Independent Study Online Course Syllabus

Course Number: EDU 907
Course Title: Research-Based Thinking Strategies

X Online □ Distance Learning

Instructor: Mabel W. Franks, Ed. D.
Phone & Fax number: 559-292-5315
Email: mabefranks@yahoo.com

Units: 3
Grade Level: K-12

Course Description

All students think to learn. It is skillful use of thinking that makes the difference. Teachers will explore and evaluate a variety of strategies designed to apply thinking skills and create a tool kit for planning K-12 whole class, small group and individualized classroom activities. Thinking Strategies is based on research conducted by Forgarty, Marzano, Costa, Jensen, Sprenger, Kinsella, Payne, and others and as outlined in ASCD’s Learning to Think, Thinking to Learn (2007). The course aligns with the new Common Core Standards (CCSS), NCTE and NETS standards and ASCD’s Educating Students Position Statement (2008) calling for the need to acquire and apply thinking skills to meet the complex challenges of the 21st Century. ELA, Math, History/Social Science and Science/Technical Common Core State Standards are embedded in reading material and assignments. The textbook, How to Teach Thinking Skills within the Common Core: 7 Key Student Proficiencies of the New National Standards (2012) by Bellanca, J, Fogarty, R., Pete, B purchased separately.

Course Dates

• Self-paced; students may enroll at any time and take up to one year to complete assignments.
• You have up to one year from the date of registration, and no less than three weeks (one week per credit), to complete the course.

Course Materials

• Textbooks and Other Reading Material:

Required Textbook: (purchased separately):

To register for courses go to http://ce.fresno.edu/cpd and log in

Course Number and Title: EDU 907 Research-Based Thinking Strategies
Instructor: Mabel Franks, Ed.D.
Date of Revision 11/19/14
Bellanca, J., Fogarty, R., & Pete, B. (2012). How to Teach Thinking Skills within the Common Core: 7 Key Student Proficiencies of the New National Standards. Bloomington, IN: Solution Tree Press

Other Reading Materials:

- Learning to Think, Thinking to Learn: The Pathway to Achievement (excerpts)
- Habits of Mind: A Resource Book for Teaching Thinking, Ed. by A. Costa (excerpts)
- Classroom Instruction that Works by R. Marzano, D. Pickering, J. Pollock (excerpts)

- Online Resources - Relevant online resources that support course content and encourage further investigation.
- Other material: Instructions for completing this course, resource materials, readings, information about Fresno Pacific University, the School of Professional Studies, and the instructor, plus specifics on course policies and procedures.

Technology Requirements:

In order to successfully complete the course requirements, course participants will need Internet access, be able to send and receive email, know how to manage simple files in a word processing program, and have a basic understanding of the Internet.

Please remember that the instructor is not able to offer technical support. In the event that you need technical support, please contact your Internet Service Provider.

Moodle:

This course will be delivered totally online. Moodle is a learning management system that provides students access to online resources, documents, graded assignments, quizzes, discussion forums, etc. with an easy to learn and use interface. To learn more about Moodle go to: [http://docs.moodle.org/en/Student_tutorials](http://docs.moodle.org/en/Student_tutorials). There are some student tutorials on the Center for Online Learning website at Fresno Pacific University – [http://col.fresno.edu/student](http://col.fresno.edu/student).

Moodle Site Login and passwords – (or other online course access information)

Students will need to have internet access to log onto [http://ce-connect.fresno.edu](http://ce-connect.fresno.edu). The username and password numbers for Moodle access will be sent to you by the university using the email address you submitted at the time of registration. The instructor will then contact you with a welcome letter and login instructions. If you need help with the username and password recovery please contact the Center for Professional Development at (800)372-5505, or (559)453-2000 during regular office hours - Mon-Fri 8:00 am to 5:00 pm.

To register for courses go to [http://ce.fresno.edu/cpd](http://ce.fresno.edu/cpd) and log in
Getting Help with Moodle:
If you need help with Moodle, please contact the Center for Online Learning (COL), by telephone 1-559-453-3460. Help by phone is available Mon-Thurs 8:00 am to 8:00pm and on Fridays from 8:00 am to 5:00 pm, or by filling out a “Request Services” form at http://col.fresno.edu/contact/request-services. Please identify that you are with the Continuing Education/Independent Studies department.

Discussion Forums
Participation is an important expectation of this course and all online courses. Online discussions promote reflection and analysis while allowing students to appreciate and evaluate positions that others express. While students may not be engaging with the same students throughout this course they will be expected to offer comments, questions, and replies to the discussion question whenever possible. The faculty role in the discussion forum is that of an observer and facilitator.

Course Requirements
To successfully complete this course, participants must:

- Complete reading assignments
- Review videos and other on-line resources
- Review, reflect and provide responses using a variety of written formats.
- Analyze relationships between approaches to learning and instructional practices.
- Participate in on-line forums
- Evaluate effectiveness of current and suggested practices
- Apply research to demonstrate development of new knowledge and transfer of skills.
- Create activities and assignments based on research and best practices
- Create and apply a Thinking Strategies tool kit
- See the “Schedule of Topics and Assignments” for more details on assignments.

National Council of Teachers of English
The National Council of Teachers of English (NCTE) define what teachers, as students, should know and be able to do in English language arts. It is the belief that all students must have the opportunities and resources to develop the language skills they need to pursue life’s goals and to participate fully as informed, productive members of society. These standards encourage the development of curriculum and instruction that make productive use of innovation and creativity which are essential to teaching and learning.

NCTE Standards that apply to this course are:

1. Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for
personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.

2. Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g., philosophical, ethical, aesthetic) of human experience.

3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

4. Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.

5. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

6. Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.

7. Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.

8. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks (video) to gather and synthesize information and to create and communicate knowledge.

9. Students develop an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.

10. Students whose first language is not English make use of their first language to develop competency in the English language arts and to develop understanding of content across the curriculum.

11. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.
12. Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

**National Common Core State Standards (CCSS)**

The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy.

This course references and integrates the English Language Arts Common Core Standards to:

- Create an understanding and acquire knowledge about the standards and how they apply to teaching and learning in the 21st Century
- Apply and assess a wide range of strategies aligned with the standards to comprehend, interpret, evaluate information to create new meaning.
- Conduct research and generate ideas related to the new Common Core Standards (CCSS) and to the College and Career Readiness Anchor Standards (CCR).

**Common Core Language Arts (K-5) and Literacy Standards (6-12) addressed in course materials and assignments include:**

Reading for Literature: RL 1, RL 2, RL 3, RL 4, RL 5, RL 6, RL 7, RL 9  
Reading for Information: RI 1, RI 2, RI 3, RI 4, RI 5, RI 6, RI 7, RI 8, RI 9  
Writing: W 1, W 2, W 3, W 4, W 6, W 7, W 8, W 9  
Speaking and Listening: SL 1, SL 2, SL 3, SL 4, SL 5  
Language Standards: L 4, L 5, L 6

**Common Core History/Social Science Standards (6-12) addressed in reading materials and course assignments include:** RH 5, RH 6, RH 8, RH 7

**Common Core Math Standards addressed in reading materials and course assignments include:** MD 3, MD 8, NS 8

**Common Core Science and Technical standards addressed in reading materials and course assignments include:** RST 1, RST 3, RST 4, RST 7, RST 9,
Common Core Standards are available at http://www.corestandards.org/.

**Learning Objectives / Outcomes**
By the end of the course, students will learn and be able to:

- Synthesize and create new knowledge about thinking as a learning process (NCTE 8, 11, 12)
- Critically read a variety of materials to build background knowledge on thinking, learning and characteristics of the digital student (NCTE 1, 6, 7)
- Discuss the role thinking plays in learning and student academic success, including second language learners and students of poverty (NCTE 1; 10)
- Explain and apply research as it relates to memory, student engagement and development of thinking skills (NCTE 3)
- Reflect on prior learning experiences to make connections between thinking, understanding and learning (NCTE 3)
- Use a variety of resources, including technology and on-line resources to gather and synthesize ideas and information related to thinking and learning (NCTE 8)
- Exhibit through writing an understanding of thinking as a learning process and respect for diverse learning (NCTE 9)
- Demonstrate an understanding of the importance thinking to learn plays in academic success and apply a range of strategies that support application of thinking skills (NCTE 3,4;5)
- Identify how the digital native, 21st Century work skill needs and the growth of online learning intersect to impact education in the United States. (NBPTS 1, 4NETS-T 5)
- Develop a strategies thinking tool kit that emphasizes the use of thinking skills and differentiates approaches to learning to meet the needs of individual students. (NBPTS 1, 4)

**Schedule of Topics and Assignments**

To register for courses go to http://ce.fresno.edu/cpd and log in
Module 1: Building Background Knowledge
Goals and Objectives:
• Examine 21st Century work skills and gaps in learning
• Explore complexities encountered by the introduction of the digital native to the traditional classroom learning environment.

Activities and Assignments:
• View 21st Century Learning (video)
• Read How to Teach Thinking/CCSS, Introduction
• Read Wagner’s Rigor Redefined
• View Digital Natives (video)
• Compare 21st Century work skills to CCSS.(10 points)
• Compare characteristics of the digital native with current teaching and learning practices. (10 points)

Module 2: Thinking to Learn
Goals and Objectives:
• Determine correlations between learning, memory, emotions and relaxed alertness, especially as they relate to ELL students and influences of poverty on learning
• Examine Bloom’s levels of learning in relationship to current practices and 21st Century thinking and learning skills

Activities and Assignments:
• Read How to Teach Thinking/CCSS, pp. 13-14
• Read ELA Common Core Standards
• Read Putting a Face on Common Core
• Read Common Core Standards- Overview
• View Walsh’s Memory Encoding (video)
• View Thinking Models (powerpoint)
• Summarize research on the association between poverty, second language learning and retention of information. (15 points)
• Analyze alignment between current practices, Bloom’s taxonomy and new Common Core Standards (CCSS), especially as the standards relate to higher order thinking skills. (15 points)

Module 3: Questioning to Engage the Mind
Goals and Objectives:
• Analyze effectiveness of observable questioning strategies, including wait time, as they relate to development of thinking skills
• Evaluate questioning techniques and approaches to determine research-based best practices
• Synthesize research on strategic questioning strategies to create professional resource
Activities and Assignments:
- Read *How to Teach Thinking/CCSS, Chapter 3 and Chapter 6*
- View *Asking Questions* (powerpoint)
- View *Spiral Questions* (video)
- View *Socratic Questioning* (video)
- View *Inquiry Approach-Questioning* (video)
- Examine classroom questioning practices (15 points)
- Explore, identify and integrate effective instructional strategies into Thinking Strategies Toolkit, Part A: Questioning Strategies (25 points)

Module 4: Listening and Speaking to Activate Thinking
Goals and Objectives:
- Analyze oral language development and thinking processes, especially as they relate to the digital native, ELL and students of poverty
- Evaluate oral language strategies to identify research-based best thinking to learn practices
- Synthesize research on effective oral language strategies to create professional resource

Activities and Assignments:
- Read *How to Teach Thinking/CCSS, pp. 137-138; Chapters 7-9, 13-15, 20*
- Read Kinsella’s and Feldman’s Active Engagement Strategies
- View *Power Teaching* (video)
- View *Reciprocal Teaching* (video)
- View *Inquiry-Based Approach to Thinking* (video)
- Analyze relationship between oral language thinking skills and student academic success, especially as it relates to development of thinking skills for all learners, including digital natives, ELL and underachieving students (15 points)
- Explore, identify and integrate effective strategies into Thinking Strategies Toolkit, Part B: Oral Language Strategies (25 points)

Module 5: Visualizing to Connect Ideas
Goals and Objectives:
- Critically analyze the relationship between thinking, visual images, and emotions
- Compare and contrast concept mapping strategies, including mind mapping, graphic organizers, and brainstorming
- Synthesize research on visualizing and graphic images to create professional resource

Activities and assignments:
- Read *How to Teach Thinking/CCSS, Chapters 1, 16-19*
- Read Richard’s *Making It Stick*
- View *Story Mapping* (video)
- View *Mind Mapping* (video)
• Graphically interpret connections between experiences, emotions, and use of visual images to learn. (15 points)
• Explore, identify and integrate effective strategies into Thinking Strategies Toolkit, Part C: Mapping Strategies (25 points)

Module 6: Reading to Deepen Understanding
Goals and Objectives:
• Analyze the correlation between reading skills and thinking
• Categorize reading strategies according to HOT effectiveness
• Synthesize research on reading strategies to create professional resource

Activities and Assignments:
• Read *How to Teach Thinking/CCSS*, pp. 89-90; Chapter 2, 10-12
• View *Crazy Professor Reading Game* (video)
• View *Literature Circles* (video)
• View *Reading Strategies* (video)
• View *Read, Discuss, and Debate* (video)
• View *Post Its* (video)
• View *SIFT Method* (video)
• Analyze self-learning strategies practiced by a “good reader” to comprehend information at a deeper and higher level (15 points)
• Explore, identify and integrate effective strategies into Thinking Strategies Toolkit, Part D: Reading Strategies (25 points)

Module 7: Writing to Make Thinking Visible
Goals and Objectives:
• Examine writing as an academic culture-defining process.
• Evaluate writing activities based on identified elements of effective instruction
• Synthesize research on writing strategies to create professional resource

Activities and assignments:
• Read *How to Teach Thinking/CCSS*, pp. 137-138, Chapter 21
• View Marzano’s *Summarizing* (power point)
• Read Hobkin’s *Journal Writing Strategies*
• View *Literary Analysis Tools* (video)
• View *Writing Workshop, K-3* (video)
• View *Writing Workshop, 7-12* (video)
• Complete a comparative analysis of writing strategies (15 points)
• Explore, identify and integrate effective strategies into Thinking Strategies Toolkit, Part E: Writing Strategies (25 points)

Module 8: Integrating Technology to Prepare the Digital Learner
Goals and Objectives:
- Evaluate quality of technology tools and applications according to usefulness and ability to support development of 21st Century skills
- Evaluate technology tools and applications to determine appropriate teaching and learning levels
- Synthesize research on the digital learner, technology and technology tools and applications to create professional resource

Activities and Assignments:
- Review *How to Teach Thinking/CCSS, pp.202-204*
- Read Costa’s *Habit of Mind with Technology* (power point)
- View *A Vision for 21st Century Learning* (video)
- View *Robotics* (video)
- View *Introduction to Teaching Integration of Technology* (video)
- Critique technology applications to determine level of thinking skills required to learn and master intended objectives. (20 points)
- Explore, identify and integrate effective technology tools and strategies into Thinking Strategies Toolkit, Part F: Technology Strategies (25 points)

Module 9: Putting It All Together
Goals and Objectives:
- Apply a variety of strategies to demonstrate comprehensive understanding of research, digital learners, and thinking to learning
- Exhibit through writing an understanding of and respect for diversity and diverse learning activities in the development of higher order thinking skills

Activities and Assignments:
- Read Costa’s *5 Themes to Create Thinking Classroom Environments*
- Create and evaluate effectiveness of a standards-aligned unit of study based on research and developed Thinking Strategies Toolkit (75 points)
- Reflect on the relationship between thinking, learning, and ability to apply new skills. (10 points)

Evidence of Learning
Course instructors will observe evidence of students’ understanding of course objectives as demonstrated through:
- Reflective writing assignments and responses to prompts, some of which require specific answers.
- Responses that require thinking as a process to deepen student understanding of important concepts, extend learning, transfer information, and develop self-learning skills.
• Responses that demonstrate understanding of the relationship between development of thinking skills and academic language, writing, oral response, technology and reading comprehension
• Self-selected strategies and applied learning demonstrate the ability to use research to evaluate effective practices.
• Responses demonstrate the ability to apply thinking skill strategies using an integrated approach to learning.
• Project requires development and application of thinking strategies to plan and evaluate lessons and activities.
• Consistent use of applied research.

Grading Policies and Rubrics
Total points possible  380
Total points required to earn an A  342
Total points required to earn a B or Credit Grade  304
No Credit Grade Below  304 points

• The discernment between an A or a B is at the discretion of the instructor based on the quality of work submitted (See Research-Based Thinking Strategies: A Toolkit Approach scoring rubric).
• Coursework falling short of a quality equaling a B or a Credit Grade will be returned with further instructions.
• All assignments must be completed in order to receive a letter or credit grade. In addition, all assignments are expected to reflect the quality that teacher-training institutions require of professional educators. If completed assignments do not meet this standard, students will be notified with further instructions from the instructor.

Major Assignments
• Reflection  10 points
• Analysis of practices  15 points
• Evaluation of practices  20 points
• Extended Project  25 points/Part
• Final Project  75 points
• Final Reflection  10 points

Students will participate in discussion forums as they progress through the course. Forums are considered assignments and participation in each forum will be graded as an assignment.

Rubric for Evaluating Assignments
Course assignments are graded with the use of a Scoring Rubric. (See Research-Based Thinking Strategies: A Toolkit Approach Scoring Rubric). The Scoring rubric describes quality of work expected for each assignment. All course assignments are graded with the
Instructor/Student Contact

A number of contacts are built into the course:
1. Initial on-line contact will be made by the instructor within two weeks of registering for the course.
2. A rubric will be included and will be used to score assignments.
3. Coaching/communication with student is available throughout the course by phone or email as needed.
4. Each assignment is to be submitted by student to the instructor at the completion of the assignment to check for understanding. Instructor will contact students to provide individual feedback on completed assignments. Support will be provided as needed.
5. If a student does not meet the course requirements when final assignments are submitted, the student will be notified by phone and/or email. Suggestions for improvement will be provided and the instructor will provide assistance to encourage satisfactory completion.

Online Courses:

Students will communicate with the instructor and classmates on a regular basis during the course through the use of asynchronous discussion forums. A Virtual Office is available for course questions and students are provided with instructor contact information in the event students need to make phone or email contact. In addition, students are encouraged to email the instructor at any time.

References/Resources

Below are references and additional suggested resources to expand the course content, including web sites for accessing the National Standards for the Teaching Profession, and State content standards.


Bellanca, J, Fogarty, R., Pete, B. (2012). How to Teach Thinking Skills within the Common Core: 7 Key Student Proficiencies of the New National Standards


To register for courses go to http://ce.fresno.edu/cpd and log in


**Final Course Grade and Transcripts**

When all work for the course has been completed, students will need to logon to the Center for Professional Development website (http://ce.fresno.edu/cpd) to “Submit Grade Form”. Once the instructor fills out the grade form online, students may log back in to request their Grade Report as well as order transcripts online. Please allow at least two weeks for the final grade to be posted. For more information see the Independent Studies Policies and Procedures that were sent to you when you received your course materials, or in your online course. They are available, also at http://ce.fresno.edu/cpd - under General Information > CPD Policies.

**Plagiarism and Academic Honesty**

All people participating in the educational process at Fresno Pacific University are expected to pursue honesty and integrity in all aspects of their academic work. Academic dishonesty, including plagiarism, will be handled according to the procedures set forth in the Fresno Pacific University Catalogue. URL http://www.fresno.edu.

**FRESNO PACIFIC UNIVERSITY STUDENT LEARNING OUTCOMES**

| **Student Learning Outcomes Oral Communication:** Students will exhibit clear, engaging, and confident oral communication – in both individual and group settings – and will critically evaluate content and delivery components. |
| **Written Communication:** Students will demonstrate proficient written communication by articulating a clear focus, synthesizing arguments, and utilizing standard formats in order to |

Course Number and Title: EDU 907 Research-Based Thinking Strategies
Instructor: Mabel Franks, Ed.D.
Date of Revision 11/19/14

To register for courses go to http://ce.fresno.edu/cpd and log in
inform and persuade others.

**Content Knowledge:** Students will *demonstrate* comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.

**Reflection:** Students will *reflect* on their personal and professional growth and *provide evidence* of how such reflection is utilized to manage personal and vocational improvement.

**Critical Thinking:** Students will *apply* critical thinking competencies by *generating* probing questions, *recognizing* underlying assumptions, *interpreting* and *evaluating* relevant information, and *applying* their understandings to new situations.

**Moral Reasoning:** Students will *identify* and *apply* moral reasoning and ethical decision-making skills, and *articulate* the norms and principles underlying a Christian worldview.

**Service:** Students will *demonstrate* service and reconciliation as a way of leadership.

**Cultural and Global Perspective:** Students will *identify* personal, cultural, and global perspectives and will employ these perspectives to *evaluate* complex systems.

**Quantitative Reasoning:** Students will accurately *compute* calculations and symbolic operations and *explain* their use in a field of study.

**Information Literacy:** Students will *identify* information needed in order to fully understand a topic or task, *explain* how that information is organized, *identify* the best sources of information for a given enquiry, *locate* and critically *evaluate* sources, and accurately and effectively *share* that information.

---

**CONTINUING EDUCATION PROGRAM STUDENT LEARNING OUTCOMES:**

**CE 1.** Demonstrate proficient written communication by articulating a clear focus, synthesizing arguments, and utilizing standard formats in order to inform and persuade others, and present information applicable to targeted use.

**CE 2.** Demonstrate comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.

**CE 3.** Reflect on their personal and professional growth and provide evidence of how such reflection is utilized to manage personal and professional improvement.

**CE 4.** Apply critical thinking competencies by generating probing questions, recognizing underlying assumptions, interpreting and evaluating relevant information, and applying their understandings to the professional setting.

**CE 5.** Reflect on values that inspire high standards of professional and ethical behavior as they pursue excellence in applying new learning to their chosen field.

**CE 6.** Identify information needed in order to fully understand a topic or task, organize that information, identify the best sources of information for a given enquiry, locate and critically evaluate sources, and accurately and effectively share that information.