  
d. Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose (e.g., analogies, enumerations, repetition and parallelism, juxtaposition of opposites, qualifying statements).  

### 1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.  
  a. Summarize what has been read.  
  b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.  
  c. Identify the implied main idea and supporting details from an instructional level passage.  
  d. Identify cause and effect implied in a paragraph. |
THEME: The Impact of Poverty on Play and Language Development

OBJECTIVES

- Rehearse and write an in-class essay.
- Conduct the peer review process.

MATERIALS

Activity #1:

- Student Work: Students should bring hard copies of their essay outlines created for homework.

Activity #2:

- Handout (attached): Make two copies for each student.

 Homework:

- Handout (attached): Make one copy for each student.

Let the Kids Learn Through Play
http://www.nytimes.com/2015/05/17/opinion/sunday/let-the-kids-learn-through-play.html

ACTIVITY #1: Rehearse and Write an In-Class Essay - 70 minutes

- Ask students: What is our class writing criteria?
- Tell students to come up with criteria for a good essay by answering the following questions. Ask these questions and then put their answers on the board:
  - What makes a good introduction?
    - Make sure the criteria include that the introduction has a thesis and it gets the attention and interest of the audience
  - What is a thesis and why is it important?
  - What makes for good paragraphs that provide reasons and evidence?
    - Make sure the criteria include that the paragraphs have a clear topic sentence, give clear explanations, and are easy to understand.
  - What makes a good conclusion?
    - Make sure the criteria include making recommendations to resolve the issues discussed in the essay.
  - Which questions prompt you to write about each of these parts of the essay?
- Have students get their homework outlines out.
- Put students into pairs to hear and respond to each other’s plans for the in-class essay. Tell pairs they are to take turns, assigning one person to be the questioner and one as the speaker. When the first questioner is finished, then pairs should switch roles and repeat the process so both students can be heard.
- Tell students to make any changes to their outline that will improve their essays.
- Time students as they write a 45-minute in-class essay using their notes.
ACTIVITY #2: Conduct the Peer Review Process - 50 minutes

- Tell students they will now provide constructive feedback to each other’s essay. They are to remember they must remain the audience that the writer is happy and comfortable with, meaning that the audience simply wants to understand what the essay is trying to say and to offer good suggestions for making the essay more interesting.

- Ask students: What kinds of things would happen when others are reading your work that would NOT make you feel happy and comfortable? Write what students say on the board.

- Put students into groups of three.

- Pass out two copies of the Audience Comment Page to each student. Explain that they will:
  o Read the essays written by the other two people in their group.
  o Fill out one Audience Comment Page for each of the essays they read.
  o They are NOT to comment on grammar or spelling yet. However, if they are not sure what something says, they can ask the writer for clarification.
  o They are to be friendly, encouraging, and genuinely helpful. Good comments on their partners’ work will help them when they have to rewrite their essay.

- Have students pass their essays to the left.

- After students have evaluated the first essay, they should pass the essay they have worked on to their left and evaluate a new essay.

- After students have evaluated two essays, they should give their evaluations to the authors, and the authors should read the comments and ask questions of the evaluators as needed.

- Tell students that you will also evaluate their essays so they will each have three reviews to help them with their rewrites. Have students hand in their essays along with the two evaluations from their peers.

- Collect student essays along with the Audience Comment Pages.

TEACHER NOTE: Evaluate the student essays handed in using a copy of the Audience Comment Page. You will need to read both the essays and the student comments on those essays to see how perceptive the audiences were for each essay. Your comments should either reflect good suggestions or offer a different way to evaluate their essays that you think might be more helpful. Additionally, DO NOT correct everything in the students’ drafts. Only mark those errors in the text that would help the student make significant progress toward a better essay. In your comments, indicate a due date for rewrites of these drafts.

HOMEWORK

READ: Have students first look up and understand the meaning of “didactic”. They should not read the homework article until they have done this. Then, have students read Let the Kids Learn Through Play and take notes on the following:

- What are the two sides of the debate?
- Why are there some who want less play in the classroom?
- What is the author’s opinion?
- What evidence does the author give?

TEACHER NOTE: The criteria for a good essay will be used again in Week 8, Lesson 2.
1. What is working for you as the audience for this piece of writing?

2. As the audience, what do you need clarified or want to hear more about to make you more interested in what the writer has to say?

3. Do you have any questions for the writer?
TWENTY years ago, kids in preschool, kindergarten and even first and second grade spent much of their time playing: building with blocks, drawing or creating imaginary worlds, in their own heads or with classmates. But increasingly, these activities are being abandoned for the teacher-led, didactic instruction typically used in higher grades. In many schools, formal education now starts at age 4 or 5. Without this early start, the thinking goes, kids risk falling behind in crucial subjects such as reading and math, and may never catch up.

The idea seems obvious: Starting sooner means learning more; the early bird catches the worm. But a growing group of scientists, education researchers and educators say there is little evidence that this approach improves long-term achievement; in fact, it may have the opposite effect, potentially slowing emotional and cognitive development, causing unnecessary stress and perhaps even souring kids’ desire to learn.

One expert I talked to recently, Nancy Carlsson-Paige, a professor emerita of education at Lesley University in Cambridge, Mass., describes this trend as a “profound misunderstanding of how children learn.” She regularly tours schools, and sees younger students floundering to comprehend instruction: “I’ve seen it many, many times in many, many classrooms — kids being told to sit at a table and just copy letters. They don’t know what they’re doing. It’s heartbreaking.”

The stakes in this debate are considerable. As the skeptics of teacher-led early learning see it, that kind of education will fail to produce people who can discover and innovate, and will merely produce people who are likely to be passive consumers of information, followers rather than inventors. Which kind of citizen do we want for the 21st century?

In the United States, more academic early education has spread rapidly in the past decade. Programs like No Child Left Behind and Race to the Top have contributed to more testing and more teacher-directed instruction.

Another reason: the Common Core State Standards, a detailed set of educational guidelines meant to ensure that students reach certain benchmarks between kindergarten and 12th grade. Currently, 43 states and the District of Columbia have adopted both the math and language standards.

The shift toward didactic approaches is an attempt to solve two pressing problems. By many measures, American educational achievement lags behind that of other countries; at the same time, millions of American students, many of them poor and from minority backgrounds, remain far below national norms. Advocates say that starting formal education earlier will help close these dual gaps.

But these moves, while well intentioned, are misguided. Several countries, including Finland and Estonia, don’t start compulsory education until the age of 7. In the most recent comparison of
national educational levels, the Program for International Student Assessment, both countries ranked significantly higher than the United States on math, science and reading.

Of course, these countries are smaller, less unequal and less diverse than the United States. In such circumstances, education poses fewer challenges. It’s unlikely that starting school at 7 would work here: too many young kids, disadvantaged or otherwise, would probably end up watching hours of TV a day, not an activity that promotes future educational achievement. But the complexities of the task in this country don’t erase a fundamental fact that overly structured classrooms do not benefit many young children.

Some research indicates that early instruction in reading and other areas may help some students, but these boosts appear to be temporary. A 2009 study by Sebastian P. Suggate, an education researcher at Alanus University in Germany, looked at about 400,000 15-year-olds in more than 50 countries and found that early school entry provided no advantage. Another study by Dr. Suggate, published in 2012, looked at a group of 83 students over several years and found that those who started at age 5 had lower reading comprehension than those who began learning later.

Other research has found that early didactic instruction might actually worsen academic performance. Rebecca A. Marcon, a psychology professor at the University of North Florida, studied 343 children who had attended a preschool class that was “academically oriented,” one that encouraged “child initiated” learning, or one in between. She looked at the students’ performance several years later, in third and fourth grade, and found that by the end of the fourth grade those who had received more didactic instruction earned significantly lower grades than those who had been allowed more opportunities to learn through play. Children’s progress “may have been slowed by overly academic preschool experiences that introduced formalized learning experiences too early for most children’s developmental status,” Dr. Marcon wrote.

Nevertheless, many educators want to curtail play during school. “Play is often perceived as immature behavior that doesn’t achieve anything,” says David Whitebread, a psychologist at Cambridge University who has studied the topic for decades. “But it’s essential to their development. They need to learn to persevere, to control attention, to control emotions. Kids learn these things through playing.”

Over the past 20 years, scientists have come to understand much more about how children learn. Jay Giedd, a neuroscientist at the University of California, San Diego, has spent his career studying how the human brain develops from birth through adolescence; he says most kids younger than 7 or 8 are better suited for active exploration than didactic explanation. “The trouble with over-structuring is that it discourages exploration,” he says.

Reading, in particular, can’t be rushed. It has been around for only about 6,000 years, so the ability to transform marks on paper into complex meaning is not pre-wired into the brain. It doesn’t develop “naturally,” as do other complex skills such as walking; it can be fostered, but not forced. Too often that’s what schools are trying to do now. This is not to suggest that we shouldn’t increase access to preschool, and improve early education for disadvantaged children. But the early education that kids get — whatever their socioeconomic background — should truly help their development. We must hope that those who make education policy will start paying attention to this science.
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<th>OBJECTIVES</th>
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**Watch a video and identify the values or the two sides of the “play” debate.**

**Reading homework.**

**Write “I believe” statements for both sides of the debate.**

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- Writing homework.

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<td>2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</td>
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THEME: The Politics of Play

OBJECTIVES

- Analyze and present on the homework reading.
- Watch a video and identify the values or the two sides of the “play” debate.
- Write “I believe” statements for both sides of the debate.

MATERIALS

Activity #1:
- Handout (attached): Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  Let the Kids Learn Through Play
  http://www.nytimes.com/2015/05/17/opinion/sunday/let-the-kids-learn-through-play.html

Activity #2:
- Video: Prescription for Play
  https://www.youtube.com/watch?v=oiDV6uOY9QI (running time: 12:08)
- Classroom Resource: Flip chart paper and markers.

Activity #3:
- Classroom Resource: Blank strips of paper big enough for students to write sentences on.
- Classroom Resource: A “hat” to choose student written statements from.

Homework:
- Handout (attached): Make one copy for each student.
  Frog Design: The Four Secrets of Playtime that Foster Creative Kids
  https://www.fastcodesign.com/1662826/frog-design-the-four-secrets-of-playtime-that-foster-creative-kids

ACTIVITY #1: Analyze and Present on the Homework Reading – 40 minutes

- Tell students they are going to look at the debate around play and see how it affects children’s education. We will look at the reasons behind both sides of the debate and draw some conclusions about the kind of values that are held by each side and how these values may be affecting many aspects of our society as well.
- But first, write the following question on the board:
  o Why is play important? What have we learned so far on this topic?
- Have students to go through their readings, writings, and notes to list what is important about play. Tell them to write their list and, for each item on the list, write down the title of the article where they got the information.
- Go round-robin and ask each student for a new reason and citation that answers the question on the board. Take notes on the reasons.
- When you have all the reasons on the board, ask:
Based on these facts or findings, what are your recommendation for children’s education?

Note these on the board as well.

- Write the following on the board:
  - What does didactic mean? (Feature this word through students’ analysis of the article whenever relevant. It is a very important word to the author of the article.)
  - What are the two sides of the debate?
  - Why are there some who want less play in the classroom?
  - What is the author’s opinion?
  - What evidence does the author give?

- Put students into pairs to prepare their answers to these questions. They will need to cite the text by reading the section where they got their evidence.
- Ask each of the questions and go round-robin from pair to pair to get students’ answers.
  - For each answer, tell them to cite the text.
  - Be sure that each student demonstrates this skill more than once.

ACTIVITY #2: Watch a Video and Identify the Values of the Two Sides of the “Play” Debate – 40 minutes

- Tell students they are now doing to concentrate on the values held by each side of the debate.
- Have students count off by two.
- Create two groups and make the assignment:
  - Group #1 holds the value: As much play in the classroom as possible.
  - Group #2 holds the value: As much formal literacy and numeracy skill in the classroom as possible as early as possible.
- Tell the groups to prepare for a video on this topic by:
  - Individually listing the values they think are held by their assigned group.
  - Meeting to create a master list of these values.
- When groups have their master lists, tell them they are going to watch a video about this debate and take notes on what their assigned group thinks about the issue of play and why they think that way.
- Watch the video:
  - Click on the link: http://www.bostonchildrensmuseum.org/power-of-play.
  - Scroll down to the orange box titled, “Play and Health”. Click on it.
  - Scroll down to the video “Prescription for Play” and click on it.
- Have the groups meet again to:
  - Discuss what they learned from the video about the values of their assigned group.
  - Decide if there are any additional values they want to add to their master list.
  - Create a list of the values on flip chart paper for presentation and prepare to explain why they think their assigned group has these values.
  - Get as many people involved in this short presentation as possible.
- Have each group present their list of values and reasons they selected those values.
- After each presentation, ask:
  - Does anyone have any question they want to ask this group?
  - Does anyone have any additional ideas about values that might be added to this list?

ACTIVITY #3: Write “I Believe” Statements for Both Sides of the Debate – 40 minutes

- Tell students they are now going to use the work they have done on values to inform some “I believe” statements that are true for their assigned group. “I believe” statements are also thesis statements that sum up an important aspect of what anyone or any group thinks.
• Write the following two statement on the board as headings to two columns:
  - I believe play is critical to children’s long-term success because __________________________.
  - I believe early skill building in literacy and numeracy are critical to children’s long-term success because __________________________.
• Tell students to go back to their large groups and generate at least 6-10 statements using the format on the board. They are to think of the values they have thought through to help them put together their statements.
• Give each group the number of blank strips of paper they request so they can write one statement on each one.
• Have students put their statements in the hat.
• Ask for a student volunteer to help you record statements on the board.
  - Assign that student one of the columns on the board.
• Have a student pick a statement from the hat and read it aloud.
• You or the volunteer student write the “because” portion of the statement on the board in the right column.
• Ask students to write down the three statements they personally feel most strongly about.
• Then, out of the three, tell them to pick the one they feel the most strongly about.
• Go round-robin to have students read their “I believe” statement aloud.
• After each has read their top statement, ask:
  - What can you say about the beliefs about play in this class?
  - What do you think are the reasons for the similarities and/or differences?

HOMEWORK

READ: Have students read Frog Design: The Four Secrets of Playtime that Foster Creative Kids and be sure that they can define and use the underlined words in the article. Then, underline those parts of the text that can help answer the following questions:
• What is the author’s opinion?
• Why does the author feel that play is so important in our society?
• What are the four things that foster creative kids?
• Why is each so important?
• What are some quotes that best summarize the author’s position?

JOURNAL WRITING: Tell students to use their “I believe” statements as the start of their journal writing assignment and explain why they chose that statement.
This is the second post in a new series, produced by Frog Design, drawn from their publication, Design Mind. The theme of the current issue — from which this essay is drawn — is “And Now the Good News.” It presents ideas flowing from the most recent TED Global conference.

I still remember an early job interview I had at Trilogy in 1998. Back then, the software maker was dubbed "Insanity Inc." by Fast Company because of its late work nights and legendary retreats to Vegas. Trilogy was hiring like mad to keep up with demand and was looking for 'young, talented overachievers with entrepreneurial ambition and chutzpah.' During my interview I was asked to write a line of programming code on a whiteboard in front of five people. Then I was directed to "Brainstorm all the possible things you can do with bubble wrap." Bubble wrap? TEDGlobal 2009 speaker Daniel Pink would later call this using a "whole new mind." For me, it was an exhilarating reminder of the relevance of open-ended play and the continuing need for workplace creativity.

There is a myth, common in American culture, that work and play are entirely separate activities. I believe they are more entwined than ever before. As the Swiss psychologist Jean Piaget once said, "Play is the answer to how anything new comes about." A playful mind thrives on ambiguity, complexity, and improvisation the very things needed to innovate and come up with creative solutions to the massive global challenges in economics, the environment, education, and more.

So, my question is, "Are our children getting the play they need to thrive in the 21st century?" According to reports from sources such as Harvard University, Time magazine, Newsweek, and The Futurist, the answer is no.

In 2007, Howard Chudacoff, a professor of History at Brown University, wrote a book called Children at Play: An American History, in which he identified a disturbing trend suggesting that play is changing dramatically from a world invented by children to a world prescribed by parents and other adults. He discovered that "the resourcefulness of children's culture has eroded, as children have become less skilled at transforming everyday objects into playthings." Plato once said, 'Necessity is the mother of invention.' What do our children really need to invent for themselves in such a manufactured, overly structured world? While an African child might be monetarily poor compared with his European counterpart, I would argue that he is richer in play because he must invent the very ball he tosses or kicks around. Children in the US simply go to Walmart. From education to play consumption, we have unknowingly created a society of more game players rather than game designers and that's an important distinction.

How can we get our youngest to embrace being designers rather than just players? Jane McGonigal, a futurist, game designer, and TED speaker, recently said, "[Game players] are people who believe they are individually capable of changing the world. 'The only problem is they believe they are capable of changing virtual worlds and not the real world.' In a recent magazine interview, a reporter asked Eric Zimmerman, a game designer and the author of Rules of Play, "What do you like best about being a game player?" He responded, "A game player" Wow. I have to say that I think I like being a designer more than a player. Maybe that's because as a designer, you're also playing." Essentially, while players may feel empowered in the game; designers are empowered by making the game and that has huge ramifications for society. The former works well when rules and boundaries are important to
follow (as in an industrial economy). The latter is better suited for a complex future that constantly redefines reality (as in the creative economy). How then can we get our youngest generation to embrace the role of designer rather than player? Fundamentally, it starts by letting children be the inventors of play.

Consider a simple example: John De Matteo, a teacher at Manhattan Academy of Technology (MAT) is considered one of the most innovative instructors in the New York educational system. When he joined MAT, there was no after-school sports program. Within six years, the school went from having zero activities to supporting 20 sports and 32 teams. How did he accomplish this amazing feat? He credits the program's success to the students, who invented their own games. Some of the games, like Capture the Farm Animal (which involves rubber chickens, balls and lots of running), are so creative that he has added them to his curriculum and teaches them to others around the country. In a recent interview De Matteo said, "I don't want [my students] to be limited by what is already out there. I want them to think completely different than what is traditional. It doesn't stop with school. They learn to become agents of change wherever they go. I may be creating an army of kids that feel like they can change the world, but that's not necessarily a bad thing."

There is an American myth that work and play are entirely separate activities. Like De Matteo, all adults ultimately need to re-imagine how we can enable and support these future "change agents." The answer may lie in four foundational pillars of play: open environments, flexible tools, modifiable rules, and superpowers.

**Open Environments**

An open environment is not the same as an enriched one: being open does not mean providing more stimuli. Rather, open environments are those in which the child gets to be the author and the medium is open to interpretation.

Very good examples of open environments might be the Adventure Playgrounds in Europe or the new Imagination Playgrounds in New York. These playscapes are, according to reviews, "designed to encourage child-directed, unstructured free play." The most egregious example of closed play is a toy like the electronic version of Simon Says, which is modeled after the timeless verbal game in which one player calls out directives to the others in the game. With the battery-operated version, what children might make up in the moment has been reduced to them merely repeating color patterns chosen by an electronic device.

Open and closed environments can be applied to our digital worlds as well. But many virtual creations only allow us to be empowered in a game defined by someone else. Take Webkinz World, a virtual universe in which your stuffed animal has its own online avatar. Game players can earn credits to spend on decorating their virtual pet's rooms. In this model, being a player, and not a creator, is rewarded and reinforced.

Thankfully, there are more open environments on the horizon. Games like Ridemakerz and Xtractaurs are trying to bridge the physical-digital divide, while also enabling creators to design some aspects of their play. Shidonni, Spore, and Scribblenauts are truly embracing the open and digital potential. With them, the play is so unlimited no one cares that someone else wrote the rules. Kids get to design their own games in real time with Scratch, Kodu, Kerpoof, and Alice. LEGO Mindstorms, Pleo, and the Spy Tracker System from Wild Planet enable authors to write their own software applications for physical products.

Whether physical or digital, there is a reason kids spend hours in a sandbox but only minutes on a Moon Sand Construction Theme Kit. Even they know the difference between an open environment and a
Flexible Tools
Part of being open is being flexible. Technology has given us a whole new set of tools, though they’re being used in ways not necessarily planned for. Phone cameras, for example, have created an army of roaming reporters who upload news as it happens. The fact that people can find different ways of using technology and that the technology is flexible enough to allow for this exploration is the key for innovation and invention. I would say the same should be true for physical materials in a child’s play environment. A crayon can be used for drawing anything, but it can also be melted and re-sculpted into something completely different. Consider the electronic Simon game mentioned previously: It is completely rigid, with a prescribed way to play. A simple modification that would allow a child to record his or her own directives would invite invention, ideation, and exploration.

Modifiable Rules
Being open and flexible within parameters is necessary and even helpful, but what happens when the parameters themselves no longer fit our needs? Should our kids be able to change the rules? Don’t get me wrong, rules can be necessary. My mother was a teacher for twenty years, so I fully appreciate the fine balance between learning and discipline that is required in any classroom. Yet I grow concerned when the daily folder my child brings home focuses on rewarding the following behaviors: walk quietly, keep hands to self, raise hand before speaking, and sit still in chair. Instead, I’d like to see a second folder promoting things like: had an original idea, created a new game on the playground, made up a story, solved a problem for a friend, or invented something uncommon from a common object. De Matteo would agree. "Classroom management is important," he says. "But it’s not more important than raising a student body who can do things for themselves and think freely. If [students] see a school that has all this opportunity laid out for them, they realize the possibilities are endless. As long as we are constantly forcing them to do activities, even though they learn, when they get out on their own they aren’t going to be able to think for themselves."

Our children have gotten really good at following rules, but where will they learn that sometimes it’s best to break them? I would argue that it’s our responsibility to show them how and praise them when they do it.

We aren’t born with playful minds, we create them.

Superpowers
Using the analogy of kids as game designers, we can consider the environments, tools, and rules as pieces or parts of the game to manipulate. But what a child does with those inputs is largely determined by the strategies, skills, and powers he or she wields. In the book To Play or Not to Play: Is It Really a Question?, author Doris Bergen suggests that play sculpts the brain and that clinical indications will soon become valid for the science of play behavior. It’s crucial to understand that we aren’t born with playful minds, we create them.

Ask a group of kindergarteners if they have superpowers. Half might say, "none," and the other half would wonder. I feel sure at least one would say, "I can fly." By fifth grade the very question would probably be met with scorn. And who could blame them? Most parents and teachers wouldn’t even think to suggest such a thing could be possible. Our culture reinforces this message of improbability with perfectly packaged cinematic characters that are larger than life. Yet, children yearn for something more.

Children don’t want to live vicariously through a character they want to be the real-life superhero. I recently sat down with the CEO of a US-based toy company, and he agreed with me. When his firm conducted research on the packaging for a line of spy gear, children were asked who they most wanted
to be. Spy Kids? James Bond? The resounding feedback was that the children wanted to be the spies
themselves, not the character. So the company introduced its spy gear with packaging that depicts real
kids being super sleuths.

Children also want to develop powers of their own. Of course, I’m not talking about having laser eyes or
sprouting wings, but in a world that teaches them rules for the first 18 years, it’s no wonder they might
want power. Often that opportunity comes too late. Our kids are thrust out into a world with a limited
understanding of what empowerment might really mean.

Superpowers, by my definition, are the physical and mental skills that we develop to adapt and thrive in
a complex world while exploring the creative opportunities made possible by global progress. (See "Our
FUN-damental Superpowers," at left.) Superpowers offer an easily articulated medium for children,
parents, and teachers that is both playful and purposeful. Fundamentally, they are skills reframed as a
type of power within the realm of human possibility and reach. Superpowers are the catalysts that
maximize the benefits of the other three foundational pillars. Simply stated, they are the pivotal piece in
turning a game player into a game designer.

When 85 percent of today’s companies searching for creative talent can’t find it, will more focus on
standardized curriculum, testing, and memorization provide the skills an emergent workforce needs?
Not likely. Play is our greatest natural resource. In the end, it comes down to playing with our capacity
for human potential. Why would we ever want to limit it? In the future, economies won’t just be driven
by financial capital, but by play capital as well. And the greatest game to be played, won’t be played at all,
we’ll be too busy designing the next one.

[Images from top by epSos.de, D Sharon Pruitt, Ishamil Orendain, and Oskay]
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  a. Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context.  
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|                  | 9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.  
|                  | a. Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline).  
|                  | b. Compare two passages in similar or closely related genre that share ideas or themes, focusing on similarities and/or differences in perspective, tone, style, structure, purpose, or overall impact.  
|                  | c. Compare two argumentative passages on the same topic that present opposing claims (either main or supporting claims) and analyze how each text emphasizes different evidence or advances a different interpretation of facts.  
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b. Analyze how meaning or tone is affected when one word is replaced with another.

c. Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author’s intent to convey information or construct an argument.

LANGUAGE

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies.

a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word’s position or function in a sentence) as a clue to the meaning of a word or phrase.

b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable).

c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.

d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

a. Demonstrate use of content, technical concepts and vocabulary when analyzing information and following directions.
THEME: The Politics of Play

OBJECTIVES

- Analyze the homework article.
- Watch a video and apply the values from the play “debate” to society’s values.

MATERIALS

Activity #1:
- Handout (attached): Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  *Frog Design: The Four Secrets of Playtime that Foster Creative Kids*

Activity #2:
- Classroom Resource: Multiple dictionaries.
- Video: *Is the Professional Pecking Order Doing More Harm Than Good?*
  [http://www.npr.org/2015/10/02/443412777/is-the-professional-pecking-order-doing-more-harm-than-good](http://www.npr.org/2015/10/02/443412777/is-the-professional-pecking-order-doing-more-harm-than-good) (running time: 15:47)

Homework:
- Handout (attached): Make one copy for each student.
  *Article: In Preschool, What Matters More: Education or Play?*
- Handout (attached): Make one copy for each student.
  *Article: There’s a Dark Side to Heroic Leadership*
  [http://www.reuvengorsht.com/2015/06/30/heroic-leadership/](http://www.reuvengorsht.com/2015/06/30/heroic-leadership/)

**ACTIVITY #1: Analyze the Homework Article – 40 minutes**

- Tell students that today’s activities will help them expand their learning about how people feel about how children are educated to a whole range of societal issues in adult life. The article they read as homework helps make that bridge between being creative children and being creative adults and why creative adults are so important to our society. A later video will expand those values even further.
- But first, a critical word definition exercise.
- Put students in pairs to collect the underlined words from the homework, define them, and put them in a sentence that clearly shows they understand the meaning of the word.
- Ask:
  - What are the words?
  - List these on the board.
- Go round-robin to listen to the sentences for each word.
  - If a student doesn’t think the sentence shows the meaning of the word, they can “challenge” by saying “challenge”. If they challenge, their pair will need to provide the correct definition.
- Write the following questions on the board:
What is the author’s opinion?
Why does the author feel that play is so important in our society?
What are the four things that foster creative kids?
Why is each so important?
What are some quotes that best summarize the author’s position?

• Put students into pairs to prepare their answers to these questions. They will need to cite the text by reading the section from where they got their evidence out loud.
• Ask each of the questions and go round-robin from pair to pair to get students’ answers.
  o For each answer, tell them to cite the text.
  o Be sure that each student demonstrates this skill more than once.

ACTIVITY #2: Watch a Video and Apply the Values from the Play “Debate” to Society’s Values – 80 minutes

• Tell students that they are going to watch a video about what creates success in companies and what doesn’t and they are going to relate these ideas of success to the values of the two sides of the “play” debate.
• But first, they are going to do a vocabulary exercise in order to make sure they get the most out of the video.
• Write the following words on the board.
  o Suppress
  o Productivity
  o Competition
  o Pecking Orders
  o Empathy
  o Dysfunction
  o Anemic
  o Collective
  o Restoration
  o Mortar
  o Resilient
  o Robust
  o Compound interest
  o Synchronize
  o Candor
  o Potential
  o Collaborators
  o Ingenuity
  o Rivalry
  o Implement

• Read each aloud and ask: What does this word mean?
• Write down correct definitions that students offer.
• Assign students different words that the class doesn’t understand to define and use in a sentence. Students can use cell phones or dictionaries.
• Collect all the correct definitions for the board.
• Write the following questions on the board and the read them aloud:
  o Describe the chicken experiment in the video and its outcomes.
  o What is Margret Heffernan’s opinion concerning competition?
  o What is Margaret’s definition of success?
  o Why is social connectedness and helpfulness so important to her idea of success?
  o What is social capital and how does it help with creating success?
According to Margaret, why is it a problem to be star, a superstar, or a super-chicken?

- Read each question aloud. Tell students they will be answering these questions after the video.
- Watch the video.
- Put students in pairs to answer the questions and then go round-robin to get multiple answers to each question.
- Re-create two groups from the previous lesson:
  - Group #1 holds the value: As much play in the classroom as possible.
  - Group #2 holds the value: As much formal literacy and numeracy skill in the classroom as possible as early as possible.
- The two groups need to meet to discuss the following two questions:
  - Does your group represent the regular chickens or the super chickens?
  - What are the values that your group holds?
  - Would Margaret Heffernan think your group will be successful or not? Why?
- Have the two groups present their answers, then ask:
  - How does ensuring that children get enough play also ensure a creative society of helpful people that can be successful together?

**HOMEWORK**

**READ:** Have students read *In Preschool: What Matters More: Education or Play? and There’s a Dark Side to Heroic Leadership*. For each article, have students look up and write down the definitions of the underlined words that they don’t know. Then, take notes on the following questions:

- What is the author’s thesis?
- What is the evidence the author uses to support his/her thesis?
- What are some key quotes that sum up the author’s most important ideas?
It's practically been relegated to superstar status in the annals of parenting lore: the Manhattan mom who sued her daughter’s $19,000-a-year preschool on grounds that the 4-year-old was not sufficiently prepared to tackle the entrance test for private kindergarten.

Earlier this month, Nicole Imprescia filed her lawsuit against the York Avenue Preschool, claiming that her daughter, Lucia, was not primed to take the intelligence test and was instead relegated to a mixed-age classroom where talk revolved around — oh, the horror — shapes and colors. As a result, Imprescia withdrew her daughter from the preschool.

“The school proved to be not a school at all, but just one big playroom,” the suit stated.

The audacity of it all: imagine...kids playing! Anyone worth her parenting salt knows that a prestigious, hard-driving preschool lays the foundation for Rhodes scholarships. Or does it?

According to The New York Times:

The suit charges that preschool education is critical to a child’s success in life, quoting from various news articles. “It is no secret that getting a child into the Ivy League starts in nursery school,” says one. “Studies have shown entry into a good nursery school guarantees more income than entry into an average school,” says another.

But those studies don’t sound familiar to Kathleen Gallagher, a research scientist and director of the childcare program at the Frank Porter Graham Child Development Institute (FPG) at the University of North Carolina at Chapel Hill.

“There is no evidence-based research that I know of that ensures these privileged kids success later on,” she says. But there is research about poor, at-risk kids and early childhood education, some of it from FPG; those in high-quality play-based preschools do better in grade school and on standardized tests and have higher educational achievement as adults.

“These preschools that claim to get children into Ivy League schools...would they get in anyway?” she wonders. “It’s hard to tease this apart.”

What’s sad here is not so much Imprescia’s litigious bent, but the state of affairs in the Big Apple and elsewhere that has led to early childhood becoming steeped in the rigors of...
academia rather than the joys of dressing up and building block castles.

“Play is the best context in which children learn,” say Gallagher.

But the Times describes “costly consultants and test preparation materials” for preschoolers, many of whom attend programs that dangle promises of test scores “high enough to catch the attention of elite private schools.”

I have a preschooler of my own who has been tasked with a bit of quiet time as I write this. She’s in the room next to me, so I can hear her “reading” We’re Going on a Bear Hunt to her stuffed dog, Cooper. Her preschool is proudly play-based. On Friday, when I dropped in and stayed for a while, they were vigorously mashing potatoes for snack and creating spin art. The kids dance, they sing, they read books and act out stories.

When my oldest started preschool six years ago, I distinctly remember asking the preschool director what I could expect my son to learn. She gently but firmly set me straight: He will learn about self-control, taking turns and following instructions, about make-believe and making friends and making messes. He will not be drilled on his multiplication tables or pushed to learn to read. Um, okay, I said. What did I, a first-time parent, know anyway?

I’ve since become a disciple of the power of play, which just happens to be the title of a 2007 book by David Elkind, professor emeritus of child development at Tufts University.

Elkind makes the case that so-called academic preschools that formally teach young children the three R’s aren’t doing children — or their parents — any favors.

“It’s a parent issue, not a child issue,” says Elkind. “There’s a lot of peer pressure among parents. Parents feel they’re depriving their children unless they are putting them in a high-pressure environment.”

Much of Europe has shifted gears, from academics in early childhood education to play. In Russia and Germany and Scandinavia, reading is not introduced until age 6 or 7. Even in academic powerhouses such as China and South Korea, where The Power of Play has been translated into the local tongue, there is budding recognition that play fosters creativity and curiosity.

In fact, in the book Academic Instruction in Early Childhood: Challenge or Pressure?, the authors cite research showing that children who attend academic preschools are more anxious and have lower self-esteem. When followed up down the road, they didn’t perform any better academically than kids in play-based preschools.

And they certainly didn’t have as much fun.
In her recent TED Talk, Margaret Heffernan, an entrepreneur, former CEO of five companies and author, discussed an experiment on productivity by evolutionary biologist William Muir at Purdue University. Muir was interested in productivity and leverages experiments with chickens for one simple reason — their productivity is easy to measure because you can just count the eggs. He wanted to know what factors can make chickens more productive, so he devised a beautiful experiment.

Chickens live in groups, so he divided a flock of chickens into two groups. The first group was left alone for six generations. In the second group, Muir only selected the most productive chickens for breeding — those who produced the most eggs — to create a “superflock” of “superchickens.”

After six generations had passed, what did he find? Well, the first group, the average group, was doing just fine. They were all plump, fully feathered. Their egg production had increased dramatically.

In the second group, all but three superchickens were dead. They had pecked all of the others to death. The individually productive chickens in the “superflock” had only survived and achieved success by suppressing the productivity of the rest.

For the past 50 years, we’ve run most organizations and some societies along the superchicken model. We assume that picking the superstars; the brightest and most knowledgeable men, or women, in the room, and giving them all the resources and all the power is the key to achieving success. The result has been just the same as in William Muir’s experiment: Aggression, dysfunction and waste.

But why is that? At least part of the reason is because we live and operate within a culture that values and personifies leaders as super heros, above everything else.

Henry Mintzberg, a top management thinker believes that our emphasis on leadership has led us to an emphasis on style over substance, to an emphasis of leader over follower. Pick up literally every modern business book and you’ll likely read tales of powerful “super hero” leaders, their triumphs and successes. Our society and culture consistently over-emphasizes individual contribution. We create an heroic culture.

An heroic culture is one that is obsessed with the ability to score goals, advance individual ideas and ensuring that the spotlight always shines on the individual. With the excessive promotion of leadership, we demote everyone else. We create clusters of followers who have to be driven to perform, instead of leveraging the natural propensity of people to cooperate in communities and collaborate as teams.
In days where many organizations are struggling to survive during turbulent times, is there still a place for the same top-down management strategies that we’ve been using since the industrial age? Do leaders really have the answers to all the messy, complex challenges that define our hyper-connected universe? Or, are we simply maintaining the myth that one or a few people at the top can figure out everything that needs to be done?

Some progressive organizations have already started to surrender their most cherished assumptions about heroic leadership and are starting to leverage the power of collaborative knowledge. They clearly see how today’s problems are very different than the past and that expecting leaders to have all the answers is all but wishful thinking. They are moving toward a more engaging style of leadership, mainly due to their recognition that followers have a greater role to play.

For most organizations though, the idea of working to collaboratively to solve problems and cultivate ideas from within the employee base flies right in the face of traditional management thinking and its belief that the only valid source of knowledge is authoritative expertise. In other words, we over-extend our reliance on our super heroes, seeking their permission and guidance before we even make a move.

Strategies for organizations are still being developed behind shut boardroom doors with small groups of leaders making decisions that impact the future of the organization. Despite their intimate understanding of customers, very few organizations will call on front-line employees or middle managers to participate in the strategic planning process. Inside the boardroom is where heroic leadership epitomizes. Most often it isn’t even a job title or rank that earns an individual the right to make or influence decisions. It comes down to whoever has the strongest voice and political influence.

So does heroic leadership still have a place in organizations? Lee Iacocca, Henry Ford and Jack Welch were heroic leaders. They were strong characters with firm answers. However, today’s business complexity has made it harder for one person to know it all. The Level 5 leaders described by Jim Collins in Good to Great illustrate the post-heroic style: they possess the humility to involve others in developing new strategies.

Heroic leaders use the power of their position to make decisions unilaterally. By contrast, post-heroic leaders are facilitators. They use skillful questions to draw ideas out of others to develop shared solutions. Both styles of leadership have the authority to make decisions for the groups they manage. The difference between them is their decision-making style: one is autocratic, the other is participative.

When it comes to executing change, heroic leaders, which may have been influential in past eras are failing to engage knowledge workers who crave a voice in deciding what direction to take. They no longer want to be sold a vision from up high that they have no part in formulating. Heroic leaders mitigate this desire by trying to inject motivation into employees, namely by “being inspiring” rather than by involving them in making decisions. Yet an inspiring sales pitch is still one-way communication no matter how stirring it might be. It may inspire, but passion tends to fade when there isn’t ownership vested in the idea.

What We Expect of Leaders
All of us have likely been in a situation, either as a driver or passenger where you are so confident in your abilities that you refuse to stop and ask for directions. Those situations mostly end with a familiar outcome – we get lost.

Business is no different. It takes a ton of humility and empathy for a leader who is expected by society to have all the answers, to admit that he or she really doesn’t know. It takes a post-heroic leader nowadays to move organizations forward and harness the collective knowledge and talent of the organization in keeping up with the pace of change.

We criticize leaders today not because they are less capable than they were in the past but because we expect more than they can deliver. Our expectations of leaders have grown astronomically because of increasing complexity and the rate of change, causing our anxiety to go through the roof. No wonder the superflock is focused on killing each other. Imagine the pressure and the level of competitiveness needed just to survive.

The stark reality is that no individual has the answers, but collectively we do. There isn’t a manual or book written with a precise prescription on how to avert disruption and how to get organizations change faster in the face of massive technological changes.

**But Wait! We Want to Be Led**

Shifting to a post-heroic era is easier said than done. We want to be led! We expect our leaders to have the answers. We expect them to guide us. This is why heroic leadership is so popular. Nobody wants to listen to a quiet, factual or less inspiring leader. They just don’t excite us and calm our fears.

The paradox here, however, is that **heroic leadership becomes self-defeating because, the more heroic it is, the more it widens the gap between dependency and empowerment.**

It’s a vicious circle. On one end, we seek empowerment. We want a voice. We want to matter. On the other hand, we are taught, from a very young age to respect authority and respect leaders. We default to waiting for directions. We are taught that in order to make the superflock, we have to become experts – that we must be the smartest person in the room and have all the answers in order to lead.

Breaking our dependency on super heroes and finding strength within ourselves is easier said than done. It requires a culture change that entails promoting and developing engaging managers, rewarding those who can bring out the creative ideas of their team members. It demands a focus that shifts from recognizing and rewarding individuals, to recognizing teamwork and the contributions of many.

We still need and want heroes. But their purpose has to change. Today’s heroes are those who are focused on creating more heroes.
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<thead>
<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
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</table>
| • Analyze homework readings. | READING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  
2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text.  
4. Interpret words and phrases that appear frequently in texts from a wide variety of disciplines, including determining connotative and figurative meanings from context and analyzing how specific word choices shape meaning or tone.  
   a. Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context.  
   b. Analyze how meaning or tone is affected when one word is replaced with another.  
   c. Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author’s intent to convey information or construct an argument. |
| • Create an outline for the essay prompt. | WRITING | 5. Develop and strengthen writing as needed by planning, brainstorming, and organizing key ideas and supporting them through revising, rewriting, or trying a new approach to strengthen support by editing to improve word choices. Efficiently present the relationships between information and ideas. Know when to seek guidance and support from peers and instructors. |
| • Writing homework. | WRITING | 4. Produce clear, varied, coherent, consistent, and engaging writing in which the development, organization, style, tone, and voice are appropriate to task, purpose, and audience. Write an analysis based on a given prompt.  
   a. Differentiate between example and reason when given a writing prompt.  
   b. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or evaluating and trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. |
THEME: The Politics of Play

OBJECTIVES

- Analyze homework readings.
- Create an outline for the essay prompt.

MATERIALS

Activity #1:
- Handout (attached): Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  In Preschool: What Matters More: Education or Play?
- Handout (attached): Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  Article: There’s a Dark Side to Heroic Leadership
  http://www.reuvengorsht.com/2015/06/30/heroic-leadership/

ACTIVITY #1: Analyze Homework Articles – 80 minutes

- Tell students the last two homework articles can help strengthen their arguments about play in the play debate.
- But first, a critical word definition exercise.
- Put students in pairs to collect the underlined words from the homework, define them, and put them in a sentence that clearly shows they understand the meaning of the word.
- Ask:
  o What are the words?
  o List these on the board.
  o Go round-robin to listen to the sentences for each word.
    o If a student doesn't think the sentence shows the meaning of the word, they can “challenge” by saying “challenge”. If they challenge, their pair will need to provide the correct definition.
- Write the following questions on the board:
  o What is the author’s thesis?
  o What is the evidence the author uses to support his/her thesis?
  o What are some key quotes that sum up the author’s most important ideas?
- Put students into pairs to prepare their answers to these questions. They will need to cite the text by reading out loud the section from where they got their evidence.
- Ask each of the questions and go round-robin from pair to pair to get students’ answers.
  o For each answer, tell them to cite the text.
  o Be sure that each student demonstrates this skill more than once.
- Repeat this process for the second article.
ACTIVITY #2: Create an Outline for the Essay Prompts – 40 minutes

- Tell students they will now have time to put their outlines together for the in-class essay they will write during the next lesson.
- Present the in-class essay prompt:
  - What is the debate going on in preschool education these days?
  - What are the values that drive each side of the debate?
  - What is your opinion about the values and practices that should be central to preschool education?
  - Why do you think this way?
- Tell the students they should cite three sources and use one quote.
- Ask students:
  - What kind of outline structure have you been using?
  - What structure has been the most helpful while you are writing?
  - What process do you use to make your outline?
- Give students time to work on their outlines.

HOMEWORK

WRITE: Have students write an outline for their in-class essay that cites three sources and includes one quotation:
- What is the debate going on in preschool education these days?
- What are the values that drive each side of the debate?
- What is your opinion about the values and practices that should be central to preschool education?
- Why do you think this way?

TEACHER NOTE: The criteria for a good essay last used in Week 6, Lesson 2 will be used again in Week 8, Lesson 2.
<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
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<tbody>
<tr>
<td>• Rehearse and write an in-class essay.</td>
<td>WRITING</td>
<td>1. Write arguments from a prompt in a formatted manner of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</td>
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<tr>
<td></td>
<td></td>
<td>a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.</td>
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<td>b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.</td>
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<td></td>
<td></td>
<td>c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</td>
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<td>d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</td>
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<td>e. Provide a concluding statement or section that follows from and supports the argument presented.</td>
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<tr>
<td>• Conduct the peer review process.</td>
<td>READING</td>
<td>5. Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.</td>
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<tr>
<td></td>
<td></td>
<td>a. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.</td>
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<td>b. Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).</td>
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<td>c. Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author’s purpose.</td>
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<td></td>
<td>d. Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose.</td>
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<td>6. Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. Determine an author’s point of view or purpose of a text.</td>
</tr>
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</table>
|                                   |                   |   b. Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and
responds to conflicting evidence or viewpoints.

c. Infer an author’s implicit as well as explicit purposes based on details in text.

d. Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose (e.g., analogies, enumerations, repetition and parallelism, juxtaposition of opposites, qualifying statements).

| Reading homework. | READING | 1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.
| | | a. Summarize what has been read.
| | | b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
| | | c. Identify the implied main idea and supporting details from an instructional level passage.
| | | d. Identify cause and effect implied in a paragraph.

| Writing homework. | WRITING | 2. Write informative/explanatory texts from a prompt in a formatted manner to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. |
THEME: The Politics of Play

OBJECTIVES

- Rehearse and write an in-class essay.
- Conduct the peer review process.

MATERIALS

Activity #1:
- Student Work: Students should bring hard copies of their essay outlines created for homework.

Activity #2:
- Handout (attached): Make two copies for each student.

Homework:
- Handout (attached): Make one copy for each student.

ACTIVITY #1: Rehearse and Write an In-Class Essay - 60 minutes

- Ask students: What is our class writing criteria?
- Tell students to come up with criteria for a good essay by answering the following questions. Ask these questions and then put their answers on the board:
  - What makes a good introduction?
    - Make sure the criteria include that the introduction has a thesis and it gets the attention and interest of the audience
  - What is a thesis and why is it important?
  - What makes for good paragraphs that provide your reasons and evidence?
    - Make sure the criteria include that the paragraphs have a clear topic sentence, give clear explanations, and are easy to understand.
  - What makes a good conclusion?
    - Make sure the criteria include making recommendations to resolve the issues discussed in the essay.
  - Which questions prompt you to write about each of these parts of the essay?
- Have students get their homework outlines out.
- Put students into pairs to hear and respond to each other’s plans for the in-class essay.
- Tell pairs they are to take turns, assigning one person to be the questioner and one as the speaker. When the first questioner is finished, pairs should switch roles and repeat the process so both students can be heard.
- Tell students to make any changes to their outline that will improve their essays.
- Time students as they write a 45-minute in-class essay using their notes.
ACTIVITY #2: Conduct the Peer Review Process - 60 minutes

- Tell students they will now provide constructive feedback to each other’s essay. They are to remember they must remain the audience that the writer is happy and comfortable with, meaning that the audience simply wants to understand what the essay is trying to say and to offer good suggestions for making the essay more interesting.
- Ask students: What kinds of things would happen when others are reading your work that would NOT make you feel happy and comfortable? Write what students say on the board.
- Put students into groups of three.
- Pass out two copies of the Audience Comment Page (attached) to each student. Explain that they will:
  - Read the essays written by the other two people in their group.
  - Fill out one Audience Comment Page for each of the essays they read.
  - They are NOT to comment on grammar or spelling yet. However, if they are not sure what something says, they can ask the writer for clarification.
  - They are to be friendly, encouraging, and genuinely helpful. Good comments on their partners’ work will help them when they have to rewrite their final essay.
- Have students pass their essays to the left.
- After students have evaluated the first essay, they should pass the essay they have worked on to their left and evaluate a new essay.
- After students have evaluated two essays, they should give their evaluations to the authors, and the authors should read the comments and ask questions to the evaluators as needed.
- Tell students that you will also evaluate their essays so they will each have three reviews to help them with their rewrites. Have students hand in their essays along with the two evaluations from their peers.
- Collect student essays along with the Audience Comment Pages for them.

TEACHER NOTE: Evaluate the student essays handed in using a copy of the Audience Comment Page. You will need to read both the essays and the student comments on those essays to see how perceptive the audiences for each essay were. Your comments should either reflect good suggestions or offer a different way to evaluate their essays that you think might be more helpful. Additionally, DO NOT correct everything in the students’ drafts. Only mark those errors in the text that would help the student make significant progress toward a better essay. In your comments, indicate a due date for rewrites of these drafts.

HOMEWORK

READ: Have students read Childhood Obesity A Serious Problem, underline all the facts about childhood obesity, and write 10 questions to quiz their classmates about facts in the article.

JOURNAL WRITING: Have students write in their journals using the following prompts:
- What do you believe are some of the reasons children are becoming more obese in recent years?
- What do you think has changed about the way we live and the way we raise our children?

TEACHER NOTE #1: The following lesson uses maps as graphs of obesity rates over time. There are multiple maps across the span of several years. Make sure that you give yourself time to review and familiarize yourself with these maps before the next lesson.

TEACHER NOTE #2: If the class will not have access to the Internet to view the maps/graphs in the next lesson, they will need color copies of the materials to complete the activities in the next lesson.
1. What is working for you as the audience for this piece of writing?

2. As the audience, what do you need clarified or want to hear more about to make you more interested in what the writer has to say?

3. Do you have any questions for the writer?
A dramatic increase in diabetes and other diseases related to childhood obesity in the United States has added millions of dollars to health care costs, a study said Wednesday.

"As overweight children become overweight adults, the diseases associated with obesity and health care costs are likely to increase even more," said the report from the Centers for Disease Control and Prevention.

The study, published in the May issue of Pediatrics, the journal of the American Academy of Pediatrics, said a review of hospital records found that "the proportion of discharges with obesity-associated diseases has increased dramatically in the past 20 years."


Diabetes diagnoses nearly doubled, accounting for 2.36 percent of child hospitalizations in the late '90s vs. 1.43 percent in the late '70s. Diagnoses of obesity alone tripled to reach 1 percent of hospitalizations.

Hospital costs for diseases related to childhood obesity increased from $35 million in 1979 to $127 million in 1999, according to the study.

About 13 percent of children and adolescents are overweight or obese, more than double the number two decades ago. Experts blame TV, computer games, lack of safe playgrounds and other factors that encourage kids to be sedentary — plus more access to super-sized portions of high-calorie foods.

At the same time, more children are suffering Type 2 diabetes, a dangerous disease that once struck mostly in middle age. Obesity also can worsen asthma and spark gallbladder disease. People even can die from obesity-caused sleep apnea, Dietz notes, when fat in the back of the throat combines with large tonsils to block the airway.

CDC researchers culled hospital discharge records, comparing obesity-related hospitalizations of 6- to 17-year-olds between 1979 and 1981 with those from 1997 through 1999.

Diabetes diagnoses nearly doubled, accounting for 2.36 percent of child hospitalizations in the late '90s vs. 1.43 percent in the late '70s, they reported Wednesday in Pediatrics.

Diagnoses of obesity alone tripled to reach 1 percent of hospitalizations.
Other obesity-related hospitalizations were more rare but rising rapidly — sleep apnea rose fivefold and gallbladder disease tripled. Asthma cases complicated by obesity rose 40 percent.

The study may surprise parents, but not obesity specialists who called it high time someone pointed out the growing danger to youngsters.

"The kids who are fat are getting really fatter," said Dr. Nazrat Mirza of Children's National Medical Center, who has patients as young as 5 with obesity-caused sleep apnea.

The study "represents just the tip of the iceberg," she said — because doctors often don’t record obesity on hospital discharge records. That’s because insurance companies don’t pay to treat it until the child comes down with a formal illness, she complained.

The government brought together star athletes Dominique Dawes, Herschel Walker and Martina Navratilova Wednesday to publicize the study and urge kids to stay slim by simply getting active.

"Get up and go outdoors," urged Education Secretary Rod Paige. "Swim, hike, .. dribble, slam-dunk. Do whatever, just move your body."
<table>
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<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
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| • Analyze homework article. | READING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
  a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. |
| • Find additional facts about childhood obesity. | READING | 7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.  
  a. Analyze how data or quantitative and/or visual information extends, clarifies, or contradicts information in text, or determine how data supports an author’s argument.  
  b. Compare two passages that present related ideas or themes in different genre or formats (e.g., a feature article and an online FAQ or fact sheet) in order to evaluate differences in scope, purpose, emphasis, intended audience, or overall impact when comparing.  
  c. Compare two passages that present related ideas or themes in different genre or formats in order to synthesize details, draw conclusions, or apply information to new situations.  
  9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.  
  a. Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline). |
| • Introduce final research project. | SPEAKING AND LISTENING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
  a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. |
| • Reading homework. | READING | 1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.  
  a. Summarize what has been read.  
  b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.  
  c. Identify the implied main idea and supporting details from |
| Writing homework. | **WRITING** | 2. Write informative/explanatory texts from a prompt in a formatted manner to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. |
THEME: The Problem of Childhood Obesity

OBJECTIVES

- Analyze homework article.
- Find additional facts about childhood obesity.
- Introduce final research project.

MATERIALS

Activity #1:
- Handout (attached): Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  Childhood Obesity a Serious Problem

Activity #2:
- Video: 5 Things You Didn’t Know About Childhood Obesity in America
  https://www.youtube.com/watch?v=H0YlOSZ_RVk (running time: 2:29)
- Handout (attached): Make one copy for each student.
  Childhood Obesity Facts
  http://www.cdc.gov/healthyschools/obesity/facts.htm
- Handout (attached): Make one color copy for each student.
  Childhood Overweight and Obesity Trends

TEACHER NOTE: If color copies are not available, make sure that this material can be projected in color so that students can read the information.

Activity #3:
- Handout (attached): Make one copy for each student.
  Final Project Description

Homework:
- Handout (attached): Make one copy for each student.
  Childhood Obesity: Causes and Consequences
  http://www.cdc.gov/obesity/childhood/causes.html
- Handout (attached): Make one copy for each student.
  Childhood Obesity Linked to Poverty, Parenting Style
  http://www.sciencedaily.com/releases/2015/11/151110134527.htm

ACTIVITY #1: Analyze Homework Article – 40 minutes

- Tell students they are going to turn to the issue of childhood obesity for the rest of the course, learning more about what it is and why it occurs, and what are some of the ways that preschools can impact children’s overall health and wellbeing. But first, we need to find out the facts.
• Tell students they can have some time to review the homework article and their quiz questions and answers to play the game. They should take a good hard look at the article because they will not be able to look at it once the game begins.

• Before starting, ask:
  o What is the title of the article?
  o What is the source for this article?
  o Write both answers like a heading for the list of facts.

• Ask: Who wants to be the first lead? Then ask students to follow this pattern:
  o The lead asks a question she or he knows the answer to.
  o Those who know the answer raise their hands.
  o The lead chooses someone to answer the question.
    ▪ If the answer is correct, that person becomes the new lead and starts this process over again.
    ▪ If the answer is incorrect, the lead chooses a new student to answer the question until someone gets the answer.
    ▪ Write all the facts that students ask in a list on the board.

• Repeat this pattern until students are out of questions.
• Tell students to take another look at the article to see if there are facts they did not ask questions about that need to be added to the list. Ask:
  o What more did you find in the article?
  o Add new items to the list.

• Tell students to write done the title and the list of facts in their notebooks.
• Lastly, ask and take notes on students’ answers:
  o What do you feel are the reasons that there is such an increase in childhood obesity?
  o How was your childhood different than children of today?
  o What are some things you think preschools should do to help children struggling with obesity?
  o Why do you think these recommendations would be effective?

ACTIVITY #2: Find Additional Facts About Childhood Obesity – 50 minutes

• Tell students they are now going to look at a number of materials to add facts about childhood obesity to the list on the board. They will need to have this list of facts in their notes like they are organized on the board, with the title and source of each as a heading. They are going to need this information for their final project, which you will introduce by the end of the class.
• Prepare to watch the video. Tell students to write down the title of the video and any new facts that are in the video that are not on the board.
• Watch the video once or twice and then ask:
  o What is the title of the video? Write the title as the heading to a new column and new facts.
  o Tell students to do the same in their notebooks.
  o What are the new facts? Add these to the list on the board.
• Pass out the CDC Childhood Obesity Facts sheet. Ask:
  o What is the name of the article? Write it on the board as a heading to a column.
  o What is the source of the article? Write that on the board as well.
• Tell students to underline those facts that are not on the board.
• Put students in pairs to check their answers with each other.
• Tell pairs to give you the new facts and put each under the heading for the article.
• Have students copy the heading and new facts in their notebooks.
• Have students form new pairs.
• Pass out the Childhood Overweight and Obesity Trends.
• Ask students for the title and source to put on the board as a heading.
Tell students to work with their partners to:
- Look at the three maps and come up with a list of national trends on childhood overweight and obesity. Think about the following questions to do this:
  - How many states are in the different color categories for the different years?
  - Where are the most obese states?
  - Choose a couple of states, that don’t include Illinois, to follow across the three maps.
  - Come up with your own observations.
- Compare the maps and numbers for Illinois:
  - What are the facts for the state?
  - How does Illinois compare with other states?
- See if at the end of the article under “Childhood Obesity Facts” which facts are new ones.
- Ask pairs for:
  - National trends and write them on the board.
  - Trends for Illinois.
  - New childhood obesity facts.

**ACTIVITY #3: Introduce Final Research Project – 30 minutes**

Tell students you will now introduce the final project. You are introducing it early so that they can use the readings and videos in the class as part of their research and so they can have some time to choose the topic they want to write about. Tell students that the skills that will be emphasized during this unit are critical to college success as well as to the reading and writing required on the GED/HSE.

- Pass out the Final Project Description.
- Go round-robin and ask students to read a paragraph or statement loudly and with feeling.
  - Tell students to imagine they are reading it to a kid. They should be expressive about their reading so it is very easy to understand.
- When the whole Final Project Description has been read, ask:
  - Any questions or concerns?
  - Is there a project topic listed here that sounds interesting to you?
  - Which one? Why?

**HOMEWORK**

**READ:** Have students read Childhood Obesity: Causes and Consequences and Childhood Obesity Linked to Poverty, Parenting Style. For each article, students should write the title and source as a heading and put the significant notes from the article under each heading. They should take notes on the following:
- The meanings of any underlined words.
- Significant new facts.
- Important studies with important findings.
- Recommendations.

**JOURNAL WRITING:** Have students answer the following prompt in their journals:
- Why do you think authoritarian parents have children that are more likely to be obese?
- What have we learned about social emotional learning and how children learn to regulate themselves?
- Explain how authoritarian parents interfere with the development of social emotional learning.

**TEACHER NOTE:** Students will use their Final Project Description sheet again in Week 6, Lesson 2. Tell them to keep the sheet and be prepared to bring it in for future classes.
Childhood Obesity has more than doubled in children and quadrupled in adolescents in the past 30 years.\textsuperscript{1, 2}

- The percentage of children aged 6–11 years in the United States who were obese increased from 7% in 1980 to nearly 18% in 2012. Similarly, the percentage of adolescents aged 12–19 years who were obese increased from 5% to nearly 21% over the same period.\textsuperscript{1, 2}
- In 2012, more than one third of children and adolescents were overweight or obese.\textsuperscript{1}
- Overweight is defined as having excess body weight for a particular height from fat, muscle, bone, water, or a combination of these factors.\textsuperscript{3} Obesity is defined as having excess body fat.\textsuperscript{4}
- Overweight and obesity are the result of “caloric imbalance”—too few calories expended for the amount of calories consumed—and are affected by various genetic, behavioral, and environmental factors.\textsuperscript{5, 6}

Health Effects of Childhood Obesity

Childhood obesity has both immediate and long-term effects on health and well-being.

Immediate health effects:
- Obese youth are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure. In a population-based sample of 5- to 17-year-olds, 70% of obese youth had at least one risk factor for cardiovascular disease.\textsuperscript{7}
- Obese adolescents are more likely to have prediabetes, a condition in which blood glucose levels indicate a high risk for development of diabetes.\textsuperscript{8, 9}
- Children and adolescents who are obese are at greater risk for bone and joint problems, sleep apnea, and social and psychological problems such as stigmatization and poor self-esteem.\textsuperscript{5, 6, 10}

Long-term health effects:
- Children and adolescents who are obese are likely to be obese as adults\textsuperscript{11-14} and are therefore more at risk for adult health problems such as heart disease, type 2 diabetes, stroke, several types of cancer, and osteoarthritis.\textsuperscript{6} One study showed that children who became obese as early as age 2 were more likely to be obese as adults.\textsuperscript{12}
- Overweight and obesity are associated with increased risk for many types of cancer, including cancer of the breast, colon, endometrium, esophagus, kidney, pancreas, gall bladder, thyroid, ovary, cervix, and prostate, as well as multiple myeloma and Hodgkin’s lymphoma.\textsuperscript{15}

Prevention

- Healthy lifestyle habits, including healthy eating and physical activity, can lower the risk of becoming obese and developing related diseases.\textsuperscript{6}
- The dietary and physical activity behaviors of children and adolescents are influenced by many sectors of society, including families, communities, schools, child care settings, medical care providers, faith-based institutions, government agencies, the media, and the food and beverage industries and entertainment industries.
- Schools play a particularly critical role by establishing a safe and supportive environment with policies and practices that support healthy behaviors. Schools also provide opportunities for students to learn about and practice healthy eating and physical activity behaviors.
Obesity maps and tables on the following pages show state-by-state childhood obesity rates for 10-17 year-olds for 2003-2011 based on data from the National Survey of Children’s Health. According to the Centers for Disease Control and Prevention, overall obesity rates remain high and prevalence among 2-19 year-olds and adults in the United States has not changed significantly between 2003-2004 and 2011-2012. For very young children, however, data from CDC’s National Health and Nutrition Examination Survey (NHANES) published in the February 25, 2014 issue of the *Journal of the American Medical Association* do show a decline in obesity prevalence in the 2 to 5 year old age group from nearly 14 percent in 2003-2004, to just over 12 percent in 2009-2010, to just over 8 percent in 2011-2012. NCSL annually reports on policy options to address childhood obesity.
2011 Rates of Overweight and Obese Children

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* Obesity is defined as body mass index (BMI) at or above the 95th percentile of the 2000 Centers for Disease Control and Prevention BMI-for-age growth charts. Children with BMI between the 85th and 95th percentile are classified as overweight. BMI is calculated as weight in kilograms divided by the square of height in meters. Children age 10-17 are included in this data.

### 2003 Rates of Obese and Overweight Children

<table>
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<tr>
<th>State</th>
<th>Overweight (85th to 94th percentile) %</th>
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The Final Project will focus on research that will include assigned readings as well as research you do on your own.

I. FINAL PROJECT REQUIREMENTS

- Your final project should answer the questions for your chosen topic, listed below.
  - These questions do not necessarily need to be answered in the order they are listed. You can be creative with how you want to put your paper together. Choose strategies that are most natural to you and that you think will make the paper more interesting for your reader.
- Incorporate your own ideas and express them in your own words.
- Cite at least three resources that are used as part of the class.
- Cite at least three resources from individual research.
- Include two quotations that clearly state ideas that you think are important to your paper.

II. STEPS IN THE PROCESS

1. Take good notes on all class readings and videos. This is important because you can use the facts, studies, and recommendations from the readings in your final project. The better the notes you take, the easier it will be to cite these sources. Make sure your notes include:
   - The title and the source you are taking notes on.
   - The significant new facts, studies, and recommendations you get from that reading.
Take notes with the title and the source as the heading and the specifics below. Organizing your notes in this way will make citing key sources much easier.

2. Choose a research topic. You do not have to choose a topic right away. You can do the class readings and see which topic listed below interests you most. If you have your own idea about what you might like to write about, let your teacher know so you can work together to list questions that will help guide your research and writing.

   Topic #1: The impact of poverty on childhood obesity and long-term health.
   Research Questions:
   - What are the facts about childhood obesity?
   - Why is this problem so important to solve?
   - What are the studies that show the impacts of poverty on childhood obesity and its long-term health effects?
   - What are some effective ways preschools can help children and parents with this issue?
   - What can society do to help children struggling with obesity?

   Topic #2: The impact of obesity on learning.
   Research Questions:
   - What are the facts about childhood obesity?
   - Why is this problem so important to solve?
   - What are the studies that show the relationship between obesity and learning?
   - What are some effective ways preschools can help children struggling with obesity?
   - What can society do to help children struggling with obesity?
**Topic #3: The health benefits of playing outside.**

**Research Questions:**
- How does playing outside improve children's health?
- Why aren't children getting enough outdoor play these days?
- What are the consequences of not getting enough outdoor play?
- What can preschools do to get children outside more?
- What can the society do to make outdoor play more a part of children's lives?

3. **Make a good research plan.** When doing any larger project, it is important to break it down into smaller and simpler parts that you can do one at a time. You will have five 80-minute classroom periods and five homework opportunities to complete your project. Don’t worry about making this plan yet, just be aware that when you are asked to come up with a research plan, you will need to think about and schedule the following tasks.

4. **Build your outline:**

   - **Write out the questions** for your chosen topic as the headings for your outline in your notebook or on the computer.
   - **Put your own ideas into the outline** for each question.
   - **Review your classroom notes** and put useful citations into your outline.
     - Citations should look like this: (Name of the Article: Source).
   - **Decide what additional information you need** from on-line resources.
   - **Review the listings of resources at the end of our classroom readings** to see if you want to look any of them up on-line.
   - **Browse on-line topics** for additional resources.
   - **Decide the two quotations you want to use** and put them in the appropriate place in your outline.

5. **Write your essay:**

   - **Use your journal to get your ideas out**, answering one question at a time.
   - **Use your outline and your journal entry to put together a complete paragraph** or set of paragraphs that sound good to you.
   - **Get a partner to read the paragraph out loud** to make sure it makes sense and reads naturally.
   - When you have all the paragraphs you need, **put the whole essay together**.
     - **Read the essay out loud to yourself** to see if there are changes you want to make.
     - **Read the essay out loud to a partner** to see if you there are other changes you want to make.
     - **Complete a final essay on the computer**.
     - **Prepare to present your essay** in any way you like.
Childhood obesity is a complex health issue. It occurs when a child is well above the normal or healthy weight for his or her age and height. The main causes of excess weight in youth are similar to those in adults, including individual causes such as behavior and genetics. Behaviors can include dietary patterns, physical activity, inactivity, medication use, and other exposures. Additional contributing factors in our society include the food and physical activity environment, education and skills, and food marketing and promotion.

**Behavior**

Healthy behaviors include a healthy diet pattern and regular physical activity. Energy balance of the number of calories consumed from foods and beverages with the number of calories the body uses for activity plays a role in preventing excess weight gain.\(^1\)\(^2\) A healthy diet pattern follows the Dietary Guidelines for Americans which emphasizes eating whole grains, fruits, vegetables, lean protein, low-fat and fat-free dairy products and drinking water. The Physical Activity Guidelines for Americans recommends children do at least 60 minutes of physical activity every day. Having a healthy diet pattern and regular physical activity is also important for long term health benefits and prevention of chronic diseases such as Type 2 diabetes and heart disease.

**Community Environment**

American society has become characterized by environments that promote increased consumption of less healthy food and physical inactivity. It can be difficult for children to make healthy food choices and get enough physical activity when they are exposed to environments in their home, child care center, school, or community that are influenced by—

**Advertising of less healthy foods.**
- Nearly half of U.S. middle and high schools allow advertising of less healthy foods,\(^3\) which impacts students’ ability to make healthy food choices. In addition, foods high in total calories, sugars, salt, and fat, and low in nutrients are highly advertised and marketed through media targeted to children and adolescents,\(^10\) while advertising for healthier foods is almost nonexistent in comparison.

**Variation in licensure regulations among child care centers.**
- More than 12 million children regularly spend time in child care arrangements outside the home,\(^11\) However, not all states use licensing regulations to ensure that child care facilities encourage more healthful eating and physical activity.\(^12\)

**No safe and appealing place, in many communities, to play or be active.**
- Many communities are built in ways that make it difficult or unsafe to be physically active. For some families, getting to parks and recreation centers may be difficult, and public transportation may not be available. For many children, safe routes for walking or biking to school or play may not exist. Half of the children in the United States do not have a park, community center, and sidewalk in their neighborhood. Only 27 states have policies directing community-scale design.\(^13\)

**Limited access to healthy affordable foods.**
- Some people have less access to stores and supermarkets that sell healthy, affordable food such as fruits and vegetables, especially in rural, minority, and lower-income neighborhoods.\(^14\) Supermarket access is associated with a reduced risk for obesity.\(^14\) Choosing healthy foods is difficult for parents who live in areas with an overabundance of food retailers that tend to sell less healthy food, such as convenience stores and fast food restaurants.
Greater availability of high-energy-dense foods and sugar sweetened beverages.

- High-energy-dense foods are ones that have a lot of calories in each bite. A recent study among children showed that a high-energy-dense diet is associated with a higher risk for excess body fat during childhood.\textsuperscript{15,16} Sugar sweetened beverages are the largest source of added sugar and an important contributor of calories in the diets of children in the United States.\textsuperscript{17} High consumption of sugar sweetened beverages, which have few, if any, nutrients, has been associated with obesity.\textsuperscript{18} On a typical day, 80% of youth drink sugar sweetened beverages.\textsuperscript{19}

Increasing portion sizes.

- Portion sizes of less healthy foods and beverages have increased over time in restaurants, grocery stores, and vending machines. Research shows that children eat more without realizing it if they are served larger portions.\textsuperscript{20,21} This can mean they are consuming a lot of extra calories, especially when eating high-calorie foods.

Lack of breastfeeding support.

- Breastfeeding protects against childhood overweight and obesity.\textsuperscript{22,23} However, in the United States, while 75% of mothers start out breastfeeding, only 13% of babies are exclusively breastfed at the end of 6 months. The success rate among mothers who want to breastfeed can be improved through active support from their families, friends, communities, clinicians, health care leaders, employers, and policymakers.

Consequences of Obesity

Health risks now

Obesity during childhood can have a harmful effect on the body in a variety of ways. Children who are obese have a greater risk of:

- High blood pressure and high cholesterol, which are risk factors for cardiovascular disease (CVD). In one study, 70% of obese children had at least one CVD risk factor, and 39% had two or more.\textsuperscript{24}
- Increased risk of impaired glucose tolerance, insulin resistance and type 2 diabetes.\textsuperscript{25}
- Breathing problems, such as sleep apnea, and asthma.\textsuperscript{26,27}
- Joint problems and musculoskeletal discomfort.\textsuperscript{26,28}
- Fatty liver disease, gallstones, and gastro-esophageal reflux (i.e., heartburn).\textsuperscript{25,26}
- Psychological stress such as depression, behavioral problems, and issues in school.\textsuperscript{29,30,31}
- Low self-esteem and low self-reported quality of life.\textsuperscript{29,31,32,33}
- Impaired social, physical, and emotional functioning.\textsuperscript{29}

Health risks later

- Children who are obese are more likely to become obese adults.\textsuperscript{34,35} Adult obesity is associated with a number of serious health conditions including heart disease, diabetes, metabolic syndrome, and cancer.\textsuperscript{35,36}
- If children are obese, obesity and disease risk factors in adulthood are likely to be more severe.\textsuperscript{34,35,37}

References

See original article for list of references.
**Childhood Obesity Linked to Poverty, Parenting Style**

*Adapted and paraphrased from original source:*

http://www.sciencedaily.com/releases/2015/11/151110134527.htm

Original author: Concordia University

**Summary:** With childhood obesity rates on the rise, a team of based researchers embarked on a study to show how authoritarian parenting and household income combine to affect kid's obesity risk. Strategies to combat the rising problem need to reflect these factors, suggests new research from Concordia University.

November 10, 2015

In 2013, 42 million infants and young children worldwide were overweight or obese. If current trends continue, that number will increase to 70 million by 2025, according to the World Heath Organization.

It's not just genes that are the cause: socio-demographic and environmental elements are also contributing factors. Lower socio-economic status, living in neighbourhoods that aren't walkable and poor access to fresh fruits and vegetables can all increase the risk of being overweight.

With obesity rates on the rise, a team of Montreal-based researchers embarked on a study to find out how parenting styles and the broader social environment combine to affect children's obesity risk.

"We thought that certain types of parenting would be associated with a higher risk of childhood obesity, and that the strength of this association would differ between children living in poverty and those who aren't," says Lisa Kakinami, the study's lead author and an assistant professor in Concordia's Department of Mathematics and Statistics in collaboration with the PERFORM Centre.

The study, published in *Preventive Medicine*, suggests that both poverty and parenting style are important predictors of childhood health. "Successful strategies to combat childhood obesity need to reflect these independent and interactive associations on health," Kakinami says.

She and her research team used data from a national survey of Canadian youth, carried out by Statistics Canada from 1994 to 2008. They examined information on 37,577 children and compared socio-demographic and socio-economic status, family and neighbourhood characteristics, and height and weight.

The researchers also paid particular attention to the types of parenting being reported, and divided those styles into four groups:

1. Authoritative -- both responsive and demanding
2. Authoritarian -- not responsive but demanding
3. Permissive -- responsive but not demanding
4. Negligent -- neither responsive nor demanding

Results showed that, for the population as a whole, preschool- and school-age children with authoritarian parents were 35 per cent and 41 per cent more likely to be obese than those with authoritative parents.

But household income had an effect for the younger, preschool-age cohort. Among kids living in poverty (i.e., living below the low-income cut-offs established by Statistics Canada), the risk of being obese was 20% greater compared with the risk among kids not living in poverty, and this risk was regardless of parenting style. However, among kids not living in poverty, authoritarian and negligent parenting was associated with 44 per cent and 26 per cent increased likelihood of obesity, respectively.

Kakinami speculates that this could be linked to kids' ability to self-regulate their energy intake. "Authoritarian parenting may translate to parents not responding to children's cues of hunger and/or feeling full, and demanding or controlling the child's energy intake," she says.

"That results in the children's ability to regulate their own energy intake being underdeveloped. These children may be more likely to overindulge when given the opportunity."
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<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
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| • Analyze homework article. | READING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  
2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. |
| • Watch video for additional information. | READING | 9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.  
   a. Draw specific comparisons between two texts that address similar themes or topics or between information presented in different formats (e.g., between information presented in text and information or data summarized in a table or timeline).  
   b. Compare two passages in similar or closely related genre that share ideas or themes, focusing on similarities and/or differences in perspective, tone, style, structure, purpose, or overall impact.  
   c. Compare two argumentative passages on the same topic that present opposing claims (either main or supporting claims) and analyze how each text emphasizes different evidence or advances a different interpretation of facts. |
| • Create thesis statements around childhood obesity. | READING | 5. Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.  
   a. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.  
   b. Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).  
   c. Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author’s purpose.  
   d. Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose. |
| Reading homework. | READING | 6. Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.  
   a. Determine an author’s point of view or purpose of a text.  
   b. Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and responds to conflicting evidence or viewpoints.  
   c. Infer an author’s implicit as well as explicit purposes based on details in text.  
   d. Analyze how an author uses rhetorical techniques to advance his or her point of view or achieve a specific purpose (e.g., analogies, enumerations, repetition and parallelism, juxtaposition of opposites, qualifying statements). |
| | 1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.  
   a. Summarize what has been read.  
   b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.  
   c. Identify the implied main idea and supporting details from an instructional level passage.  
   d. Identify cause and effect implied in a paragraph.  
   e. Distinguish among fact, opinion, and reasoned judgment in a text.  
   f. Cite several pieces of textual evidence that most strongly support analysis of what the text says explicitly as well as inferences drawn from the text; predict probable outcomes from knowledge of events obtained from a reading selection.  
   g. Determine the appropriate reading strategy to acquire specific information and to match the purpose of reading (e.g., rereading, skimming, scanning, reading for detail, meaning, or critical analysis). |
THEME: The Problem of Childhood Obesity

OBJECTIVES

- Analyze homework article.
- Watch video for additional information.
- Create thesis statements around childhood obesity.

MATERIALS

Activity #1:

- Teacher Resource: Make note cards for each of the bulleted questions below based on articles read for homework:
  - …Causes and Consequences: What are the reasons given for child obesity? Which reasons do your group think are most significant? Why?
  - …Causes and Consequences: What are the new facts about childhood obesity in this article that we have not seen before?
  - …Poverty, Parenting Styles: How would you describe the study that is presented in the second article?
  - …Poverty, Parenting Styles: What is the link the study makes between poverty, authoritarian parents and obesity?

- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand. 
  Childhood Obesity: Causes and Consequences (attached to Week 9, Lesson1)
  http://www.cdc.gov/obesity/childhood/causes.html

- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  Childhood Obesity Linked to Poverty, Parenting Style (attached to Week 9, Lesson1)
  http://www.sciencedaily.com/releases/2015/11/151110134527.htm

Activity #2:

- Video: Childhood Obesity in America | This is Injustice
  https://www.youtube.com/watch?v=1Yb77kDq-Zo (running time: 2:34)

Homework:

- Handout (attached): Make one copy for each student.
  Child Obesity and Cognition
- Handout (attached): Make one copy for each student.
  Study Finds Link Between Child’s Obesity and Cognitive Function
  http://news.aces.illinois.edu/news/study-finds-link-betweenchilds-obesity-and-cognitive-function

ACTIVITY #1: Analyze Homework Article – 40 minutes

- Tell students they are going to take a close and careful look at the two homework articles to get the most information out of them for possible use in your final projects.
- Go over any underlined words in the articles:
  - Have students name the words from each article while you write them on the board.
Ask for definitions and write them on the board.

Have a student read the sentence from the article with the word in it for each of the words on the board and ask: Does the sentence make sense?

- Put students into six groups. If you are working with a small class, create three groups.
- Have each group pick one or two note cards.
- Tell each group to:
  - Independently look back at the article and their notes to be clear on their answers to the question on the note card.
  - Give each member a chance to present their answers.
  - Talk about what they want their group answer to be:
    - If there is consensus, there is one answer.
    - If there are many different answers, plan to have different students present their different viewpoints.
- Have each group present their answers in the order listed in “Materials” section. Take notes on each question on the board.
- After each group answers the question, ask students if they have anything they would like to add. Take notes on additional student answers.
- When all questions have been answered. Ask:
  - What from these readings do you think might be useful to your final research project?
  - Which of the research questions for the final project could this information support?
- Note the number of sources listed at the end of Article #1. Ask:
  - Does the use of so many sources make you believe that what the article has to say is true? Why?
  - In other words, why are sources so important to making your point?

ACTIVITY #2: Watch Video for Additional Information – 40 minutes

- Tell students they are going to watch a video that uses facts they are now familiar with to make a specific kind of statement about childhood obesity.
- Tell students to watch the video and note:
  - Any new facts.
  - The opinion of the video makers.
  - The video makers’ recommendations.
- Watch the video once or twice, depending on students’ requests.
- Put students in pairs to compare notes and come up with a statement that summarizes the video makers’ point of view.
- Ask the following questions one at a time to get feedback from the different pairs. Write their feedback on the board:
  - What are the new facts?
  - What is the opinion of the video makers?
  - What are their recommendations?
  - What is your statement that summarizes the point of view of video makers’ point of view?
- Ask the class:
  - Which statement do you think summarizes the point of view of video best?
  - Do you want to make any changes to this statement to make it better?

ACTIVITY #3: Create Thesis Statements Around Childhood Obesity – 40 minutes

- Tell students they will now come up with their own thesis statement for their final project. Students will need to keep practicing this skill so they can be clear about their thoughts on this topic.
• Tell students to go through their notebooks to list the readings and videos they have seen on this topic so far.
  o Write down the titles that students report to you.
• Put students in new pairs and assign each pair an article or video that has been listed on the board.
• Have each pair talk about the reading or video they are assigned based on their notes and come up with:
  o A statement that summarizes the author’s point of view.
  o Citations that clearly supports the statement.
• Have each pair present their statement and their evidence.

HOMEWORK

READ: Have students read Child Obesity and Cognition and Study Finds Link Between Child’s Obesity and Cognitive Function. Students should make sure they can define each of the underlined words. Then, underline those areas of the article that can help them answer the three research questions:
• What was the design of one of the featured studies?
• What were the findings?
• What were the conclusions?

WRITE: For each article above, write the title and source as a heading and put the significant notes from the article under each heading using the questions as a guide.

TEACHER NOTE: Explain how transferring those parts of the article they have underlined into a notebook is a key college-level study skill. By taking the information out of the article and writing in their own words and in their own format, they learn the material better and have better access to it because it is organized to support the way they think. This makes the information more accessible for tests or, in this case, writing assignments.
Childhood and adolescent obesity has become an **epidemic** in industrialized countries around the world, including the United States. The **prevalence** of obesity, defined as a Body Mass Index (BMI) at or above the 95th percentile, in school-age children and adolescents in the U.S. has tripled since 1980. According to a study conducted in 2010[1], 17 percent of youth are obese and over 30 percent of U.S. high school students are considered overweight or obese. Children and adolescents who are overweight or obese are more likely to develop serious medical conditions, including hypertension, back pain, type II diabetes, impaired glucose homeostasis, bone and joint disorders, sleep apnea and intracranial hypertension.[2] They are also more likely to face **stigmatization** and to develop emotional and psychological problems such as depression, anxiety, eating disorders, and low self-esteem.

What you might not know is that obesity may also negatively impact your child or adolescent’s brain and cognitive development. While overall evidence is still inconclusive, there is growing data that suggest that there may be a relationship between overweight/obesity and poorer cognitive performance in youth. For example, in 2008, a group of researchers administered several cognitive assessments to a sample of over 2000 children between the ages of 8 and 16.[3] Compared to normal-weight children, those who were overweight performed significantly worse on measures of visual-spatial organization and general mental ability. Another study found that preadolescent children who were obese performed significantly worse on a test measuring **inhibition**, working memory and cognitive flexibility.[4]

So what can be done to help your child reach their cognitive potential? One of the best things you can do is make sure your child receives regular exercise. This not only is helpful for weight management, but exercise has also been shown to improve executive functioning (which includes the ability to plan, organize, control emotion, and inhibit inappropriate behavior). A randomized **control trial** of 94 sedentary, overweight children found that participants who received 40 minutes of aerobic exercise 5 days per week over the course of 15 weeks had better planning abilities at the end of the intervention as compared with subjects who were assigned to the no-exercise condition.[5] In addition, aerobic exercise also has been shown to have a positive effect on children’s academic achievement and school performance.[6]

It’s important to work with your child’s pediatrician in order to devise an exercise plan that is right for him or her. And make sure your child is involved with physical activities that they find fun, engaging and are likely to want to continue doing, such as sports, hiking, biking, walking the family dog, or playing Dance Dance Revolution! Be creative, and keep it fun and playful - exercise does not have to be a chore!

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**Adapted and paraphrased from original source:** [http://neurodevelop.com/neuroblog/?p=10](http://neurodevelop.com/neuroblog/?p=10)

**Original author:** Neuro Assessment & Development Center

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URBANA, Ill. – A new University of Illinois study finds that obese children are slower than healthy-weight children to recognize when they have made an error and correct it. The research is the first to show that weight status not only affects how quickly children react to stimuli but also impacts the level of activity that occurs in the cerebral cortex during action monitoring.

“I like to explain action monitoring this way: when you’re typing, you don’t have to be looking at your keyboard or your screen to realize that you’ve made a keystroke error. That’s because action monitoring is occurring in your brain’s prefrontal cortex,” said Charles Hillman, a U of I professor of kinesiology and faculty member in the U of I’s Division of Nutritional Sciences.

As an executive control task that requires organizing, planning, and inhibiting, action monitoring requires people to be computational and conscious at all times as they process their behavior. Because these higher-order cognitive processes are needed for success in mathematics and reading, they are linked with success in school and positive life outcomes, he said.

“Imagine a child in a math class constantly checking to make sure she’s carrying the digit over when she’s adding. That’s an example,” he added.

In the study, the scientists measured the behavioral and neuroelectric responses of 74 preadolescent children, half of them obese, half at a healthy weight. Children were fitted with caps that recorded electroencephalographic activity and asked to participate in a task that presented left- or right-facing fish, predictably facing in either the same or the opposite direction. Children were asked to press a button based on the direction of the middle (that is, target) fish. The flanking fish either pointed in the same direction (facilitating) or in the opposite direction (hindering) their ability to respond successfully.

“We found that obese children were considerably slower to respond to stimuli when they were involved in this activity,” Hillman said.

The researchers also found that healthy-weight children were better at evaluating their need to change their behavior in order to avoid future errors.

“The healthy-weight kids were more accurate following an error than the obese children were, and when the task required greater amounts of executive control, the difference was even greater,” he reported.

Scientists in the Hillman lab and elsewhere have seen a connection between healthy weight and academic achievement, “but a study like this helps us understand what’s happening. There are certainly physiological differences in the brain activity of obese and healthy-weight children. It’s exciting to be able to use functional brain imaging to see the way children’s weight affects the aspects of cognition that influence and underlie achievement,” said postdoctoral researcher and co-author Naiman Khan.
<table>
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<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
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</table>
| ● Analyze homework articles.   | READING           | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  
2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text.  
4. Interpret words and phrases that appear frequently in texts from a wide variety of disciplines, including determining connotative and figurative meanings from context and analyzing how specific word choices shape meaning or tone.  
   a. Determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context.  
   b. Analyze how meaning or tone is affected when one word is replaced with another.  
   c. Analyze the impact of specific words, phrases, or figurative language in text, with a focus on an author’s intent to convey information or construct an argument. |
- Create an outline for the essay prompt.
- Writing homework.

**WRITING**

1. Write arguments from a prompt in a formatted manner of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
   a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.
   b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.
   c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
   d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
   e. Provide a concluding statement or section that follows from and supports the argument presented.
THEME: The Problem of Childhood Obesity

Class to be held in the Technology Lab

OBJECTIVES

- Analyze homework articles.
- Create an outline for the essay prompt.

MATERIALS

Activity #1:

- Teacher Resource: Make note cards for each of the separate questions listed below for the homework articles:
  - Child Obesity and Cognition: What was the design of the featured study?
  - Child Obesity and Cognition: What were the findings of the featured study?
  - Study Finds Link…: What were the conclusions of the featured study?
  - Study Finds Link…: What was the design of the featured study?
  - Study Finds Link…: What were the findings of the featured study?
  - Study Finds Link…: What were the conclusions of the featured study?

- Handout (attached to Week 9, Lesson 2): Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  - Child Obesity and Cognition
  - Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  - Study Finds Link Between Child’s Obesity and Cognitive Function
  - http://news.aces.illinois.edu/news/study-finds-link-between-childs-obesity-and-cognitive-function

ACTIVITY #1: Analyze Homework Articles – 40 minutes

- Tell students they are going to work with a partner on a key question for each of these articles, and then meet with another pair of students who have worked on the same article to give a clear report of what was significant about the article. Again this information could be part of the research they want to include in their final report.

- Go over the underlined words in both articles:
  - Have students identify the underlined words from each article while you write them on the board.
  - Ask for definitions and write them on the board.
  - Have a student read the sentence with the word in it for each of the words on the board.
  - Ask: Does the sentence make sense?

- Put students into six groups. If you are working with a small class, create three groups.

- Have each group pick one or two note cards and work on their answer to the questions.

- If you have multiple groups answering questions for a single article, allow groups using the same article to meet together and
  - Report to each other.
  - Make suggestions about what would make their report out clearer.
Assign people to report back on the different questions.

- Have the groups give their reports in order.
  - Take notes on their answers on the board.
- When all questions have been answered. Ask:
  - Which of the research questions for the final project could this information support?
  - Are you getting interested in any of these research questions?
  - Are there other questions you might like to do research on regarding childhood obesity?

ACTIVITY #2: Create an Outline for the Essay Prompt – 80 minutes

- Tell students they now will have time to put their outlines together for the in-class essay they will write during the next lesson.
- Present the in-class essay prompt:
  - Summarize the findings on obesity.
  - Describe how obesity harms children using two studies to illustrate what you mean.
  - Present your initial thoughts on what preschools should do to help prevent obesity.
- Tell the students they should cite three sources and use one quote.
- Ask students:
  - How do you think outlining your readings in your notebooks will help you put together an outline for your in-class essay?
  - What process will you use to put together your outlines for the in-class essay?
- Tell students you will be going around to take a look at their notebooks to see how they are organizing themselves and to offer helpful suggestions. (Make sure you do not have a one-size fits all approach to outlines. Ask students about their organization, how it is working for them, and what would make the process of putting notes together easier. Use their answers as the basis for your suggestions.)
- Give students time to work on their outlines on-line.

HOMEWORK

WRITING: Have students prepare for an in-class essay that cites three sources and uses one quote by creating an outline where they:

- Summarize the findings on obesity.
- Describe how obesity harms children using two studies to illustrate what they mean.
- Present their initial thoughts on what preschools should do to prevent obesity.
- Cite three sources.
- Use one quote.

TEACHER NOTE: The criteria for a good essay last used in Week 8, Lesson 2 will be used as a handout in the next lesson.
<table>
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<th>OBJECTIVES</th>
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</table>
| • Rehearse and write an in-class essay. | WRITING | 1. Write arguments from a prompt in a formatted manner of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.  
   a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.  
   b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases.  
   c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.  
   d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.  
   e. Provide a concluding statement or section that follows from and supports the argument presented. |
| • Conduct the peer review process. | READING | 5. Analyze the structure of texts, including how specific sentences or paragraphs relate to each other and the whole.  
   a. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.  
   b. Analyze the structural relationship between adjacent sections of text (e.g., how one paragraph develops or refines a key concept or how one idea is distinguished from another).  
   c. Analyze transitional language or signal words (words that indicate structural relationships, such as consequently, nevertheless, otherwise) and determine how they refine meaning, emphasize certain ideas, or reinforce an author’s purpose.  
   d. Analyze how the structure of a paragraph, section, or passage shapes meaning, emphasizes key ideas, or supports an author’s purpose.  
6. Determine an author’s purpose or point of view in a text and explain how it is conveyed and shapes the content and style of a text.  
   a. Determine an author’s point of view or purpose of a text.  
   b. Analyze how the author distinguishes his or her position from that of others or how an author acknowledges and |
| Reading homework. | READING | 1. Demonstrate and use a variety of comprehension strategies to obtain key ideas and details from text.  
|                   |        | a. Summarize what has been read.  
|                   |        | b. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.  
|                   |        | c. Identify the implied main idea and supporting details from an instructional level passage.  
|                   |        | d. Identify cause and effect implied in a paragraph.  
| Writing homework. | WRITING | 2. Write informative/explanatory texts from a prompt in a formatted manner to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. |
THEME: The Problem of Childhood Obesity

OBJECTIVES

• Write an in-class essay.
• Conduct a peer review.

MATERIALS

Activity #1:
• Student Work: Students bring a hard copy of their outlines.
• Handout: Make one copy for each student.
  Teachers should make copies of the criteria for a good essay used each week.

Activity #2:
• Handout (attached): Make two copies for each student.

Homework:
• Handout: Make one copy for each student.
  Whole Child: Developing Mind, Body, and Spirit through Outdoor Play (pages 1-8 only*)
  http://www.nwf.org/pdf/Be%20Out%20There/BeOutThere_WholeChild_V2.pdf
*TEACHER NOTE: This article will be used in its entirety during the next two lessons. Therefore, you may wish to make copies of the full article but guide students to only use pages 1-8 for today’s lesson.
• Handout (attached): Make one copy for each student.
  Health Benefits: Remember Playing Outside Until Mom Called You in for Dinner? Today’s kids probably won’t.

ACTIVITY #1: In Class Essay – 70 minutes

• Pass out the criteria for a good essay and review it, allowing students to add new criteria if applicable.
• Have students get out their outlines.
• Go round-robin and have each student read his or her thesis statement aloud.
• Put students into pairs to hear and respond to their partners’ plans for the 45-minute essay. Write the following questions on the board to structure their interaction.
  o How did you summarize the findings on obesity?
  o How does obesity harm children? Using two studies to illustrate what they mean.
  o What are your initial thoughts on what preschools should do to prevent obesity?
• Tell pairs they are to take turns, assigning one person to be the questioner and one as the speaker. The questioner should use the questions on the board but they should also add questions that will help them understand what the person is trying to say better. When the first questioner is finished, students in each pair should switch roles and repeat the process so both students can be heard.
• Allow students to make any changes to their outline that will improve their essays.
• Tell students that in an actual testing situation, they will need to put together their outline and then write an essay in 45 minutes. So today, they will have “extra” time for writing. They are to focus on
being as clear and persuasive as they can. They should write their ideas first and then leave some time to read over their work and make changes.

- Time students as they write a 45-minute in-class essay.

**ACTIVITY #2: Peer Review – 50 minutes**

- Tell students they will now provide constructive feedback on each other’s essays. Remind them to remain the audience that the writer is happy and comfortable with, meaning the audience wants to understand what the essay is trying to say and to offer good suggestions to make it more interesting.
- Put students into groups of three.
- Pass out two copies of the Audience Comment Page to each student. Explain that they are going to:
  - Read the essays written by the other two people in their group.
  - Fill out one Audience Comment Page for each of the essays they read.
  - They are NOT to comment on grammar or spelling yet. However, if they are not sure what something says, they can ask the writer for clarification.
  - They are to be friendly, encouraging, and genuinely helpful. Good comments on their partner’s work will help them when they have to rewrite their final essay.
- Have students pass their essays to the left.
- After students have evaluated the first essay, they should pass the essay they have worked on to their left and evaluate a new essay.
- After students have evaluated two essays, they should give their evaluations to the authors, and the authors should read the comments and ask questions to the evaluators as needed.
- Tell students that you will also evaluate their essays so they will each have three reviews to help them with their rewrites. Have students hand in their essays along with the two evaluations from their peers.

**HOMEWORK**

**READ:** Have students read pages 1-8 of *Whole Child: Developing Mind, Body, and Spirit through Outdoor Play* and underline those areas of the article that help answer the questions:
- What is the author’s thesis? What is the evidence?
- What are the significant facts, studies, and findings for how outdoor play helps the mind?
- What are the significant facts, studies, and findings for how outdoor play helps the body?
  - Also have students underline significant quotes from the text. Choose those that are not already highlighted in big letters or on title pages in the article.

**READ:** Have students read *Health Benefits: Remember Playing Outside Until Mom Called You in for Dinner?*, take notes on “What are the health benefits of outdoor play?”, and circle those resources that they are interested in looking at further.

**WRITE:** For each article, have students write the title and source as a heading and put the significant notes from the article under each heading using the questions as a guide.

**JOURNAL WRITING:** Have students write in their journal using the following prompts:
- How much time playing outdoors did you do as a kid?
- What kinds of games and learning did you do?
- In your experience, do children now grow up in a different world than you did? Why?

**TEACHER PREPARATION:** Evaluate the student essays using a copy of the Audience Comment Page. You will need to read both the essays and the student comments on those essays to see how perceptive the audiences for each essay were. Your comments should either reflect good suggestions or offer a different way to evaluate their essays that you think might be more helpful. Additionally, DO NOT correct
everything in the students' drafts. Only mark errors in the text that would help the student make significant progress toward a better essay. In your comments, indicate a due date for rewrites of these drafts.

**TEACHER NOTE:** Remind students to bring their *Final Project Description* sheet to the next class with them.
1. What is working for you as the audience for this piece of writing?

2. As the audience, what do you need clarified or want to hear more about to make you more interested in what the writer has to say?

3. Do you have any questions for the writer?
In the last two decades, childhood has moved indoors. The average American boy or girl spends as few as 30 minutes in unstructured outdoor play each day, and more than seven hours each day in front of an electronic screen. This shift inside profoundly impacts the wellness of our nation's kids. Childhood obesity rates have more than doubled the last 20 years; the United States has become the largest consumer of ADHD medications in the world; and pediatric prescriptions for antidepressants have risen precipitously.

Our kids are out of shape, tuned out and stressed out, because they're missing something essential to their health and development: connection to the natural world.

**Body**
- Outdoor play increases fitness levels and builds active, healthy bodies, an important strategy in helping the one in three American kids who are obese get fit.
- Spending time outside raises levels of Vitamin D, helping protect children from future bone problems, heart disease, diabetes and other health issues.
- Being out there improves distance vision and lowers the chance of nearsightedness.

**Mind**
- Exposure to natural settings may be widely effective in reducing ADHD symptoms.
- Schools with environmental education programs score higher on standardized tests in math, reading, writing and listening.
- Exposure to environment-based education significantly increases student performance on tests of their critical thinking skills.

**Spirit**
- Children's stress levels fall within minutes of seeing green spaces.
- Play protects children's emotional development whereas loss of free time and a hurried lifestyle can contribute to anxiety and depression.
- Nature makes you nicer, enhancing social interactions, value for community and close relationships.

**OUTDOOR TIME FOR KIDS: THE SCIENCE**

1. **Less Free Time:** During the last 30 years, the amount of children's free time has declined, in favor of more structured activities. For example, between 1981-1997, unstructured outdoor activities fell by 50%.

2. **Outside Time vs. Inside Time:** Research shows that children are spending half as much time outside as they did 20 years ago – and much more time doing "inside" activities.

3. **Too Much Screen Time:** The average American child spends 44 hours per week (more than 6 hours a day!) staring at some kind of electronic screen.
4 **Childhood Obesity**: The prevalence of obesity among children aged 6 to 11 more than doubled in the past 20 years, to 17 percent of children in this age group. The rate of clinically obese adolescents (aged 12-19) more than tripled, to 17.6 percent. The Centers for Disease Control concludes that a major missing ingredient is an hour per day of moderate physical activity.

   *Study: CDC’s National Center for Chronic Disease Prevention and Health Promotion. Division of Adolescent and School Health. Childhood Obesity. 20 Oct. 2008.*

5 **Increased Use of Ritalin in Children**: In 2000, one out of every eight American children was taking Ritalin for treatment of behavioral disorders such as Attention Deficit Hyperactivity Disorder (ADHD). Researchers hypothesized that an increase in television viewing, as well as greater academic pressure at an earlier age, was contributing to increased usage.


6 **Increased Use of Anti-Depressants in Children**: The use of anti-depressants in children grew between 1998 and 2002 from 1.6% to 2.4%, an adjusted annual increase of 9.2%. The growth in antidepressant use was greater among girls (a 68% increase) than among boys (a 34% increase.)


7 **Surge in Childhood Obesity**: In the past 30 years, childhood obesity has more than tripled. The prevalence of obesity among children aged 6 to 11 years increased from 6.5% in 1980 to 19.6% in 2008. During the same time period, the prevalence of obesity among adolescents aged 12 to 19 years increased from 5.0% to 18.1%.

   *Study: CDC’s National Center for Chronic Disease Prevention and Health Promotion. Division of Adolescent and School Health. Childhood Obesity. 20 Oct. 2008.*

8 **Lack of Vitamin D and Health Issues**: Many children in the U.S., especially minorities, need more Vitamin D. Spending time outside raises levels of Vitamin D, protecting children from bone problems and other health issues.


9 **Near-Sightedness**: In several studies reported in the journal Optometry and Vision Science, researchers found that kids who spent more time outside during the day tended to have better distance vision than those who favored indoor activities.

   *Study: What’s Hot in Myopia Research-The 12th International Myopia Conference, Australia, July 2008*

10 **Natural Settings and Cognitive Behavior**: Children who are exposed to natural or outdoor settings receive benefits to their cognitive health, such as reduction of ADHD symptoms.


11 **School Performance**: Offering environmental education programs in school improves standardized test scores.


12 **Critical Thinking**: Through environmental education offered in schools, students increase their critical thinking skills of performance on tests.

   *Study: Ernst, Julie (Athman) and Martha Monroe. “The effects of environment-based education on students’ critical thinking skills and disposition toward critical thinking.” 10.4 Environmental Education Research, Nov. 2004.*

14 **Importance of Play**: Play protects children’s emotional development; whereas a loss of free time in combination with a hurried lifestyle can be a source of stress, anxiety, and may even contribute to depression for many children.


15 **Nature Makes You Nicer**: Increased time in nature makes one nicer, enhances social interactions and more.

# Early Childhood Education Bridge Semester 2

## ASE Standards Covered for Week 11, Lesson 1

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
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<tbody>
<tr>
<td>- Analyze and present on the homework articles. &lt;br&gt; - Review the article's recommendations.</td>
<td>READING/SPEAKING AND LISTENING</td>
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</tr>
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<tr>
<td>SPEAKING AND LISTENING</td>
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<td>8. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.</td>
<td></td>
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| READING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
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      g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
      h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. |
| WRITING | 2. Write informative/explanatory texts from a prompt in a formatted manner to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. |
THEME: The Impact of Outdoor Play on Health

OBJECTIVES

- Analyze and present on the homework articles.
- Review the article's recommendations.

MATERIALS

Activity #1:
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  Whole Child: Developing Mind, Body, and Spirit through Outdoor Play (pages 1-8).
  http://www.nwf.org/pdf/Be%20Out%20There/BeOutThere_WholeChild_V2.pdf
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  Health Benefits: Remember Playing Outside Until Mom Called You in for Dinner? Today's Kids Probably Won't (attached to Week 10, Lesson 2)
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  Final Project Description (attached to Week 10, Lesson 2)

Activity #2:
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  Whole Child: Developing Mind, Body, and Spirit through Outdoor Play (pages 9-10; the recommendations).
  http://www.nwf.org/pdf/Be%20Out%20There/BeOutThere_WholeChild_V2.pdf
- Classroom Resource: Flip chart paper and markers.

Homework:

- Handout: Make one copy for each student.
  The Children & Nature Network: Ensuring That All Children Can Spend Quality Time Outdoors
- Handout: Make one copy for each student.
  Curriculum Activities to Develop Children’s Environmental Awareness
  http://journal.naeyc.org/btj/200603/lewinactivitiesBTJ.pdf
- Handout (attached): Make one copy for each student.
  Nurturing Environmental Awareness in Children
ACTIVITY #1: Analyze and Present on the Homework Article – 80 minutes

• Tell students that the Whole Child publication that they read for homework is chock full of valuable information that will be needed for the final project. Tell students that in today’s analysis of the article, they will eventually come to the question: How is outdoor play different than indoor play? In other words, what are the added benefits of outdoor play that indoor play can’t offer?

• Have students count off by three and put them into three groups. Assign each group one of the following questions:
  o What are the significant facts, studies, and findings for how outdoor play helps the mind?
  o What are the significant facts, studies and findings for how outdoor play helps the body?
  o What are the significant facts, studies and findings for how outdoor play helps the spirit?

• Tell groups they are to:
  o Look over their notes for answers to the question assigned to their group.
  o Go round-robin to make a master list of new facts.
  o Go round-robin to describe the different studies and their findings.
  o Decide how to present the list and descriptions using flip chart paper and markers.
  o Give each person in the group a role in putting the brief presentation together and/or being the presenters.

• Before the presentations start, ask:
  o What is the author’s thesis?
  o What is the evidence? Have students read specific parts of the text to show exactly where they are getting their evidence.

• Have groups give their presentations. After each presentation ask:
  o Any questions for the presenters?
  o Do you have any thing you would like to add or comments you would like to make?

• After all the presentations, ask: What quotes did you choose that summarized key points in this article for you?

• Now take out the other article on Health Benefits: Remember Playing Outside… and ask:
  o What are the health benefits of outdoor play the first article on the Whole Child doesn’t cover?
  o Which of the resources from the Health Benefits article did you choose as ones you might like to look into for further research?

• Have students to get out their Final Project handout and look at the different research questions presented. Ask:
  o Which questions among the final project research topics do the readings we looked at today help answer?
  o Which question are you getting interested in? Why?
  o Are there other questions that have come up in the reading that you may have more interest in than those listed on the final project sheet?

• Lastly, ask: How is outdoor play different than indoor play? In other words, what are the added benefits of outdoor play that indoor play can’t offer?

ACTIVITY #2: Review the Whole Child’s Recommendations – 40 minutes

• Tell students they are now going to read the recommendations from the Whole Child: Developing Mind, Body, and Spirit through Outdoor Play pages 9-10 out loud. While the recommendations are being read, students should check off those that they think might be particularly effective. By doing this they will be helping themselves start to answer questions for the final project.

• Go round-robin and have each student read a paragraph or recommendation. They are to read each loudly, dramatically, and with feeling. They are to pretend they are reading this to children so that the way they are reading will help someone easily understand what is being said.
STOP at the end of each section and ask:

- Which recommendations did you mark as particularly effective?
- Why?

- When this process is complete, have students:
  - Look at the references.
  - Go through and read the titles.
  - Circle those they might be interested in reading as part of their final project research.

---

**HOMEWORK**

**READ:** Have students read the following three articles and for each article write notes listed below:

- *Ensure That All Children Can Spend Quality Time Outdoors*
- *Activities to Develop Children’s Environmental Awareness*
- *Nurturing Environmental Awareness in Children*

**WRITE:** After reading each article, students should:

- Write down the title and source as a heading.
- List the different kinds of activities that will enhance environmental awareness for each article.
- Write down any significant quotes.

**JOURNAL WRITING:** Have students answer the following prompt in the journals:

- Why is it so important to have children learn about the environment?
- What does our society stand to lose if children don’t think the natural world is important?
- How strongly do you feel about these issues? Why?

**CHOOSE FINAL PROJECT TOPIC:** Students should take a look at the final project research questions and think about which one they would like to work on or if they want to research another topic. Students should be prepared to announce their choice of topic during the next lesson and to explain why they have made this choice.

**TEACHER NOTE:** Tell students that they will need their Final Project Description sheet (attached to Week 9, Lesson 1) during the next lesson and remind them to bring it to class.
Children of today will inherit a planet that isn't very healthy.

We can no longer view our planet's resources as inexhaustible. We must be educated and aware of our impact on its atmosphere, fresh water, soils, forests, and oceans.

There is nothing we can do to change the past; we can only try to create a better and brighter future. It begins with a shift in perspective: it is high time to leave nets and bug jars behind on our nature walks and bring cameras and magnifying glasses along (and maybe a large plastic bag to pick up trash). We can respect that each thing has a place. Each natural thing has a purpose; each bug has a job. Each dried leaf will eventually degrade into nutrient-rich soil to feed the tree from which it fell. Nature wastes nothing. In my class, we say, "It belongs to the earth, not us."

Beginning this process in the early years, when attitudes toward the world around them are forming, is essential. Doing this will help to give young children a new perspective — a simple idea — from which they can begin to grow.

**What the Teacher can do**

There are many lessons around us that can help connect children directly to the wonders of our planet. The teacher's role in creating environmental awareness is to model awe, respect, and wonder. Teachers must show delight with each new discovery and teach respectful observation of the life around us.

It is not required that the teacher have a broad base of knowledge in environmental education, or even a great curriculum. It requires only a shift in perspective coupled with a big dose of enthusiasm and sincerity.

There are many things that we can do to increase opportunities for observation in our classrooms and on our playgrounds. The more things we find to notice, the more children will begin to understand that they are part of a global community, and not the center of one.

One way of helping children learn to be aware of their environment is to ask questions that require opinions and ideas, not facts, such as: Where do you think that insect is going? Have you ever seen one like this before? Isn't the sky beautiful today? Would you like to paint a picture of the sky?

Talking with children is much more effective than talking to them. By involving them in discussions, they focus on what is being said.

It is important that we do not take our surroundings for granted. Taking time to watch the plants, animals, and weather around us is a great way of modeling respect for them. Celebrate the first buds of spring and the last leaf falling in winter. Keep a journal or calendar to record when *nature events* happen. Record the children's observations as well as your own. This encourages the children to be more tuned in to their environment.
Young children are only aware of their own environments and lives. It’s the only reference point they have. Showing them that the world is vast and different everywhere is another way to help them understand that they are only one part of a global community.

**Using Globes and Maps**
Using globes and maps of the world can easily become part of almost any group time or lesson. When you read a story that comes from or is about a place, find that place on a globe with the group. Talk about and imagine what places may be like — use *National Geographic* pictures to help children visualize and begin to understand that the earth has endless variations of landscapes, skin colors, languages, foods, wildlife, and cultures. They are amazed and intrigued to learn that not all children go to school or eat at McDonald’s.

Learning the basics about the planet is also easier using a globe to illustrate. The imaginary red line is the equator, which is the warmest place on the earth. Around the equatorial belt is where all rain forest and coral reefs are located. The weather never gets cold there. As one moves toward the poles, the weather gets colder, being coldest at the poles. Three-fourths of our planet is covered by water. Our atmosphere is what makes our planet capable of sustaining life. Using saran wrap around a globe will help illustrate how thin our layer of protection is, and that “outer space” is actually very close.

**More Ideas for Observing Nature**
Using insects in the classroom is a wonderful way to practice learning to observe respectfully. There are some nature/science stores that sell butterfly kits and ant farms. There is also a company called Insect Lore which you may call at (800) LIVE-BUG. Insect Lore offers a large variety of insects, books, and curricula to go with them.

While hatching and watching the insects’ metamorphosis and growth, the children can make books, draw pictures, and keep calendars. Discuss what we see as the changes take place. After you have observed the insects, they can be released, which further illustrates their right to be in their natural environments. Bye bye butterfly!

Hanging feeders or bird houses in yards or outside windows is a wonderful way to attract birds to your area. Providing nesting materials such as shredded newspaper, hay, or straw will draw birds to your yard. Watching them provides endless opportunities for learning about migration, beak types, and species.

Trees and forests are the lungs of our planet. We could not survive without them. Clear cutting of forests is a worldwide problem. Not only does it destroy habitats and oxygen-making trees, but it also loosens soils contributing to mud slides and massive flooding. In and out doors, one can plant almost anything: flowers, vegetables, bulbs, and trees. A curriculum called *Project Learning Tree* can be obtained through your state’s agricultural and forestry department. It is easy to use and very educational for teachers as well. The curriculum, which has all one needs to teach about plants and trees, is cost free after attending a workshop.

Planting a tree each year is important. We have a maple tree that makes wonderful helicopter seeds. We have sent these seeds home with the children on earth day so that they and their parents can plant at home.

On a planet mostly covered by water, it’s hard to believe that clean water is becoming scarce. Water conservation is very important. Learning about the earth’s water cycle can be fun and easy.
Condensation and evaporation make a huge circle. There is neither one more nor one less drop of water in our planet than there was when dinosaurs roamed. It just makes that circle over and over again. As condensation becomes too heavy, it falls in the form of snow, ice, rain, or hail. As it falls, some of it becomes polluted by the dirty air through which it falls; some gets polluted by the dumping of waste in rivers, which dump into oceans. Everything is connected.

Project WET (Water Education for Teachers) is a curriculum available through:
The Water Course
201 Culbertson Hall
Montana State University
Bozeman, Montana 59717-0570

Teaching children about "zoo animals" as a unit is one of my pet peeves. There really is no such thing as a "zoo animal." Zoos are places that have captive wild animals on exhibit for the public to view. They also educate visitors and sometimes breed endangered species. Teaching children that the animals come from all over the world is a giant step towards making a zoo visit educational.

Endangered species are often discussed before a zoo visit. Today, species are disappearing more quickly than ever in history. The main reason for this is loss or pollution of habitat. Protecting habitats is the only way to help endangered species. What is the point of saving them if there is nowhere for them to live?

Project Wild and Aquatic Project Wild are other invaluable resources for educating children and teachers about wildlife. Project Wild may be located through your local wildlife and fisheries department or local fish and game departments.

There are, of course, many ways to reach children and to help them care about the environment. Each teacher and classroom should follow its interests and develop its own ways of knowing and loving this planet of ours. Each young child, exposed to an attitude of wonder and respect toward our planet, will not take for granted the world around them. Protecting our environment will be part of their life work, a legacy they will leave to their children.
## Early Childhood Education Bridge Semester 2
### ASE Standards Covered for Week 11, Lesson 2

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>STANDARD CATEGORY</th>
<th>STANDARD</th>
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<tbody>
<tr>
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<td>READING</td>
<td>1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.</td>
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<tr>
<td>• Create a research plan.</td>
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<tr>
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<td>2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.</td>
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<td>b. Summarize details and ideas in text.</td>
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<td>c. Make sentence level inferences about details that support main ideas.</td>
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<td>d. Infer implied main ideas in paragraphs or whole texts.</td>
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<td>e. Determine which detail(s) support(s) a main idea.</td>
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<td>f. Identify a theme, or identify which element(s) in a text support a theme.</td>
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THEME: The Impact of Outdoor Play on Health

OBJECTIVES

- Analyze the homework readings.
- Create a research plan.

MATERIALS

Activity #1:
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  *The Children & Nature Network Ensuring That All Children Can Spend Quality Time Outdoors*
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  *Curriculum Activities to Develop Children’s Environmental Awareness*
  [http://journal.naeyc.org/btj/200603/lewinactivitiesBTJ.pdf](http://journal.naeyc.org/btj/200603/lewinactivitiesBTJ.pdf)
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  *Nurturing Environmental Awareness in Children* (attached to Week 11, Lesson 1)

Activity #2:
- Handout: Students should have brought their copy to class. However, teachers may wish to have extra copies on hand.
  *Final Project Description* (attached to Week 9, Lesson 1)
- Handout (attached): Make one copy for each student.
  *Final Project Planning Sheet*

Homework:
- Handout (attached): Make one copy for each student of the summary highlights.
  *Start Early to Build a Healthy Future: The Research Linking Early Learning and Health*
  [http://www.theounce.org/resources/start-early-to-build-a-healthy-future](http://www.theounce.org/resources/start-early-to-build-a-healthy-future)
- Handout: Make one copy for each student of the full report.
  *Start Early to Build a Healthy Future: The research linking early learning and health*

ACTIVITY #1: Analyze the Homework Readings – 40 minutes

- Tell students that they will be listing the different ways environmental awareness can be integrated into the classroom. This listing and thinking about which kinds of activities would be most effective is directly related to questions asked for the final project.
- Tell students to get out their Final Project handout and look at the different research questions presented. Ask:
What questions for these research topics requires that you make recommendations about best practices in preschools?

• Put students into pairs and have each pair create a master list of classroom or outdoor practices that can enhance environmental awareness based on the readings.

• Ask for the title of the first article and write it on the board: Ensure that All Children Can Spend Quality Time Outdoors.

• Go round-robin to have pairs report and describe a different classroom or outdoor practice until there are no more.

• Repeat this process for the other two homework readings.

• After all the practices are listed on the board, ask:
  o Which of these practices would you think would be the most effective and why?
  o What kinds of practices might work well together?

• Ask, again:
  o What is the difference between outdoor play and play in general?
  o What would you expect is the power of connecting indoor and outdoor activities around environmental awareness?

• Let students know that these connections they are making might be useful in their research essays.

ACTIVITY #2: Create a Research Plan – 80 minute

• Tell students that they are now ready to make a research plan. They have already done some reading and extensive note taking on all the areas needed for each of the research topics. It is now time to get down to work doing additional research, putting the final project essay together, and preparing for a presentation during the last day of class. But before students make their plan, they must first announce the research topic that they would like to work on.

• Tell students to get out their Final Project Description sheet (attached to Week 9, Lesson 1).

• Ask:
  o Which of you is interested in working on final project topic #1: The impact of poverty on childhood obesity and long-term health?
    ▪ Ask each: Why have you chosen this topic?
  o Repeat for final project topic #2 (The impact of obesity on learning,) and topic #3 (The health benefits of playing outside).

• Some students may have come up with their own research topic. Ask:
  o Which of you is perhaps interested in another research topic?
  o What would the topic be?
  o Why is this question of interest?

• Make plans to meet with those students interested in another topic so you can come up with a set of questions they can use as guides through the project—similar to the list for the other three research topics. This list of questions must grow from the readings that have already been done in class and be broad enough to require additional research.

• Next, tell students to look at section three on their Final Project Description on how to “Make a Good Research Plan”.

• Go round-robin asking students to read each of the instructions one at a time under “Build Your Outline” and “Write Your Essay.” They are to read each of the statements loudly and with feeling.

• Tell students that they are to use this process of putting together a final project as the basis for filling out their plan.

• Pass out and project the Final Project Planning Sheet.

• Explain that the Final Project Planning Sheet reflects the amount of in-class time they will have to work on their Final Project and the number of homework opportunities they also have. They will be responsible for predicting what they think they will get done, keeping track of what actually gets
done, and making changes so that they can get through the entire process of writing their final project. This planning process is designed to discourage students from leaving project until the last minute. This process also lays out the best practices for doing big projects in college.

• Tell students to look at the “Build Your Outline” section and put a check next to what they think they can get done in 80 minutes in class.
  o Ask a number of students, which of these first items did you check off?
  o Point out that there may be some differences in students’ answers.

• Next, tell students to put a star next to those items they think they could get done for homework.
  o Ask a number of students, which of these items did you put a star next to?
  o Point out that there may be some differences in students’ answers.

• Repeat this line of questioning, alternating with checks for in class work and stars for homework until all students have a good idea about how they will be putting their Final Project Planning Sheets together.

• Make appropriate points for different items:
  o How many think using their journal is helpful for getting their own ideas out first?
  o Clearly, having a partner listen to your paragraphs or draft essay needs to happen in class, and, certainly, to get feedback on paragraphs, getting partner help would have to happen many times. This activity will be built into every class.

• Have students put their Final Project Planning Sheets together. Tell them they can always have another one if they want to redo it. You can also e-mail them a copy of the sheet so they can keep it updated for each research class.

• Put students in pairs to review each other’s plans and give comments.

• Meet together as a class so students can ask final questions.

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**HOMEWORK**

**READ:** Have students read the summary highlights and the full report of *Start Early to Build a Healthy Future* and underline those parts that list the recommendations that programs should do to improve children’s health.

**JOURNAL WRITING:** In their own words, have students describe the different programs the Ounce of Prevention has implemented to make children healthier.
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<tr>
<th>AVAILABLE TIME</th>
<th>GOALS PER TIME SLOT</th>
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<td>Class #1: 80 minutes</td>
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<td>Homework</td>
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<td>Class #2: 80 minutes</td>
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SUMMARY HIGHLIGHTS

Foundations of Health: Essential for a Bright and Healthy Future

Leading researchers from the Center on the Developing Child at Harvard University and the Women and Children’s Health Policy Center at Johns Hopkins University have collaboratively identified four foundations of health that buffer young children against adverse childhood experiences, allowing their bodies and brains to develop without the lasting effects of toxic stress. These four foundations that all children need to thrive are:

- stable and responsive relationships
- safe and secure environments
- nutrition
- health-promoting behaviors

Stable and responsive relationships: According to a report by the Robert Wood Johnson Foundation, “while much emphasis has been placed on the foundational importance of the early years for later success in school and the workplace ... an environment of supportive relationships is also the key to lifelong physical and mental health.” Secure attachments with caregivers affect young children’s ability to form relationships and regulate emotions. Stable, responsive relationships support young children’s social-emotional health, helping them develop skills such as trust, compassion, cooperation and self-soothing. And according to a literature review by researchers from Johns Hopkins, stable and responsive relationships help build up children’s neuroendocrine, stress regulatory, inflammatory, and immune systems.

Safe and secure environments: As young children grow, their exposure to different environments expands—from the prenatal environment to the home, school, community and beyond. The safety and security of their environments at every level have strong implications for their health throughout their lives. The need for safe and secure environments begins prenatally—for instance, children whose mothers smoke tobacco or live in very stressful environments during pregnancy are more likely to be born with low birth weight, a significant risk for chronic diseases such as coronary heart disease, hypertension and diabetes.

Nutrition: A healthy diet fuels learning, growth and development and staves off obesity and disease. Nutritional interventions for young children have been shown to promote growth and development across every domain. Undernourishment in early life, on the other hand, has been associated with higher risks for hypertension, insulin resistance and heart
disease, and may play a key role in the development of osteoporosis, autoimmune diseases, diabetes and cancer. And childhood obesity raises children’s risks of developing heart disease, high blood pressure, cancer and asthma.

**Health-promoting behaviors**: Early learning about behaviors that promote health helps young children establish routines that lead to healthier choices throughout life. At this stage, young children are developing the ability to create causal theories about how things happen, as evidenced by their perpetual question, “Why?” Studies show that 2- and 3-year-olds can develop causal explanations of health, including an understanding that illness is caused by invisible germs and that, “He needs more to eat because he is growing long arms.” Caregivers can help young children develop healthy behaviors by engaging their curiosity and budding independence, providing them with healthy choices and explaining why healthy behaviors are important.

**Recommendations for Early Education and Health Care Policy, Practice and Research**

In the context of a changing health care landscape that places increasing emphasis on disease prevention and health promotion—on keeping people healthy and thereby reducing the need for costly treatments later in life—early childhood programs have an opportunity to play a larger part. We call for increased investment in high-quality early education and family-support programs, as well as for greater coordination and integration across systems that touch the lives of vulnerable young children and their families. Here we offer five policy, practice, funding and research recommendations to bring us closer to achieving our vision of a healthy start for all.

- Direct health resources to the youngest and most vulnerable children from the prenatal period to age five. Ensure that young children and their families, particularly those facing poverty and other stressors, have access to comprehensive, high-quality early childhood education, home visiting, and health care services.
- Implement effective and evidence-based practices that meet young children’s comprehensive needs in both early education and health care settings.
- Invest in systems to support high-quality and effective services in early childhood and health care settings.
- Build cross-sector collaboration to support young children in achieving good health and address children’s interrelated health and developmental needs.
- Embark on research and evaluation that further explores and defines the link between early learning and health.

These recommendations put forth a vision for a comprehensive approach to disease prevention and health promotion that takes into consideration the health and developmental needs of the “whole child.” A whole-child perspective acknowledges that a child’s supportive and enriching experiences in homes and early education classrooms are as integral to a child’s lifelong health as care received in pediatricians’ offices in reducing young children’s risks of toxic stress, disease, injury, preventable disability and premature death and giving every child a fair chance at health. By holistically supporting young children in the critical first years, high-quality early childhood programs with an intentional focus on health have the potential to change the course of children's lives. They have a powerful role to play in narrowing the health gap and elevating children’s chances at a healthy future from the very start.
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<th>OBJECTIVES</th>
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| • Analyze homework article. | READING | 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.  
   a. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.  

2. Determine central ideas or themes of texts and analyze their development; summarize the key supporting details and ideas.  
   a. Comprehend explicit details and main ideas in text.  
   b. Summarize details and ideas in text.  
   c. Make sentence level inferences about details that support main ideas.  
   d. Infer implied main ideas in paragraphs or whole texts.  
   e. Determine which detail(s) support(s) a main idea.  
   f. Identify a theme, or identify which element(s) in a text support a theme.  
   g. Make evidence based generalizations or hypotheses based on details in text, including clarifications, extensions, or applications of main ideas to new situations.  
   h. Draw conclusions or make generalizations that require synthesis of multiple main ideas in text. |
| • Conduct research.  
• Reading homework. | WRITING | 7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem.  
   g. Narrow or broaden the inquiry when appropriate.  
   h. Synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.  
   i. Gather relevant information from multiple authoritative print and digital sources using advanced searches effectively.  
   j. Assess the strengths and limitations of each source in terms of task, purpose, and audience.  
   k. Integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.  
   l. Draw evidence from literary or informational texts to support analysis, reflection, and research.  

8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.  

9. Draw evidence from literary or informational texts to support analysis, reflection, and research. |
THEME: The Impact of Outdoor Play on Health

Class to be held in the Technology Lab

OBJECTIVES

- Analyze homework article.
- Conduct research.

MATERIALS

Activity #1:

- Handout: Students should have brought their copy of the summary highlights to class. However, teachers may wish to have extra copies on hand. 
  Start Early to Build a Healthy Future: The research linking early learning and health. 
  https://www.theounce.org/resources/start-early-build-healthy-future/

- Handout: Students should have brought their copy of the full report to class. However, teachers may wish to have extra copies on hand. 
  Start Early to Build a Healthy Future: The research linking early learning and health 

ACTIVITY #1: Analyze Homework Article – 40 minutes

- Tell students this is the final class reading for the Bridge! All the rest of the readings will be those they do for their research.
- Start by telling students to take out their homework reading. Assign each student to read one of the four “foundations of health” (on page 7) and be ready to report out in their own words. Because there are four foundations, there will be multiple students with the same reading assignment. The four foundations are:
  - Stable and Responsive Relationships
  - Safe and Secure Environments
  - Nutrition
  - Health Promoting Behaviors
- For each of the foundations ask:
  - What is your description of the foundation?
  - Does anyone have anything to add to the description?
- When all foundations have been fully described, ask:
  - Which foundation would play belong in? How about outdoor play? Environmental awareness?
  - What do you think about this definition of health for small children?
  - Is there anything about this definition that surprises you?
- Put students into pairs. Give each pair one of the following assignments such that half the pairs have one assignment and half have the other.
  - Assignment #1: Make a master list of the recommendations that programs should do to improve children’s health. Make sure this list is in your own words.
Assignment #2: Make a master list of and be able to describe the different programs the Ounce of Prevention has implemented to make children healthier. Make sure these descriptions are in your own words.

- Next, create small groups with four students each with one pair who completed Assignment #1 and one pair who completed Assignment #2.

- Tell each small group to:
  - Share the master list of recommendations for Assignment #1.
  - Share the program descriptions for Assignment #2.
  - Answer this question: How are Ounce of Prevention programs meeting the article’s recommendations?

- Bring the class together and:
  - Go round-robin from group to group to have each give you a program description until all have been described.
  - Take notes on each of these program descriptions.
  - Repeat for the list of recommendations.

- Ask the full class: How are Ounce of Prevention programs meeting the article’s recommendations?
  - Draw lines from the recommendations to the program descriptions to show how there are multiple ways programs can respond to the same recommendations.

- Finally, ask:
  - How could you use this information in your research essay?
  - What questions could this material help you answer?

ACTIVITY #2: Conduct Research – 80 minutes

- Tell students that the rest of the Bridge Semester 2 is going to be devoted to completion of their final project. Explain that each research period will include the following processes:
  - Students will each state what they hope to accomplish that day and the help they need to get started.
  - They will work on what they want to accomplish.
  - The class will come back together as a whole toward the end of the period so students can state:
    - What they accomplished during the period.
    - What adjustments, if any, they need to make to their Final Project Planning Sheet.
      - Are they on target?
      - Do they need to make new adjustments?
      - What they have assigned themselves as homework.

- Tell students that while they are working on their research project, you will be working with them individually or in small groups to answer their questions, give them feedback on what they have already accomplished, and assist with on-line research issues.

- Have students get out their Final Project Planning Sheet.

- Go round-robin to have students state what they hope to accomplish this period.

- Allow students to work until 20 minutes before the end of the period.

- Go round-robin to have students state:
  - What they accomplished this period.
  - What adjustments they need to make to their Final Project Planning Sheet.
  - What they have assigned themselves for homework.

HOMEWORK

READ: Students should complete self-assigned research and writing.
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   g. Narrow or broaden the inquiry when appropriate.  
   h. Synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.  
   i. Gather relevant information from multiple authoritative print and digital sources using advanced searches effectively.  
   j. Assess the strengths and limitations of each source in terms of task, purpose, and audience.  
   k. Integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.  
   l. Draw evidence from literary or informational texts to support analysis, reflection, and research. |
| • Conduct research. | | 8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. |
| • Report on research and set homework goals. | | 9. Draw evidence from literary or informational texts to support analysis, reflection, and research. |
| • Reading homework. | | |
THEME: Final Project Research and Writing

Class to be held in the Technology Lab

OBJECTIVES

- Set the day’s research and writing goals.
- Conduct research.
- Report on research and set homework goals.

MATERIALS

- None.

ACTIVITY #1: Set the Day’s Research Goals - 20 minutes

- Go round-robin to have students state what they hope to accomplish this period and indicate any help they need to get started.
- Work with students individually or in small groups to address questions and barriers to their work.

ACTIVITY #2: Conduct Research - 80 minutes

- Allow students to work on their Final Project Planning Sheet items until 20 minutes before the end of the period.

ACTIVITY #3: Report on Research and Set Homework Goals - 20 minutes

- Go round-robin to have students state:
  - What they accomplished this period.
  - What adjustments they need to make to their Final Project Planning Sheet.
  - What they have assigned themselves for homework.

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THEME: Final Project Research and Writing

Class to be held in the Technology Lab

OBJECTIVES

- Set the day’s research and writing goals.
- Conduct research.
- Report on research and set homework goals.

MATERIALS

- Classroom Resource: Flip chart paper and markers.
- Classroom Resource: Other presentation materials students request.

ACTIVITY #1: Set the Day’s Research Goals - 20 minutes

- Before students start their work each day of this week, ask them:
  - What homework were they able to complete before today?
    - Go round-robin to have students state the work they completed at home.
  - What would they like to complete in class today?
    - Go round-robin to have students make their declarations.
- Pair students up who have written material they need feedback on.
- Work with students individually or in small groups to address questions and barriers to their work.

ACTIVITY #2: Conduct Research - 80 minutes

- Allow students to work on their Final Project Planning Sheet items until 20 minutes before the end of the period.

ACTIVITY #3: Report on Research and Set Homework Goals - 20 minutes

- Go round-robin to have students state:
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THEME: Final Project Research and Writing

Class to be held in the Technology Lab

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### Early Childhood Education Bridge Semester 2
### ASE Standards Covered for Week 14, Lessons 1 and 2

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THEME: Final Project Research and Writing

Class to be held in the Technology Lab

OBJECTIVES

- Set the day’s research and writing goals.
- Conduct research.
- Report on research and set homework goals.

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HOMEWORK

READ: Students should complete self-assigned research and writing.
TEACHER NOTE: For the final presentations in weeks 15-16, students should use criteria for a good presentation that they have already created throughout the bridge. Be prepared to bring criteria for a good presentation that has already been created, even if it was created in Bridge Semester 1.
THEME: Final Project Research and Writing

Class to be held in the Technology Lab

OBJECTIVES

- Set the day’s research and writing goals.
- Conduct research.
- Report on research and set homework goals.

MATERIALS

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  9. Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.  
  10. Present formal and informal speeches including discussion, information requests, interpretation, and persuasion.  |
| • Evaluate presentations according to the criteria for a good presentation. | SPEAKING AND LISTENING | 2. Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.  
  a. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.  
  b. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.  
  3. Delineate a speaker’s argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.  
  4. Demonstrate active listening skills.  
  a. Interpret verbal and non-verbal cues and behaviors to enhance communication.  
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- e. Fact/opinion
- f. Assumptions
- g. Propaganda
- h. Relevancy
- i. Validity
- j. Relationship of ideas
THEME: Final Project Presentation

OBJECTIVES

- Formally present final projects.
- Evaluate presentations according to the criteria for a good presentation.

MATERIALS

Activity #1 & 2:
- Classroom Resource: Equipment needed for presentations.

ACTIVITIES #1 and #2: Presentations – 120 minutes

- Tell students that before they give their presentations they are going to establish what a good presentation will look like.
- Ask:
  - What criteria did we use in Bridge Semester 1 for a good presentation?
  - What requirements do we have for the Final Project from the Final Project Description sheet?
  - Write these criteria on the board.
- After each presentation, conduct a discussion by asking:
  - What questions do you have for the presenter?
  - What really worked in the presentation?
  - What needs further clarification?
THEME: Final Project Presentation

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THEME: Final Project Presentation

OBJECTIVES

- Formally present final projects.
- Evaluate presentations according to the criteria for a good presentation.

MATERIALS

Activity #1 & 2:
- Classroom Resource: Equipment needed for presentations.

ACTIVITIES #1 and #2: Presentations – 120 minutes

- Tell students that before they give their presentations they are going to establish what a good presentation will look like.
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  - Write these criteria on the board.
- After each presentation, conduct a discussion by asking:
  - What questions do you have for the presenter?
  - What really worked in the presentation?
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THEME: Celebration

OBJECTIVES

• Celebrate student achievements!

MATERIALS

Activity #1:
• Classroom Resource: Party supplies.
• Handout: Certificates for students.

ACTIVITY #1: Celebration Prompts

• Go around the room to ask students what they have learned. Cheer for students after they speak.
• Give certificates to students for what you think they have accomplished. Make sure each student gets one.