



### Course Syllabus

<b>ECED 5510.01</b>	<b>Cognitive Development: Implications for Early Learning</b>	<b>Fall II 2005</b>
<b>325 Webster Hall 5:00-9:00 T</b>	<b>Dr. Cheryl Breig-Allen 236 Webster Hall 961.2660 x 7652 allenCB@webster.edu</b>	<b>3 credit hours</b>

*NOTE: The syllabus is subject to change in response to student needs and topics of interest that emerge.*

#### **COURSE DESCRIPTION:**

This course focuses on the cognitive development of children birth to eight years of age. An introduction and comparison of various cognitive developmental theories are explored. An in-depth examination of Piaget, Vygotsky and recent discoveries in brain research is conducted through readings and observations. Emphasis is placed on a constructivist theory, which includes the cognitive, representational, physical domains. An examination of the interrelationships among these domains with the framework of a developmentally appropriate curriculum for infants, toddlers and young children demonstrating typical and atypical development is an important factor of this course. The application of technology and its use with young children is incorporated throughout the course. Information from Project Construct is used as a model in examining curricular implications and implementation.

## LEARNING OUTCOMES

Course Outcomes	Webster University SOE Goals and Dispositions	NAEYC Standards for Early Childhood Professional Preparation Missouri Standards for Teacher Education Programs (MoSTEP) NCATE Candidate Proficiencies
<p><b>Students will:</b></p> <p>1. Develop the skills of listening to children, observing and documenting their ideas action, words and work.</p>	<p><b>Goals</b></p> <p>2.4 The <b>informed instructor</b> employs a variety of formal and informal assessments to monitor learning and modify instruction.</p> <p><b>Dispositions</b></p> <p>2.4 listens respectfully to other points of view</p>	<p><b>NAEYC</b></p> <p><b>Standard 3. Observing, documenting and assessing to support young children and families</b></p> <p>3b Knowing about and using observation, documentation, and other appropriate assessment tools and approaches</p> <p><b>MoSTEP</b></p> <p>2.1 Knows and identifies child development</p> <p>8.3 Evaluates the effect of class activities on both individual and class as a whole, collecting information through observation of classroom activities, questioning, and analysis of student work</p> <p><b>NCATE</b></p> <p>Ability to Respond to Diversity Pedagogical Knowledge Professional Knowledge and Skills Impact on PreK-3 Learners</p>
<p>2. Draw upon knowledge of developmental theory, multicultural perspectives, and ongoing study of particular children when preparing the learning environment and learning experiences.</p>	<p><b>Goals</b></p> <p>1.3 The <b>knowledgeable learner</b> identifies developmental factors in student learning; and</p> <p>1.4 understands theoretical principles of effective instruction to plan learning experiences.</p> <p>4.2 The <b>responsive educator</b> acknowledges social and cultural contexts to create effective teaching and learning environments.</p> <p><b>Dispositions</b></p> <p>2.1 understands, respects and responds appropriately to diversity in a variety of settings</p>	<p><b>NAEYC</b></p> <p><b>Standard 1. Promoting child development and learning</b></p> <p>1a. Knowing and understanding young children's characteristics and needs</p> <p>1b. Knowing and understanding multiple influences on development and learning</p> <p>1c. Using developmental knowledge to create healthy, respectful, and challenging learning environments</p> <p><b>MoSTEP</b></p> <p>2.1 Knows and identifies child development</p> <p>2.4 Knows theories of learning</p> <p>3.4 Connects instruction to student's prior experiences, family, culture and community</p>

		<p><b>NCATE</b> Ability to Respond to Diversity Pedagogical Knowledge Professional Knowledge and Skills</p>
<p>3. Learn how to support children’s learning in regard to the content areas of language arts, math, science, social studies, art, music, drama and movement through integrated learning experiences, project studies, and daily living experiences.</p>	<p><b>Goals</b> 1.1 The <b>knowledgeable learner</b> knows content that supports conceptual understanding; and 1.2 applies tools of inquiry to construct meaningful learning experiences. 2.1 The <b>informed instructor</b> designs curriculum based on students’ prior knowledge, learning styles, strengths and needs; and 2.2 uses a variety of communication modes, media, and technology to support student learning. <b>Dispositions</b> 1.2 embraces an openness to change (adaptability, flexibility)</p>	<p><b>NAEYC</b> <b>Standard 4. Teaching and Learning</b> 4b. Using developmentally effective approaches 4c. Understanding content knowledge in early education 4d. Building meaningful curriculum <b>MoSTEP</b> 1.5 Creates interdisciplinary learning 4.1 Selects, creates and plans learning experiences that are appropriate for curriculum goals, relevant to learners, and based upon principles of effective instruction. 7.3 Supports and expands learner expression in speaking, writing, listening and other media <b>NCATE</b> Content Knowledge Pedagogical Knowledge Professional Knowledge and Skills Impact on PreK-3 Learners</p>
<p>4. Learn how to support autonomy and reciprocity among children, including those with diverse learning styles and abilities.</p>	<p>4.3 The <b>responsive educator</b> adapts instruction to the learner’s knowledge, ability, and background experience; and 4.4 identifies resources for specialized services when needed. <b>Dispositions</b> 2.2 exhibits empathy 3.5 affects change with courage and confidence</p>	<p><b>NAEYC</b> <b>Standard 4. Teaching and Learning</b> 4a. Knowing understanding and using positive relationships and supportive interactions <b>MoSTEP</b> 2.3 Encourages student responsibility 6.2 Manages time, space, transitions and activities effectively 9.1 Applies a variety of problem-solving strategies reflecting on practice, influences on student’s growth and learning and the complex interactions between them</p>

		<p>10.2 Talks with and listens to students, is sensitive and responsive to signs of distress, and seeks appropriate help as needed to solve students' problems</p> <p><b>NCATE</b>          Ability to Respond to Diversity          Pedagogical Knowledge          Professional Knowledge and Skills          Impact on PreK-3 Learners          Evidence of Dispositions</p>
<p>5. Act as mentors and co-learners who provoke curiosity, creative thinking, consideration of multiple perspectives and research among children and adults.</p>	<p>4.1 the <b>responsive educator</b> understands and responds appropriately to issues of diversity;</p> <p>4.2 acknowledges social and cultural contexts to create effective tea</p> <p><b>Dispositions</b>          1.3 exhibits curiosity          3.3 communicates and collaborates in university and school cultures          3.4 accepts academic rigor (willingness to work/high expectations)</p>	<p><b>NAEYC</b>  <b>Standard 1. Promoting Child Development and Learning</b>          1a, 1b, 1c (see above)  <b>Standard 5. Becoming a Professional</b>          5d. Integrating knowledgeable, reflective and critical perspectives on early education</p> <p><b>MoSTEP</b>          5.2 Engages students in active learning that promotes the development of critical thinking, problem-solving, and performance capabilities</p> <p><b>NCATE</b>          Ability to Respond to Diversity          Content Knowledge          Pedagogical Knowledge          Professional Knowledge and Skills          Impact on PreK-3 Learners</p>
<p>6. Develop skills of observation, documentation and research in order to continuously inform curriculum decisions and teaching responses.</p>	<p>3.1 The <b>reflective collaborator</b> values and integrates reflection to grow as a professional;</p> <p><b>Dispositions</b>          1.4 engages in reflection          3.2 practices informed decision-making in university and school cultures</p>	<p><b>NAEYC</b>  <b>Standard 5. Becoming a Professional</b>          5c. Engaging in continuous, collaborative learning to inform practice</p> <p><b>MoSTEP</b>          8.1 Employs a variety of formal and informal assessment techniques (e.g., observations, authentic assessments)</p>

		<p>11.2 Applies current research on teaching and learning with technology to plan and deliver developmentally appropriate learning opportunities that integrate a variety of software, applications and learning tools to support the diverse needs of learners</p> <p>11.4 Uses technology resources in assessing student learning of subject matter using a variety of assessment techniques to collect and analyze data, to interpret results, and to communicate findings to improve instructional practice and maximize student learning</p> <p><b>NCATE</b>  Ability of Utilize Technology  Pedagogical Knowledge  Professional Knowledge and Skills  Impact on PreK-3 Learners</p>
<p>7. Learn how to collaborate with parents as partners in the development, analysis, and implementation of curriculum.</p>	<p>3.2 The reflective collaborator promotes communication and collaboration with colleagues, families and community leaders;</p> <p>3.3 seeks relationships with families and students to support student learning; and</p> <p>3.4 initiates change that benefits students and their families.</p>	<p><b>NAEYC</b>  <b>Standard 2. Building Family and Community Relationships</b>  2c. Involving families and communities in their children's development and learning</p> <p><b>NCATE</b>  Ability to Respond to Diversity  Pedagogical Knowledge  Professional Knowledge and Skills  Evidence of Dispositions</p>

## TEXT

Siegler, R.S. & Alibali, M.W. (2004). Children's Thinking (4<sup>th</sup> Edition). Upper Saddle River, NJ: Pearson/Prentice Hall.

Additional readings will be distributed during class sessions.

Audio-visual: Video and slides will be used to illustrate and examine concepts and strategies presented in class.

## COURSE REQUIREMENTS

### 1. Observational Studies

Four short papers on a chosen aspect of cognitive learning in young children including observation, documentation, reflection and implications for teaching (2-4 pages typed and double spaced)

#### Format

- Introduction (context, finding and framing a research question)
- Body of paper (supporting observations of subject and issue focused upon)
- Peer group comments (summary of collaborative inquiry)
- Conclusion (reflections, questions, projections for next observation)
- Documentation (accompanying photos, sketches, videos, transcribed conversations, children's work)

### 2. Cognitive Development Inquiry Paper

This final paper is based on the preceding observations, questions and resultant research (7-10 pages typed and double spaced).

#### Format

- **Title Page** (The title should summarize the main ideas of the paper with style.)
- **Introduction (Origins of your question)**  
The body of the paper opens with an introduction that presents the specific question under study and describes the research strategies.  
Develop the background material with enough breadth and clarity to make it generally understood by a wide professional audience.  
State the purpose of the paper and rationale (educational significance) behind it.
- **Data Collection**  
This section describes in detail how the study was conducted (videotape, transcribed conversations, photographs, filed notes, reflective journals, children's work samples, surveys, peer-group comments or interviews).  
Identify the participants within their context.  
Tell the reader **what** you did and **how** you did it in sufficient detail.  
Refer to observations as needed but do not use previously written observations to make up the body of the final paper.
- **Data Analysis**  
Summarize the data collected and report findings.  
Analyze, interpret and draw inferences from the results.
- **Conclusions**  
Present a conclusive, cohesive research-based summation and or action plan at the end of the paper.
- **References**  
At least three different class readings  
At least five additional references  
A limit of one internet reference  
All citations in the manuscript must appear in the reference list and all references must be cited in the text.  
Provide sufficient references to support your research and document statements made about the literature.

### 3. Participation and Leadership in Facilitating Class Discussion on Reading Assignments

Students will choose a chapter from the text and lead whole group discussion concerning main points from text, related readings, and issues identified in class..

### 4. Participation in Peer Group Discussion and Analysis of Documentation

- Complete observation assignments and be prepared to discuss your experiences in class.
- Participate in small and large group reflection and analysis of documentation.

#### Rubric for Key Assessment

Proficient A or A-	Proficient B+, B or B-	Nearing Proficiency C+ or C	Unacceptable C- or D
<ul style="list-style-type: none"> <li>• Takes initiative to use multiple methods of observation and tools for documentation that capture critical moments in cognitive learning.</li> <li>• Engages in collaborative reflection, interpretation and analysis of documented observations.</li> <li>• Explores principles, theory and relevant research addressed beyond the assigned readings and class materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Uses appropriate process of observation, reflection, interpretation and projection to study and support the cognitive development of young children.</li> <li>• Explores principles, theories and relevant research addressed through assigned readings and class materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Uses few appropriate connections made to assigned readings or class materials.</li> <li>• Content supported by adequate theoretical argument and some details to support.</li> </ul>	<ul style="list-style-type: none"> <li>• Observations lack detail, clarity and focus.</li> <li>• Ideas not developed; lacks logic of support; confusing does not make sense</li> <li>• Unclear thinking and/or unsubstantiated arguments presented in written reflections. Few appropriate connections to text or class handouts.</li> </ul>

<ul style="list-style-type: none"> <li>• Considers the complexities of family and community context when drawing conclusions and/or developing action plans.</li> <li>• Clarity of writing, paragraphing, transitions and sentences make papers easy for the reader to follow. Attractive and appropriate APA manuscript format.</li> </ul>	<ul style="list-style-type: none"> <li>• Draws from observations and theoretical framework to inform work with children and families.</li> <li>• Absence of usage and grammatical errors; accurate spelling; careful proofreading; follows APA manuscript format.</li> </ul>	<ul style="list-style-type: none"> <li>• Complex issues need further description and interpretation Adequate explanation of thinking. Logical and clear arrangement of basic ideas for practice.</li> <li>• Papers are readable but lack smooth flow of ideas. Required length of papers not met. Required number of references not met. Many errors in use of APA format.</li> </ul>	<ul style="list-style-type: none"> <li>• Action plans or conclusions are not supported by theory, research and observations.</li> <li>• Spelling and grammatical errors are numerous enough to interfere with understanding. Does not follow APA format.</li> </ul>
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### **ATTENDANCE**

Regular attendance will be taken and penalties imposed for excessive absences. A no credit is given to anyone missing more than one class.

### **WRITTEN WORK**

Assignments are due at class time on the date specified. Failure to turn in a paper on time can result in a penalty of one grade. Assignments are expected to be free of mechanical, typographical, grammatical, and spelling errors.

### **COURSE CALENDAR**

11/25 Introduction to course, content, and expectations. Get acquainted and develop a profile of the class as individual and group learners (questions and concerns).

Classroom Inquiry

Key questions about children's thinking

Chapter 1

11/1 Theories of cognitive development

Piaget

Information Processing

Vygotsky

Chapters 2, 3 and 4

11/8 Perceptual and Memory Development  
 Chapters 5 and 7  
**First Observation Report Due**

11/15 Language and Conceptual Development  
 Chapter 6 and 8  
**Second Observation Report Due**

11/22 The Development of Social Cognition  
 Chapter 9  
**Third Observation Report Due**

11/29 Problem Solving and Development of Academic Skills  
 Chapters 10 and 11  
**Fourth Observation Report Due**

12/6 Conclusions for the present; Challenges for the future  
 Chapter 12

12/13 In-depth Inquiry with Children  
**Final Project Due**

### READING AND CLASS PARTICIPATION

Reading assignments will be given for each class. Chapters from texts should be read prior to class lecture and discussion on that topic. Students are responsible for all materials for all materials as assigned, including text and any supplemental readings. Class participation is strongly encouraged as we all have experiences from which others can learn. We need to build and construct our knowledge as we proceed through this course.

Assessments	Links to Course Outcomes	Percentage of Grade
Chapter Discussion	2, 3, 5	5%
Small and Large Group Reflection and Analysis of Observations Evidence of Behavior Supporting Dispositions and Responsibilities of Adult Learners	1, 2, 3, 4, 5, 6, 7	5%
Observational Studies 1 2 3 4	1, 2, 3, 4, 5, 6, 7	10% 10% 10% 10% 40%
Cognitive Development Inquiry Paper	1, 2, 3, 4, 5, 6, 7	40%

**Note: ALL PAPERS/PROJECTS MAY BE RETURNED VIA A SELF-ADDRESSED, STAMPED ENVELOPE OR PICKED UP FROM INSTRUCTOR AFTER GRADES ARE POSTED. PAPERS ARE NOT AVAILABLE FOR PICK-UP IN THE SOE OFFICE.**

### **ACADEMIC HONESTY POLICY:**

**Students at Webster University are expected to practice academic honesty.**

#### **Avoiding Plagiarism**

Plagiarism is intentionally claiming that another person's work is his/her own or implying that another person's work is his/her own (through inadequate or inaccurate citations of reference material.)

Students:

- Should not copy whole portions of text from another source as a major component of papers or projects.
- Should identify the title, author, page number/webpage address, and publication date of works when directly quoting small portions of texts, articles, interviews, or websites.
- Should appropriately identify the source of information when paraphrasing (restating) ideas from texts, interviews, articles, or websites.
- Should follow the guidelines of the American Psychological Association Style Guide when referencing all research sources.

For further information about the consequences of academic dishonesty please consult the Webster University Student Handbook.

### **ACCESSIBILITY/ACCOMODATIONS POLICY:**

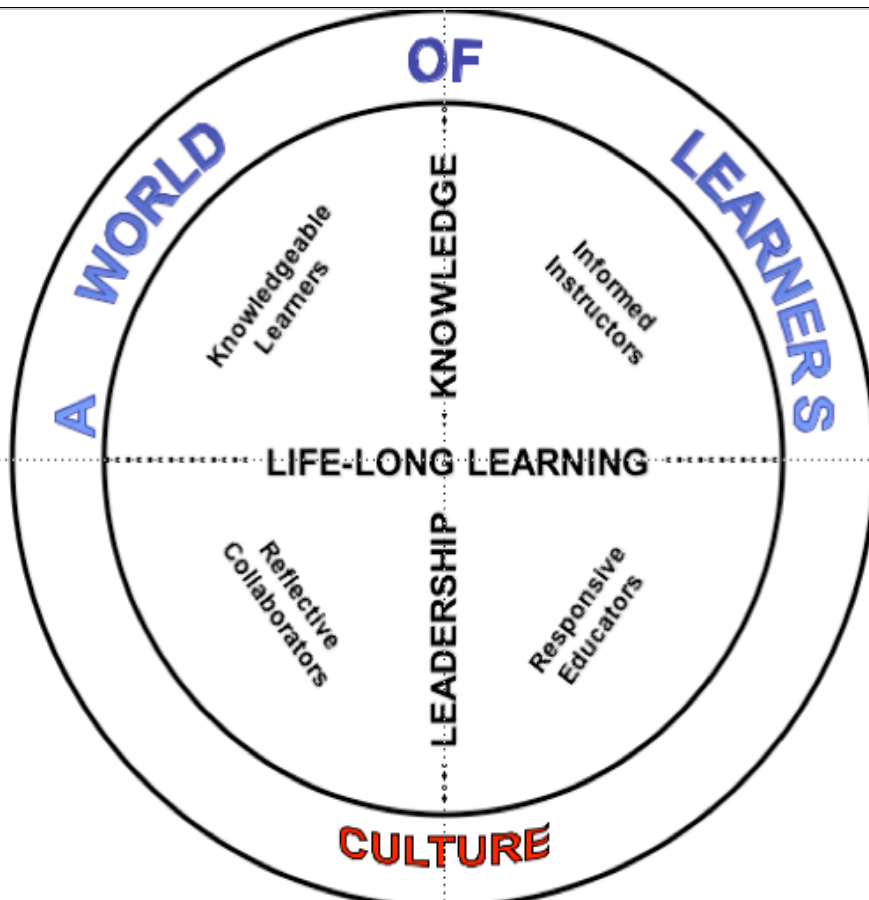
If you have a disability that may have some impact on your work in this class and for which you may require accommodations contact the Director of the Academic Resource Center, Dr. Pat McLeese, at (314) 968-7495.

#### **WEBSTER UNIVERSITY SCHOOL OF EDUCATION**

**Vision:** " . . . We all must work to make this world worthy of its children." (Casals, 1970)

**Mission:** The School of Education at Webster University provides its students with the knowledge, experiences, and practical tools that help them guide both themselves and others toward lifelong learning. The School of Education is a community of educator-scholars who apply critical reflections and creative energies to enhance learning in schools and other educational settings. The faculty strives to support this community by modeling effective teaching practices based on sound theory and research. Personalized approaches create a challenging, yet supportive environment that permits the risk-taking necessary for learning and growth. The School of Education encourages its faculty and students to work actively toward this end, keeping in mind that action must be rooted in visionary, yet realistic, thinking. This thought and action process underscores the development of an inner-directed self-understanding, an outer-directed global perspective, and an appreciation of human diversity that arises from both.

**Theme:** Developing a world of learners through knowledge, leadership, and life-long learning.



The universal mandala (a circle with intersecting vertical and horizontal lines) graphically represents the conceptual framework of the School of Education. The outer circle provides the framework for a “world of learners” in cultural settings. The two axes represent the theme components of knowledge, leadership, and life-long learning. These lines are broken to emphasize the fluid relationship of the goals and integrated concepts. Each quadrant represents one of the school’s four goals for its candidates: to develop knowledgeable learners, informed instructors, reflective collaborators, and responsive educators.

#### Goals

1. Education candidates will demonstrate knowledge of the subject matter, knowledge of the learner, and knowledge of pedagogy based on inquiry and scholarship.

##### The knowledgeable learner:

- 1.1 knows content that supports conceptual understanding;
  - 1.2 applies tools of inquiry to construct meaningful learning experiences;
  - 1.3 identifies developmental factors in student learning; and
  - 1.4 understands theoretical principles of effective instruction to plan learning experiences.
2. Education candidates will incorporate multiple assessment and instructional strategies to support effective educational practices based on research and theory.

##### The informed instructor:

- 2.1 designs curriculum based on students’ prior knowledge, learning styles, strengths, and needs;

- 2.2 understands and uses a range of instructional strategies;
  - 2.3 uses a variety of communication modes, media, and technology to support student learning; and
  - 2.4 employs a variety of formal and informal assessments to monitor learning and modify instruction.
3. Education candidates will reflect on the roles educators take as leaders of change through collaboration with colleagues, students, and families in schools and communities.

The reflective collaborator:

- 3.1 values and integrates reflection to grow as a professional;
  - 3.2 promotes communication and collaboration with colleagues, families, and community leaders;
  - 3.3 seeks relationships with families and students to support student learning; and
  - 3.4 initiates change that benefits students and their families.
4. Education candidates will demonstrate respect for diversity through responsive teaching and learning that values individual differences.

The responsive educator:

- 4.1 understands and responds appropriately to issues of diversity
- 4.2 acknowledges social and cultural contexts to create effective teaching and learning environments;
- 4.3 adapts instruction to the learner's knowledge, ability, and background experience; and
- 4.4 identifies resources for specialized services when needed.

**Dispositions:**

NCATE defines dispositions as "the values, commitments and professional ethics that influence behaviors toward students, families, colleagues, and communities and affect student learning, motivation, and development as well as the educator's own professional growth. " (Professional Standards, p. 53) There is significant value in focusing attention on qualities that make an effective teacher.

- 1. Understands and Respects Self
  - 1.1 Understands and respects that s (he) may be different from others
  - 1.2 Embraces an openness to change (adaptability, flexibility)
  - 1.3 Exhibits curiosity
  - 1.4 Engages in reflection
- 2. Understands and Respects Others
  - 2.1 Understands, respects, and responds appropriately to diversity in a variety of settings
  - 2.2 Exhibits empathy
  - 2.3 Commits to fairness and honesty
  - 2.4 Listens respectfully to other points of view
- 3. Understands and Respects Professional Communities
  - 3.1 Commits to professional behavior in university and school cultures
  - 3.2 Practices informed decision-making in university and school cultures
  - 3.3 Communicates and collaborates in university and school cultures
  - 3.4 Accepts academic rigor (willingness to work/ high expectations)
  - 3.5 Affects change with courage and confidence