Fall 2024, R546 Instructional Strategies for
Thinking, Collaboration, and Motivation

Canvas: http://canvas.iu.edu/
Old Course Website: http://curtbonk.com/bobweb; **Dropbox Resources 2021**
HTML of Syllabus: http://curtbonk.com/Instructional-Strats-R546-2024.htm

Dates: August 31, 2024 to October 19, 2024 (Saturday recordings, 8:00 am-1:00 pm EDT)
IU-Bloomington: Section 33515 Online
Instructor: Curtis J. Bonk, Professor, IST Dept.; Wright Education Building
E-mail: cjbonk@indiana.edu; Homepage: http://curtbonk.com/
Instructional Assistants (each will help with 2-3 optional synchronous sessions): Vanessa Johnson: vanjohn@iu.edu; Dr. Sunmi Seol: smseol@stanford.edu; Emily Virga: evirga@iu.edu.

Course Description:
Students in this course will learn how to develop learning environments that stimulate critical thinking and creativity, and that promote cooperative learning and motivation. In addition, they will learn technology integration strategies. To highlight method similarities and differences and to link theory to practice in each area, scientifically researched strategies and programs will be illustrated through hands-on activities. There is much experimentation and risk-taking in this class. Everyone will learn dozens of instructional strategies; but, more importantly, they will reflect on their overall teaching philosophy.

Course History and Intended Audience:
Educators in all sectors are struggling with wave after wave of educational change. Many recognize the need for shifting their teaching philosophy to a more learner-centered or hands-on approach. This trend is especially evident here in 2024; the age of STEM, competency-based education, personalized instruction, problem-based learning, digital learning, Wikipedia, TED-Ed, and MOOCs. Today, learners can be more self-directed. However, learners often lack sufficient time and resources. In response, this course provides a roadmap for those stuck in the murky swamp of paradigm change and educational reform. Different versions of this course have been taught since 1991, with videoconferencing added in 1996 and a HyFlex/blended approach in an experimental classroom in 2021. Only once before, in 2009, has it been delivered in a fully online format. Past course participants have also included graduate students, corporate trainers, instructional designers, administrators, private consultants, award-winning Fulbright scholars, etc. This course is intended for:

- Graduate students wanting to feel better prepared to teach, train, or learn something new.
- Corporate trainers trying to embed practical strategies into their training workshops and classes.
- Higher education professors seeking to enhance their instruction with innovative teaching.
- Instructional designers interested in embedding thinking skills into software and other media.
- K-12 principals and other administrators hoping to integrate various educational reform efforts.
- Practicing teachers searching for professional development opportunities for engaging learners.
- Private consultants offering thinking skills or problem-solving workshops or training.
- Visiting scholars, Fulbright scholars, and other visiting guests who want to make a difference.
- Anyone wanting to teach with educational technology; especially, AI tools and platforms.

Required Material: Bonk, C. J. (2024). *Packet of Course Handouts*. (available **FREE as a PDF** in Dropbox)
Bonk, C. J., & Khoo, E. (2014). *Adding Some TEC-VARIETY: 100+ Activities for Motivating and Retaining Online Learners*. **Note: this is a FREE e-book:** http://tec-variety.com/; http://tec-variety.com/freestuff.php

Khoo, E., & Bonk, C. J. (2022). *Motivating and Supporting Online Learners*. Burnaby, BC, Canada:

Commonwealth of Learning. Free book available: http://hdl.handle.net/11599/4481 and free course available: https://colcommons.org/welcome/coursedetails/8; https://www.colvee.org/; EdTechBooks: https://edtechbooks.org/motivating_and_supporting_online_learners; DOI 10.59668/699

Highly Rec'd Texts:

1. Gary A. Davis (2004). *Creativity is Forever (5th Ed)*. Dubuque, Iowa: Kendall/Hunt.
2. Sawyer, Keith (2013). *Zig Zag: The Surprising Path to Greater Creativity*. Jossey-Bass.
3. Bonk, C. J., & Zhang, K. (2008). *Empowering Online Learning: 100+ Activities for R2D2*. Jossey-Bass.
4. Bonk, C. J., & Zhu, M. (Eds). (2022). *Transformative Teaching Around the World: Stories of Cultural Impact, Technology Integration, and Innovative Pedagogy*. Routledge.

Bonk Book Library: I have an extensive set of books that I can loan out to people near to Bloomington.

Course Purpose, Approach, and Education 3.0 (or perhaps even Education 4.0):

Since the early 1980s, countless reports have detailed the shift toward an information-based economy and the need for a more technologically sophisticated workforce. Life in 2024 is much different from 1984. The skills and experiences required to succeed today are vastly different from three decades ago. A modern-day workforce clearly demands skills such as creativity, flexibility in thought, the ability to make decisions based upon incomplete information, complex pattern recognition abilities, and synthesis skills. Such changes are occurring faster than most organizations and institutions can adapt. They are also accelerating massive transformations in teaching and learning environments across sectors of education.

In response to the emerging global marketplace, there has been a renewed interest in innovation and creativity. It does not matter if one is in a public school or higher education setting or in a military and corporate training environment. The shift in perspective is the same. Everyone is seeking the Holy Grail and hoping to become more inventive and productive than the next person or organization. Some are labeling this new age "Education 3.0." The markers of this time are tinkering, making things, invention, connection, freedom, imagination, play, collaboration, engagement, passion and purpose, finding meaning, and the open exchange of ideas. Consequently, this class will begin with a dialogue of what Education 3.0 represents. Each student will find his or her own sense of meaning or philosophy in this course.

In Education 3.0, people will no longer tolerate a curriculum that emphasizes the rote memorization of facts over problem solving and creativity. Instead, innovative instructors and trainers engage learners with more authentic and active learning experiences. Even with such renewed interest and resources, most teachers still lack the time and resources to adequately deal with the proliferation of instructional practices and associated ideas regarding educational change. This course—R546 on instructional strategies—can change all that for you. The basic purpose of this course, therefore, is to attempt to fuse motivation and cooperative learning into thinking skill areas such as critical and creative thinking.

The books and activities selected will enable us to understand coinciding trends in education related to creative thinking, critical thinking, motivation, and cooperative learning. In starting on this path, specific techniques and ideas will be offered as well as implementation steps. Demonstrations and hands-on experiences of various methods will be used to highlight method similarities and differences. In addition, students will be exposed to ways to use technology to increase student thinking skills and teamwork. Finally, advice will be offered for getting started using these alternative instructional strategies.

Course Objectives:

As a result of this course, participants will:

- Understand the commonalities and differences of creative and critical thinking.

- Feel comfortable using dozens of motivational strategies and instructional techniques.
- List thinking skill options for different types of learners and content areas.
- Design innovative thinking skill activities as well as unique cooperative learning methods.
- Develop a personal synthesis and perspective on instructional strategies and pedagogy.
- Repeat all the above objectives in a technology-enhanced, blended, or online environment, including the use of generative AI technology platforms.

During the course, enrolled students will be expected to:

- Complete the required readings and actively participate in course activities.
- Write and reflect on the subject matter.
- Search for and share additional resources beyond the course materials provided.
- Develop and share curriculum materials and course plans.

Weekly Modules and Course Sequence

Week 1. Aug 31 **Education 3.0 and Strategy Review/Recap (R2D2, EC-VARIETY, AI Pedagogy)**
Week 2. Sept 7 **Coop Learning Methods/Principles & Flipping the Class** (Read a creativity book)
Week 3. Sept 14 **Critical Thinking Defined and Explained** (Continue reading creativity book)
Week 4. Sept 21 **Critical Thinking Methods** (Read 2nd book) (**Due:** 2 papers from Task #2)
Week 5. Sept 22 **Creative Thinking Defined and Explained** (take pics during the week of creativity)
Week 6. Sept 28 **Creative Thinking Methods** (Share pics of you being creative in the prior week)
Week 7. Oct 12 **Motivation Defined and Explained** (Read third book or a special journal issue)
Week 8. Oct 19 **Motivation Theory and Techniques** (**Due:** Final papers and Presentations)

Note #1 on Readings: During Weeks 1-3, I want everyone to read a creativity book. I recommend Keith Sawyer's Zig Zag book or Gary Davis' *Creativity is Forever* book (buy used). During Weeks 4-7, students are to read two 2 additional books or one book and one special journal issue related to this class. I want you to read books on critical thinking, creativity, cooperative learning, motivation, or problem-solving. For doctoral students, at least one of these books or special journal issues should be research-based or research grounded. Some recommended books are listed below. I will bring these and many more to the optional synchronous sessions for display.

Note #2 on Collaboration and Teaming on Assignments: Students are allowed to work in teams on any paper or project but the length of such papers or presentations are, in effect, longer.

Note #3 on Lateness Policy: Assignments have a 72 hour (i.e., 3 day) grace period with no penalty.
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Grades and Due Date:

Task	Grades	Due date
Active Participation or Course Reflection Paper	60	Due each week or October 19
Reflection and Personal Exploration Activity1	40	Sep 21 (+3 days grace)
Reflection and Personal Exploration Activity2	40	Sep. 21 (+3 days grace)
Reflection and Personal Exploration Activity3	40	Oct. 19 (+3 days grace)
Final project	60	Oct. 19 (+3 days grace)
Total Points	**240**	

Grading Scale: I will use a 90-80-70-60 scale based on 240 total points.

240 = Total Points
225 pts = A
216 = A-
207 = B+
200 = B
192 = B-
183 = C+
176 = C
168 = C-

Sample of Course Related Books:

Creativity, Thinking, Instructional Strategies, and Innovation Books

1. Bergin, Doris, Lee, Lena et al. (2020). *Enhancing brain development in infants & young children*.
2. Catmull, Ed (2014). *Creativity, Inc.: Overcoming Unseen Forces*. Random House.
3. de Bono, E. (2004). *How to have a beautiful mind*. Vermillion. (or *Lateral Thinking* from 1990).
4. Dweck, Carol (2006). *Mindset: The New Psychology of Success*. Random House.
5. Grant, Adam (2016). *Originals: How Non-Conformists Move the World*. Viking.
6. Gronseth, Susie & Dalton, Betsy (2020). Universal Access Thru Inclusive ID: UDL, Routledge.
7. Kaufman, S. B. & Gregoire, C. (2015). *Wired to Create: Unraveling Mysteries of Creative Mind*.
8. Lehmann, Chris, & Chase, Z. (2015). *Building School 2.0*: *How to Create the Schools We Need*.
9. Magiera, Jennie (2017). *Courageous Adventures: Navigating Obstacles to Innovation*. Corwin.
10. Martinez & Stager (2013). *Invent to Learn: Making, Tinkering, & Engineering in the Classroom*.
11. McLagan, Patricia (2017). *Unstoppable You: Adopt the New Learning 4.0 Mindset*. ATD Press.
12. Michalko, M. (2006). *Tinkertoys: A handbook of creative-think tech* (2nd ed). Ten Speed Press.
13. Pink, Daniel (2009). *Drive: The Surprising Truth About What Motivates Us*. Riverhead Books.
14. Robinson, Sir Ken (2013). *Finding Your Element: How to Discover Your Talents and Passions*.
15. Robinson, Sir Ken (2015). *Creative Schools: The Grassroots Revolution That's Transforming Ed.*
16. Sawyer, Keith (2013). *Zig Zag: The Surprising Path to Greater Creativity*. Jossey-Bass.
17. Tucker, Caitlin (2020). *Balance with Blended Learning: Partner with Your Students…* Corwin.
18. von Oech, Roger (2002). *Expect the unexpected (or you won't find it)*. Berrett-Koehler Pub.
19. Wagner, T. (2012). *Creating Innovators: Making of Young People Who Change World*. Scribner.
20. Wagner, T. & Dintersmith, T. (2015). *Most Likely to Succeed: Preparing Kids Innovation Era*.

Motivation and Adult Learning Books:

1. Anderson, Gina (2021). *Teaching Without a Degree: Luma Learning Lessons*. Luma.
2. Baumeister, R. & Tierney, J. (2011). *Willpower: Rediscovering Greatest Human Strength*. Penguin
3. Barkley, Cross, & Major (2005). *Collab lrng tech: A Handbook for College Faculty*. Jossey-Bass.
4. Brookfield S. (2012). *Teaching for Critical Thinking: Tools/Tech to Help Students Q Assumptions*.
5. Brookfield, S. (2013). *Powerful Techniques for Teaching Adults*. Jossey-Bass/Wiley.
6. Dabbaugh, Marra, & Howland (2019). Meaningful Online Learning: Integ. Strats. NY: Routledge.
7. Ferlazzo, Larry (2013). *Self-Driven Learning: Strategies for Student Motivation*.
8. Major, Harris, & Zakrajsek (2016). *Teaching for Learning: 101 Designed Ed Activities*. Routledge
9. McCombs, B. L., & Pope, J. E. (1994). *Motivating hard to reach students*. DC: APA.
10. Reeve, J. (1996). *Motivating others: Nurturing inner motivational resources.* Allyn and Bacon.
11. Salmon, G. (2013). *e-tivities: The key to active online learning (2nd Ed)*. London: Kogan-Page.
12. Sharples, M. (2019). *Practical Pedagogy: 40 new ways to teach and learn*. NY: Routledge.

Big Picture Books

1. Eyler, Joshua (2018). How Humans Learn: Science and Stories Behind Effective College Tchg.
2. Kirschner, Paul & Hendrick, Carl (2020). *How Learning Works*. Routledge.
3. Palmer, Parker (2007). *The Courage to Teach: Exploring a Teachers Life*. Jossey-Bass
4. Perkins, David (2009). *Making Learning Whole: How 7 Principles of Tchg Transform Ed*.
5. Zhao, Yong and friends (2019). *Education is a Terrible Thing to Waste*, Teachers College Press.

Class Tasks: (I) Active Involvement; (II) Reflection and Personal Exploration Activities; and (III) Final Project

Task #I. Active Participation or Reflection Paper (60 points). Demonstrations of strategies, sharing resources and ideas, participation in optional and recorded synchronous Zoom sessions on Saturday mornings (except for September 22 which is a Sunday) (**optional**), questions via email, etc.

Those attending most of 6 of the 8 synchronous Zoom sessions will automatically receive all 60 points. Those attending 5 zoom sessions must write a 2 page single spaced reflection paper on the recordings, class activities, handouts, etc. Those attending 4 zoom sessions must write a 3 page single spaced reflection paper on the recordings, class activities, handouts, etc. Those attending 3 zoom sessions must write a 4 page single spaced reflection paper on the recordings, class activities, handouts, etc. Those attending less than 3 zoom sessions must write a 5 page single spaced reflection paper on the recordings, class activities, handouts, etc.

Task #II. Reflection and Personal Exploration Activity Options (90 Points--Pick any 3; see grading rubric in Dropbox):
Note: Two of these tasks are due September 21 (Week 4 meeting) and the other one is due October 19 (Week 8 meeting). Examples of these tasks can be found in Dropbox or at the Bobweb Web site. These tasks have been designed for you to go deeper into a theory, theorist, topic, concept, strategic approach, or issue. I want you to become a budding expert on some aspects of this course. Grace period (72 hours). **Note:** newer task ideas are in **red** below. If you try one or more of them, please give me feedback on improving, enhancing, expanding, or integrating them.

Option A. Curriculum Brainstorm (40 points)
In this option, I want you to spend 1-3 hours all alone brainstorming (perhaps in a closet with a flashlight) all the possible ways you could use critical and creative thinking and motivational techniques and cooperative learning in your job setting (page 1); or, how AI tools might generate pedagogy to help you teach utilizing those instructional strategies. After attending a few classes, you will spend more time personally ranking these ideas and reconfiguring your original 3-4 lists. For example, you might sort your ideas into categories or prioritizations that are useful to you this coming year (page 2). Next, I want you to reflect and jot down notes on this list and how it changed (page 3—single-spaced). You can find examples in Dropbox of high quality curriculum brainstorm tasks from prior years. I will give feedback on this 3-4-page assignment related to your (1) creative, originality, and insightful ideas, (2) coherent and complete reflection, (3) practical relevance to this class and your future, and (4) impact and related matters.

Option B. Super Thought Paper (40 points)
The exploratory thought paper allows you to summarize some of the thinking you have been doing as a result of this class or book that you have been reading related to this class. Your super thought piece or book review will be a 2-4 page (single-spaced) exploration and explanation of a thinking skill, motivational strategy, or cooperative learning technique or idea that you have been contemplating or reading about or perhaps how Generative AI can be used in any of these forms of teaching or in an

innovative pedagogical way. This is not mindless idea doodling, but, instead, is a way to coherently explore something that "inspires" you at a deep level. Your Super Thought Paper will be assessed for: (1) insightfulness, originality, and creativity, (2) impact, (3) strong logic, flow, and coherence, and (4) completeness and depth of thought.

Option C. Education 3.0 Philosophy Paper (40 points)
In this option, you are to define what Education 3.0 means to you. Please back up your claims with 5-10 references. I also want you to describe your teaching or instructional philosophy. What instructional principles and guidelines do you view as vital? What does an effective learning environment look like in light of this class? Stated another way, what have you learned in this class that has altered or perhaps transformed your philosophy of teaching? Perhaps it entails an emphasis on flipping the classroom? Or perhaps it is allowing learners more time for exploration and creativity. Be sure to list at least ten guiding principles and describe how at least 4 of them would be operationalized. Be sure to turn in a 2-4 page single-spaced paper. These educational philosophy papers will be assessed for: (1) insightfulness, originality, and creativity, (2) relevance, practicality, and potential impact, (3) strong logic, flow, and coherence, and (4) completeness and depth of thought.

Option D. Expert or Scholar Review (40 points)
Sometimes an instructional approach or thinking program is synonymous with the inventor or creator of that program. In this option, I want you to review the work of a scholar in this field. For instance, you might read about the person who invented a popular instructional technique or series of techniques or who authored a famous book, such as Sir Ken Robinson, Edward De Bono, or David or Roger Johnson from the Cooperative Learning Center. You might send that person (or someone who has developed similar programs or strategies) a letter asking for additional information. For instance, you might want to see what else exists on a topic, find out how teachers are using a thinking skill program, write to competing researchers for research reports, or something similar. It is the exploratory, inquisitive nature of the task that is prized here, not what you actually do. In addition to orally reporting what you found out, you must turn in a 2-4 page single-spaced summary of the work of this person. Be sure to include what you did, why you chose this activity, what you gained from it, any resources received, and a copy of your letter(s). You might place an appendix in the paper outlining that person's life. Your expert review will be assessed for: (1) insightfulness, originality, exploration, and creativity, (2) relevance, practicality, and potential impact, (3) strong logic, flow, and coherence, and (4) completeness and depth of thought.

Option E. Award-Winning Teacher, Fulbright Teacher, Visiting Scholar Interview(s) (40 points)
In this option, I want you to interview one or more award-winning teachers, Fulbright teacher participants from previous years in R546 (as Dr. Bonk for a list of names and emails), or current visiting scholars in this class this year. Ask them how the ideas of this class are carried out in their country, region of the world, or classroom. Just how are they using or planning to use creative thinking, critical thinking, cooperative learning, motivation, and/or technology integration (including generative AI like ChatGPT) when they return home or how have they incorporated them already? Ask the visiting scholar(s), expert teacher(s), or Fulbright visitor(s) some questions about what they are learning in this course. How can their use of these approaches be improved? How might they use the ideas of this class in their own classes? How do the respective ideas of this course link together? What is especially beneficial or intriguing about this course? In your 2-4 page single spaced paper, you are to summarize what you found out. You might also make some recommendations to the expert. Your interview review will be assessed for: (1) insightfulness, originality, and creativity, (2) relevance, practicality, and potential impact, (3) strong logic, flow, and coherence, and (4) completeness and depth of thought. You might include an appendix with the transcript of an interview that you conduct as well as your interview questions. You also might share your paper with the expert teacher. If you do, please include their response and feedback as an appendix for 2 bonus points.

Option F. Book or Special Journal Issue Review (40 points)
Review a book or special issue of a journal related to this class (including one of the books you decide to read). It can be a book or special issue that is practical, research-oriented, or theoretical. What are the key points or findings of the book or issue? What are the strengths and weaknesses? What are future trends? How will you apply some of the ideas from this book? You might decide to compare and contrast two books. An option of this would be to write a rebuttal to an existing review or critique as if you were the author. You should turn in a 2-4 page single-spaced review. Your book or special journal issue review will be assessed for: (1) insightfulness, originality, and creativity, (2) relevance, practicality, and potential impact, (3) strong logic, flow, and coherence, and (4) completeness and depth of thought. If you do a book review and publish it or post a piece of it to Amazon and share the link with me, you can gain 2 bonus points.

Option G. R546 "Making Impact" Book Review (40 points)
Dr. Meina Zhu and I have an edited book published in 2022 with Routledge that has chapters written by previous students of the R546 class. This book was going to be called "Making Impact." The publisher changed the title to: ***Transformative Teaching Around the World: Stories of Cultural Impact, Technology Integration, and Innovative Pedagogy***. There are around 40-45 short stories (1,000 to 3,000 words) written by award-winning Fulbright teachers and former IU students around the globe who have enrolled in my R546 course on instructional strategies for critical and creative thinking, collaboration, motivation, and technology integration. Most are now back in their countries. Readers of this book will hear stories from outstanding teachers in 22 countries such as Mexico, India, Morocco, mainland China and Taiwan, Bhutan, Papua New Guinea, Thailand, Cyprus, Singapore, Finland, Botswana, New Zealand, Yemen, Saudi Arabia, Yemen, Rwanda, Costa Rica, Kazakhstan, Israel, Uzbekistan, Korea, and the USA. These authors tell emotional, educationally powerful, and highly impactful stories of transformative changes in their classrooms, communities, and countries. Many of their stories relate to the use of innovative technology during the pandemic as well as global technologies for international exchanges and collaboration among K-12 students in different countries. What are the strengths and weaknesses? What are future trends? How will you apply some of the ideas from this book? In this option, you are to write a 2-4 page single-spaced summary of this book. If you do a book review and publish it or post a piece of it to Amazon and share the link with me, you can gain 2 bonus points. Be brave. Be bold. Be innovative! Your book review will be assessed for: (1) insightfulness, originality, and creativity, (2) relevance, practicality, and potential impact, (3) strong logic, flow, and coherence, and (4) completeness and depth of thought.

Option H. One Super Summary Search (40 points)
In the Super Summary Search, you might conduct a library search (preferably online) on a topic within motivation, critical thinking, creative thinking, cooperative learning, or pedagogy related to technology integration (including generative AI) that you find important (this must include at least 10 articles (for doctoral students, at least half of these must be research-based articles). For instance, you might be interested in cooperative learning in K-12 classrooms; or, more specifically, cooperative learning in environmental science classrooms. If that is your topic, you would search through the research and practice literature on this topic (let's say for the past 3-5 years) and then create a personal bibliography on this topic for your later use. I would like you to categorize the articles somehow (e.g., according to research or practice, task, age-groups, domain, time required, etc.). In addition, I would like for you to write a one paragraph summary for about 3-5 of these articles, wherein you summarize the article and discuss its importance to the field and to yourself and your colleagues. You will turn in the following items to me: (1) bibliography of the articles found listed in important categories/topics and (2) 4-5 brief summary abstracts. I will look for the following in your work: 1. completeness and depth, 2. impactfulness of the project, (3) insight and relevancy to class and topic selected, and 4. coherent analysis and categorization. Unless I ask, I do not need copies of any of the articles you select though you might include the first pages of every

article.

Option I. Research Dig (40 points)
Unlike the Super Summary Search which also includes practical articles, in this option, you are to canvass the research literature on a topic related to this class. Perhaps this will lead to a dissertation, master's theses, or research project. You must find at least 15 articles on a topic and read at least half of them. In your paper, you should describe how you found your articles and essentially describe the state of the research? What are the general findings? What are the strengths and weaknesses or limitations? Where are the open issues, questions, or gaps on this topic and how might you research this area? What are future trends? Also, how will you apply some of the ideas from this work? You should turn in a 2-4 page single-spaced review. This will be evaluated for (1) logic and organization, (2) completeness/depth, (3) originality and insight, and (4) relevance and practicality.

Option J. Program or Strategy Review (40 points)
Find a method for teaching thinking skills, cooperative learning, or motivation, or a problem-solving program or other heavily researched methods (e.g., reciprocal teaching, cooperative scripts, etc.) and review or synthesize that approach and its applicability to learners who you currently or someday might teach. What flaws or limitations are apparent? What are the strengths or potential uses of the program? You might ask a teacher how he or she would actually use it in the classroom. You also might investigate the literature related to generative AI related to one or two of these topics. You are to turn in a 2-4 page single-spaced review of this program or approach. These papers will be graded for (1) relevance, logic, and organization, (2) completeness and depth, (3) originality and insight, and (4) impact and practicality.

Option K. Job Application Paper (40 Points)
Here, you are to write a 3 page single-spaced paper where you evaluate one or more perspectives, strategies, or approaches from the perspective of an educational setting, issue, or problem of importance to you (preferably your current or past job). For example, the paper might be titled, "My life as a cooperative learning teacher in a competitive classroom." Or… "How generative AI might augment teacher pedagogical skills and experimentations. Like all good papers, it should have a descriptive title, some kind of thesis statement, and a conclusion. Since this is not a library research paper, you do not necessarily need to use any reference resources other than the text and class discussion. These papers will be graded for (1) demonstration of understanding of the idea or strategy, (2) relevant application of it to some educational setting or context and impact, (3) insights and creativity, (4) coherence, organization, and completeness.

Option L Case Situations or Problems (40 Points)
Write 3 case situations or vignettes related to your current or most recent job setting (each will be about one page long single-spaced). In these cases, you will point out the situation or problem in 1-2 paragraphs as well as the key questions or issues. Next, you will detail the concepts that relate to this class. Finally, you will provide a resolution based on your course readings. If anyone shares their cases with co-workers or peers and gets feedback on them, you will get 2 bonus points provided you attach this to your work. Your paper will be graded for: (1) sound solution and overall demonstration of understanding of idea, strategy, perspective, or approach, (2) case richness/detail, (3) coherence and organization of the paper, and (4) relevance, practicality, and potential impact.

AI Option: Adventurous students might ask ChatGPT to solve their cases. If you do this, please reflect on the solution(s) that ChatGPT or some other platform provided. You will get 2 bonus points for asking a generative platform or system for their solution. And you could ask two or three different platforms (e.g., ChatGPT, Claude, Microsoft Copilot, Gemini, etc.) and compare them.

Option M. Action Plan to Make Impact (40 Points)

I want you to operationalize your thinking and learning in this class so that you can make an impact in your teaching, training, or in society at learn. What are your plans and next steps? What are you going to commit to? Will you create special activities, courses, programs, and curricula or a whole new type of school or university? Just where and how do you hope to make an impact with the R546 content. If possible, think big. Be bold. Be creative. Please share this with at least one colleague, friend, or family member and include their response or feedback in an appendix (worth 2 bonus points). You should turn in a 2-4 page single-spaced review. This will be evaluated for (1) logic and organization, (2) completeness/depth, (3) originality and insight, and (4) relevance and practicality.

Option N. Instructional Strategy Comparison to Make Impact (40 Points)
You might compare yourself to the ideas, stories, or teaching philosophies from 3-4 of the authors in the new book: ***Transformative Teaching Around the World: Stories of Cultural Impact, Technology Integration, and Innovative Pedagogy***. In what ways is your approach similar and different? Have you attempted similar instructional strategies in your classroom? Please share this with at least one colleague, friend, or family member and include their response or feedback in an appendix (worth 2 bonus points). You should turn in a 2-4 page single-spaced review. This will be evaluated for (1) logic and organization, (2) completeness/depth, (3) originality and insight, and (4) relevance and practicality.

Option O. Technology Integration Pedagogies Action Plan (including AI in Education) (40 Points)
In this option, I want you to create a Technology Integration Pedagogies Action Plan (TIPAN) for integrating technology in instruction (including AI tools, resources, and ideas) for the next 1-2 years. In your TIPAN, you could briefly detail each instructional strategy, the intended content area, the most applicable grade(s) or age level(s), and the context or setting of use. With your 2-4 page paper and list of strategies and you might create a visual overview such as a timeline for implementation or overriding model or framework that guided your ideas. This plan could be designed for yourself or for others in your current or intended workplace. Please be specific where possible. Your paper will be assessed for: (1) insightfulness, originality, and creativity, (2) relevance, practicality, and potential impact, (3) strong logic, flow, and coherence, and (4) completeness and depth of thought.

Option P. Combination or Extension of Above Options (Note: needs approval) (40 Points)
In this option, you can combine 2 or more of the above options (e.g., a book review and author/expert interview). Please run your combination idea by the instructor first. You might also suggest extending one of the options in a new direction (e.g., a book review or expert interview that you attempt to publish).

Task #III. Final Project Options (Pick one—Due October 19):

Master's students I recommend Option A, E, or F below (red = a new task option).

Option A. Presentation/Description of Curriculum Unit or Idea (60 points: this can be team taught)
For master's students, the key class assignment here is the development of a curriculum idea or unit on critical or creative thinking, motivation, or cooperative learning for a content area that you teach or would like to teach someday. Here, I want you to specify the materials to be learned/studied, targeted age group, learning objectives, instructional plan, time length, method(s) used and procedures, and anticipated assessment procedures (about 4-5 single spaced pages total). Note that the topic of this unit or lesson is up to you. I would ask that you present your curriculum ideas to the class with at least one class handout so that we all benefit from your efforts; the normal time allotment is 8-10 minutes for individuals and 15-20 minutes for teams. During your presentation, you can be as creative as you want to be.

Grading criteria for your curriculum unit presentation and paper include:

1. Organization of the ideas and presentation (logic, flow, length, practiced).
2. Topic stimulation (active engagement of audience).

3. Usefulness of materials (clear, practical, handy, relevant, informative, handout(s) provided).
4. Knowledge of the topic (expertise, good ideas, insights).
5. Scope of plans & curriculum impact (goals clear, important, appropriate, significant, doable).
6. Uniqueness (creative spark, catches attention, has chance to explode, something different).

Typically, presenters are provided with immediate feedback from other students as well as from me. I have collected tons of examples from previous years to share with you--see Dropbox or the Bobweb Web site for some of these previous units. For many students, this assignment is typically the highlight of the course.

Option B. Research Proposal on Instructional Strategies or R546 Content (60 points)
Doctoral students might focus more on research ideas and select Option B. For instance, you might conduct a pilot test of an instructional approach. Alternatively, you might observe and code the teaching techniques used by one instructor or a series of instructors. Or, you might observe a student "think aloud" as he uses a learning strategy or technique. Instead of that, you might perform action research in a course that you are teaching. For instance, you might try out cooperative learning, or, more specifically, a cooperative reading technique like reciprocal teaching or cooperative scripts. Alternatively, you might investigate how AI-based pedagogical activities are being implemented in your organization or institution. Please turn in a maximum of 10 single-spaced pages, exclusive of references, appendices, chats, and tables. The research proposal should include a title page, introduction, review of the literature, method section, results and discussion (optional), and references.

Option C. Grant Proposal Related to R546 Content (60 points)
Perhaps you are working for a center that needs grant money. Here is a chance to help out. After thoroughly reading a topic area related to R546 in some way, draft a proposal for a grant to a government agency or a foundation. You (and your boss) choose the funding agency, title, and monies needed. Include the purpose and goals, ideas, timeline for the project, ramifications or implications, budget, and other items required in the grant. An extensive literature review with associated research questions should ground your proposal. Please turn in a maximum of 10 single-spaced pages, exclusive of references, appendices, charts, and tables.

Option D. Teaching and Learning Center (or similar) Creation Proposal (60 points)
Write a proposal to create a teaching and learning center with a focus in an area wherein you are interested. This proposal must be related to R546 content where possible and should include strategies and ideas for critical or creative thinking, cooperative/collaborative learning, motivation, or technology integration or AI in education pedagogy. Start with a rationale for the center. Names and ideas related to specific R546 instructional strategies must be highlighted. These proposals can be internally written such as to a university or school district or externally written such as to a government agency or foundation. Include a rationale and purpose for center in your proposal as well as goals or targeted plans, strategies that you hope to implement (very important) and how you might train for them, a timeline, a budget, stakeholders, space needed, resource needs, etc. Please turn in a maximum of 10 single-spaced pages, exclusive of references, appendices, charts, figures, and tables. Be specific, practical, unique, and inspiring in your design. This is a particularly hard option to provide specifics. Be careful. A general overview will **not** suffice. If you select it, please be creative!

Option E. Make Your Own "Making Impact" Book (60 points)
Dr. Meina Zhu and I edited a book in 2022 published by Routledge based on this class with around 40 former R546 students with 1,000 to 3,000 word stories. This book of personal stories of teaching is intended to show how these former students are making an impact in their countries based on ideas that they learned in this course. The book title is: ***Transformative Teaching Around the World: Stories of Cultural Impact, Technology Integration, and Innovative Pedagogy***. In this option, you are to create

your own edited book or personally authored book based on instructional strategies for critical and creative thinking, collaboration, motivation, and technology integration or AI pedagogy. I prefer it to be an open access book. You might want to use Pressbooks since that tool is free and open at IU. Note that you can also put your Pressbook link in your resume. For this assignment, you should have at least three chapters. In total, it should be a minimum of 5,000 words (not counting references and appendices). Include a 1-page single-spaced reflection paper on what you learned from this Pressbook or open textbook activity. Describe what you learned from the task including specific course concepts and ideas mentioned in your book. Feel free to collaborate on this task. Note: It is hard for me to anticipate the word count on this task. In effect, the 5,000 word minimum is a guide or suggestion; not a hard and fast rule.

Grading Scale from Options B, C, D, or E (Note 1 (low) to 10 (high) for each of the following criteria):

1. Review of the Problem, Issue, & Literature (interesting, relevant, current, organized, thorough)
2. Relevancy (linked to content of the course, connections to course, fulfills task expectations)
3. Implications/Future Directions (important, generalizability, options available, research focus)
4. Overall Richness of Ideas (richness of information, elaboration, originality, uniqueness)
5. Overall Coherence (clarity, unity, organization, logical sequence, synthesis, style)
6. Overall Completeness (adequate info presented, fulfills task, no gaps/holes, precise, valid pts)

Option F. Other: Student Determined Equivalent Related to R546 Content (Note: needs approval)
Note: In this task, you can do whatever you want related to this class. For instance, you might create a new course website, design an interactive online glossary, produce a super summary video of R546 course-related content, record a series of podcast shows, design a guidebook or series of tutorials of how to embed Generative AI into one's instruction (i.e., instructional strategies for critical and creative thinking and collaborative learning for AI in education), or craft some other useful product for this class. When done, you are to write a 1-2 page single spaced reflection paper about your project and what you learned from it. Grading criteria will depend on the project selected. I look forward to seeing your creative efforts. The sky is the limit!