Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

Course and Instructor Information

Course Title: Improving Students’ Thinking Skills  
Credits: 3  
Format: Online via HuskyCT  
Prerequisites: None  
Professor: Dr. Jann Leppien

Email: Through HuskyCT messages; jann.leppien@uconn.edu, or jleppien@mt.net  
Telephone: 406-868-2757  
Office Hours/Availability: Questions will be responded to within 24 hours. Typically, I check HuskyCT messages and my email daily. I will check into the course at a minimum of once per day. If you need immediate assistance, please email me or call me.

Course Materials

Required course materials should be obtained before the first day of class.

Texts are available through a local or online bookstore of your choice. The UConn Bookstore carries the required text(s), which can be shipped (fees apply).

Required Materials:


Additional course readings and media are available within HuskyCT, through either an Internet link or Library Resources.

Course Description

Whether in professional careers or daily life, contemporary society is increasingly in need of individuals proficient at problem solving skills, critical reasoning, creativity, and analysis. Because society needs citizens with these skills, as educators it is our responsibility to nurture and develop these capabilities in
our students. Prepare to be both role models for such thinking and developers of such skills in students.

The major purpose of this course is to study the theoretical and practical aspects of thinking skills instruction. Participants will learn how to prepare and deliver lessons that incorporate thinking skills instruction within the disciplines they teach. Participants will develop a grade level specific taxonomy of thinking skills, apply strategies that teach of, for, and about thinking, and organize a unit of instruction using a framework that promotes the use of thinking as students move toward enduring understandings.

Course Objectives

By the end of the semester, students should be able to:

1. Synthesize the connection between human learning and intellectual development that will serve as a foundation for more responsible decision making in curriculum and instructional design.
2. Distinguish between the skills, thinking process, and dispositions inherent in CCSS or other state curricular standards document.
3. Recognize the importance of introducing and explaining to students the rationale for the importance of knowing how to think clearly.
4. Identify critical thinking skills in various disciplines and practice the skills necessary to infuse good thinking into their respective curriculum and to bring the explicit teaching of thinking skills into their classroom instruction. To this end, students will create learning tasks, design instructional unit frameworks, and create lessons that foster student thinking.
5. Create a thinking skills taxonomy that can be used to guide the teaching and learning of critical thinking skills. The taxonomy will identify, define, and proceduralize disciplinary skills, processes, and dispositions that are emphasized at a specific grade level.
6. Research cognitive support strategies that foster the development of student thinking.
7. Locate and develop thinking skill assessments to guide student growth.
8. Apply visual thinking routines and critique their effectiveness.

National Association for Gifted Children (NAGC) and Council for Exceptional Children (CEC) Teacher Preparation Standards in Gifted and Talented Education Alignment of Course Content and Expectations to the Standards

Standard 2: Learning Environments

2.1 Beginning gifted education professionals create safe, inclusive, culturally responsive learning environments that engage individuals with gifts and talents in meaningful and rigorous learning activities and social interactions.

Standard 3: Curricular Content Knowledge

3.1 Beginning gifted education professionals understand the role of central concepts, structures of the discipline, and tools of inquiry of the content areas they teach, and use their understanding to organize knowledge, integrate cross-disciplinary skills, and develop meaningful learning progressions within and across grade levels.

3.2 Beginning gifted education professionals design appropriate learning and performance modifications for individuals with gifts and talents that enhance creativity, acceleration, depth and complexity in academic subject matter and specialized domains.
3.3 Beginning gifted education professionals use assessments to select, adapt, and create materials to differentiate instructional strategies and general and specialized curricula to challenge individuals with gifts and talents.

**Standard 5: Instructional Planning and Strategies**

5.1 Beginning gifted education professionals know principles of evidence-based, differentiated, and accelerated practices and possess a repertoire of instructional strategies to enhance the critical and creative thinking, problem-solving, and performance skills of individuals with gifts and talents.

5.3 Beginning gifted education professionals collaborate with families, professional colleagues, and other educators to select, adapt, and use evidence-based strategies that promote challenging learning opportunities in general and specialized curricula.

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**Course Background and Organization**

This course has been divided into weekly online modules of instruction to guide you toward expertise in understanding thinking skills instruction. On Monday of every week, you need to log on and enter the appropriate weekly module. In each module, you are provided with class notes, reading assignments, Discussion Board questions, and performance tasks/assignments that address each module’s theme. The tasks require you to use a variety of recommended instructional practices from sharing teaching strategies with other educators in this class to designing thinking skill taxonomies and lessons to foster student thinking. Most modules are completed within a week’s time (Monday-Sunday), while some modules extend over a two-week period. I have intentionally designed the course in this manner so that you begin to use the recommended strategies outlined in the text and apply them to your educational setting. You will want to keep up with the assignments so that by the end of the course, you will be finished with all your assignments. As a community of learners, you and your colleagues should grow throughout the semester as you interact with the course content, apply it to your classroom (educational) settings, and gain expertise and confidence in the teaching of thinking.

The approaches used for meeting the course objectives are a combination of reading assignments, participation in online class discussions, and performance tasks that require you to demonstrate understanding of specific key concepts, skills, or principles. These course assignments are outlined in each module.

The quality of written material produced by you should reflect the highest standards of scholarship. Please obtain a manual or guide (APA Manual) that will assist you in your writing projects. All written work should be composed on a computer, using Word or PDF file and submitted electronically, using 12 point, Times font.

It is important to realize that when courses are online, Universities establish guidelines for to consider to be the norm for student workload. A 3-credit online course requires an average of:

- 6 to 9 hours per week for a full semester course.
- 15 to 22 hours per week for a six week course.
- 18 to 27 hours per week for a five week course.
- 30 to 45 hours per week for a three week course.

Plan accordingly! To be successful, keep up with all the readings and assignments and monitor and participate in discussion postings.
## Course Outline and Schedule

### Schedule of Class Meetings, Topics, and Due Dates

Each module contains class notes, assigned readings, and performance tasks that apply the recommended ideas discussed in text. Each module asks you to engage in questions pertinent to the readings via the Group Discussion Board as well as to complete assignments based on the ideas expressed within the modules. See online for full descriptions of these modules.

**Tuesday, January 22-Sunday, January 27**
Course Orientation Module
Read Articles: A Guide to 4Cs
Performance Task: Self-Introduction and Reading the Guide to the 4Cs

**Monday, January 28-Sunday, February 3**
Module 1: Rationale for the Need to Teach Thinking
Read Articles: 1, 3, 4, 6, 7
Performance Task: "Kid Talk Rationale"

**Monday, February 4-Sunday, February 10**
Module 2: Building Common Understandings (Languages and Definitions for Thinking)
Read Articles: 8, 9, 11, 12, 13, 15, 16
Performance Task: Classification of Skills, Thinking Processes, and Dispositions Chart

**Monday, February 11-Sunday, February 17**
Module 3: Creating and Sustaining Thoughtful Environments
Read Articles: 19, 21,23,24
Performance Task: Classroom Observation and Analysis

**Monday, February 18-Sunday, February 24**
Module 4: Our Changing Perspectives on Thinking
Read Articles: 26, 27, 28, 29, 30, 32
Performance Tasks: Cues and Questions to Promote Thinking

**Monday, February 25-Sunday, March 3**
Module 5: Human Variability and Thinking
Read Articles: 33, 34, 35, 37, 38, 39, 40
Performance Task: Designing a Learning Task that Addresses Student Differences

**Monday, March 4-Sunday, March 10 and Monday, March 11-Sunday, March 17**
Module 6: Thinking Across the Curriculum
Read Articles: 41, 42, 43, 45, 46
Performance Task: Developing a Thinking Skills Taxonomy and Curricular Framework

**Monday, March 18-Sunday, March 24**
Module 7: Thinking in School Subjects
Read Articles: 47, 48, 49, 50, 51, 52, 55
Performance Task: Think Like Chart

**Monday, March 25-Sunday, March 31 and Monday, April 1-Sunday, April 7**
Module 8: Techniques for Teaching Thinking
Read Articles: 57, 58, 59, 60, 61, 62, 63, 64, 65, 66
Performance Task: Teaching a Thinking Skill Explicitly
Monday, April 8 - Sunday, April 14 and Monday, April 15 - Sunday, April 21
Module 9: Strategies for Teaching Thinking
Read Articles: 67, 68, 69, 70, 71, 72, 73, 74, 78
Performance Task: Exploring Inquiry Models and Designing a Research Cycle

Monday, April 22 - Sunday, April 28
Module 10: Assessing Growth in Thinking Abilities
Read Articles: 79, 81, 83, 84, 85
Performance Task: Rubrics to Assess Critical Thinking

Monday, April 29 - Friday, May 3
Module 11: Website Review: Visual Thinking from Project Zero and End-of-Course Reflection
Performance Task: Using a Visual Thinking Routine; Personal Reflection

Course Requirements and Grading

Each weekly performance task and class discussion posting is worth a certain number of points and will be based on the quality, timeliness, and completeness of the demonstrated task. You will want to respond to the class discussion postings early in the week (by Friday or at least by noon on Saturday) since there will be times that you will be responding to members of your assigned group. There is a total of 144 points for all assignments this semester. For a detailed description of each performance task and its point value, refer to each module online.

Summary of Course Grading: The following list describes each performance task and/or class discussion postings you will complete during the course:

<table>
<thead>
<tr>
<th>Module</th>
<th>Assignments</th>
<th>Points</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Module-Course Orientation</td>
<td>Biosketch, Framework Foundations White Paper</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Module 1</td>
<td>‘Kid Talk Narrative’ Lesson Group Discussion Board Posting and Response</td>
<td>5</td>
<td>See Holistic Rubric</td>
</tr>
<tr>
<td>Module 2</td>
<td>Classification of Skills, Thinking Process, and Dispositions Chart Group Discussion Board Posting and Response</td>
<td>10</td>
<td>See Holistic Rubric</td>
</tr>
<tr>
<td>Module 3</td>
<td>Classroom Observation and Analysis; Group Discussion Board Posting and Response</td>
<td>10</td>
<td>See Holistic Rubric</td>
</tr>
<tr>
<td>Module 4</td>
<td>Cues and Questions to Promote Thinking; Group Discussion Board Posting and Response</td>
<td>5</td>
<td>See Holistic Rubric</td>
</tr>
<tr>
<td>Module 5</td>
<td>MI or Self-Designed Classroom Tasks; Group Discussion Board Posting and Response</td>
<td>10</td>
<td>See Holistic Rubric</td>
</tr>
</tbody>
</table>
Module 6 | Developing a Thinking Skills Taxonomy and Curricular Framework; Group Discussion Board Posting and Response | 15 | See Holistic Rubric
Module 7 | Think Like a _____ Charts; Class Discussion Board Posting and Response | 10 | See Holistic Rubric
Module 8 | Teaching a Thinking Skill Explicitly; Group Discussion Board Posting and Response | 15 | See Holistic Rubric
Module 9 | Exploring Inquiry Models and Designing Research Cycle Chart, Group Discussion Board Posting and Response | 10 | See Holistic Rubric
Module 10 | Rubrics to Assess Critical Thinking; Group Discussion Board Posting and Response | 5 | See Holistic Rubric
Module 11 | Try out Visual Thinking Routine; Self-Evaluation on the Group Discussion Board | 5 | See Holistic Rubric

It typically takes me 2-3 days to evaluate each performance task you submit each week. You will receive prompt feedback regarding the completion of these tasks and your Discussion Board responses and comments. Since most of the assignments require you to discuss ideas presented within the text with your colleagues and to create original products or performances, the following holistic evaluation guide is used to determine the number of points that you receive.

**Holistic Rubric to Evaluate Students’ Understanding and Performance Criteria**

<table>
<thead>
<tr>
<th>Level</th>
<th>Understanding</th>
<th>Performances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophisticated Levels</td>
<td>Shows a sophisticated understanding of the relevant ideas or processes. The concepts, evidence, arguments, qualifications made, questions posed, and methods used are advanced, going well beyond the grasp of the issues being discussed.</td>
<td>The performance or product is highly effective. The ideas are presented in an engaging, polished, clear and thorough manner, and are mindful of audience, context and purpose. The final product or performance shows high quality craftsmanship.</td>
</tr>
<tr>
<td>Accomplished Levels</td>
<td>Shows a solid understanding of the relevant idea or processes. The concepts, evidence, arguments and methods used are appropriate for addressing the issues or problems. Response shows no misunderstandings of key ideas or overly simplistic approaches.</td>
<td>The performance or product is effective. The ideas are presented in a clear and thorough manner, showing awareness of the audience context and purpose.</td>
</tr>
<tr>
<td>Naïve Levels</td>
<td>Shows a somewhat naive or limited understanding of the relevant ideas or processes. The concepts, evidence, arguments and methods used are somewhat simple, crude or inadequate for addressing the issues or problems. Response may reveal some misunderstandings of key ideas or methods.</td>
<td>The performance or product is somewhat effective. Some problems with clarity, thoroughness and delivery are evident. It is unclear whether the audience, context and purpose have been considered.</td>
</tr>
<tr>
<td>Inadequate Levels</td>
<td>Shows little apparent understanding of the relevant ideas or processes. The concepts, evidence, arguments and methods used are</td>
<td>The performance or product is ineffective. One of two situations is evident. The performance is</td>
</tr>
</tbody>
</table>
inadequate for addressing the issues or problems. Responses reveal major misunderstandings of key ideas or methods.

unpolished, providing little evidence of planning, practice and consideration of purpose and audience, or the presentation is so unclear and confusing that the key points are difficult to determine.

### Participation in On-Line Class Discussions Guidelines: All Postings and Responses are Required

Each week, you will be asked to participate in a threaded Group Discussion Board related to the course content. I will post questions to which you are to respond, but you should consider this a conversation in which you discuss the readings with your colleagues. I will read the postings and occasionally post a question or clarification, but the Group Discussion Board is primarily a space for your ideas. Use the following criteria to judge the quality of your postings and your responses to your colleagues. Since each posting and responses are required, I will use the criteria below to judge how to award you full points or partial points based on the quality of your posting and responses to your colleagues.

**An excellent contribution to the on-line discussion.** (4 points) Has a focused point to make and uses examples from the text to prove that point. Includes brief quotations from the text and analyzes those quotations, explaining how the author’s words create certain effects, impressions, or meanings. Is written in clear and sophisticated prose. Makes an original point that enhances our understanding of the text.

When replying to colleagues, the comments or feedback are substantive and reflect that the student read and thought about the assigned reading and additional sources posted by the person they are replying to. The reply moves the conversation forward or makes a reply to a question asked in response to their own posting or provide substantive feedback to assist colleagues in their instructional design templates. Replies are made over several days rather than all crammed into the due dates.

**A good contribution.** (2-3 points) Has a focused point to make and uses examples from the text to prove that point. Includes brief quotations from the text and analyzes those quotations, explaining how the author’s words create certain effects, impressions, or meanings. Written in clear prose. In other words, will accomplish all the things an excellent response accomplishes but differs in degree: the focus might require further narrowing, the point further refining, more textual evidence and analysis might need to be undertaken. Or perhaps the point is less original or helpful in interpreting the text.

When replying to colleagues, the comments or feedback reflect that the student read and thought about the assigned reading and additional sources posted by the person they are replying to, yet failed to give any real feedback for improvement or revision. The reply more often acknowledges the efforts of his/her colleague, but refrains from assisting in the revision process and providing substantive feedback to assist colleagues in their instructional design templates. Replies are delayed, which hinders the conversation and feedback.

**A below average contribution** (0-1 point). Does not display evidence that the reader has carefully read the text. Does not offer textual evidence or analysis. Does not make a relevant or clear point about the text. Rambles, is off-topic, does not contribute any new or useful understanding of the text.
When replying to colleagues, the comments or feedback reflect that the student did not read their colleagues’ posts or additional sources posted by the person they are replying to. Feedback is limited and offers little to assist their colleagues in professionally improving their curricular design tasks. Replies to peers are inconsistent and delayed.

Total Points:

Performance Tasks: 100 points
Group Discussion Postings and Comments: 44 points (11 posts @ 4 points each)
Total: 144 points

Graduate Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>97-100</td>
<td>A+</td>
</tr>
<tr>
<td>93-96</td>
<td>A</td>
</tr>
<tr>
<td>90-92</td>
<td>A-</td>
</tr>
<tr>
<td>87-89</td>
<td>B+</td>
</tr>
<tr>
<td>83-86</td>
<td>B</td>
</tr>
<tr>
<td>80-82</td>
<td>B-</td>
</tr>
<tr>
<td>77-79</td>
<td>C+</td>
</tr>
<tr>
<td>73-76</td>
<td>C</td>
</tr>
<tr>
<td>70-72</td>
<td>C-</td>
</tr>
<tr>
<td>67-69</td>
<td>D+</td>
</tr>
<tr>
<td>63-66</td>
<td>D</td>
</tr>
<tr>
<td>60-62</td>
<td>D-</td>
</tr>
<tr>
<td>&lt;60</td>
<td>F</td>
</tr>
</tbody>
</table>

Due Dates and Late Policy:

All course due dates are identified in each module. Typically, all performance tasks are due on Sunday of each week. Because of the interactive nature of this course, late assignments impact the quality of the course. Assignments are due by midnight (your local time) on the date listed in the assignment. Unless there are unavoidable circumstances, assignments will be assessed a 5% penalty for each day late. Recognizing that there are occasional technical problems with online courses and professional and personal issues that can impact the timeliness of assignments, please simply notify the instructor when this has occurred so that plans can be made accordingly. The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.

Feedback and Grades:

I will make every effort to provide feedback and grades within 2 days of the required postings and submissions of performance tasks. All feedback and grades will be submitted to you through your UConn email address. Since most of the assignments require you to discuss ideas presented within the
text with your colleagues and to create original products or performances, please see the guidelines and rubrics to make sure you have submitted quality performances as well as specific directions within each module. To keep track of your performance in the course, refer to My Grades in HuskyCT.

### Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources, which include:

- The Student Code
  - Academic Integrity
  - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

### Students with Disabilities

Students needing special accommodations should work with the University's Center for Students with Disabilities (CSD). You may contact CSD by calling (860) 486-2020 or by emailing csd@uconn.edu. If your request for accommodation is approved, CSD will send an accommodation letter directly to your instructor(s) so that special arrangements can be made. (Note: Student requests for accommodation must be filed each semester.)

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government." (Retrieved March 24, 2013 from Blackboard's website)

### Software Requirements and Technical Help

The technical requirements for this course include:

- Word processing software
- Adobe Acrobat Reader
- Reliable internet access

Technical and Academic Help provides a guide to technical and academic assistance.

This course is completely facilitated online using the learning management platform, HuskyCT. If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the Help Center. You also have 24x7 Course Support including access to live chat, phone, and support documents.
Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Save files in commonly used word processing program formats.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

University students are expected to demonstrate competency in Computer Technology. Explore the Computer Technology Competencies page for more information.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the Office of Institutional Research and Effectiveness (OIRE).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.

Selected Bibliography


Ritchhart, R. (2015). Creating cultures of thinking: The 8 forces we must master to truly transform our schools.
