

## TECH 904 - Collaboration and Problem-Solving Apps for Educators

### Independent Study Online Course Syllabus

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**Number of Graduate Semester Units:** 2  
**Target Audience:** K – 12<sup>th</sup> grade teachers  
**Course Access:** [ce-connect.fresno.edu](https://ce-connect.fresno.edu)

#### Course Description

Classroom Problem-Solving Apps for Educators is designed to fit the technology needs of classroom teachers and students. There is a continuous stream of new apps. Deciding which apps work best for YOUR classroom can be overwhelming. In this course, teachers and administrators will explore, research, and choose platforms that fit the needs of “their” unique classroom of students, not someone else’s. In a world where individualized learning is emphasized, a one-size fits all approach does not work. This class allows educators to focus on integration of applications and meaningful classroom learning. After all, technology is a tool, not a toy! Use technology as an opportunity to engage, encourage, and inspire learning. Take your classroom to the next level!

**Note:** There is no required textbook for this course.

#### Required Texts and Course Materials

**Textbook:** There is no textbook required for this course.

**Online Resources:** Relevant online resources that support the course content and encourage further investigation will be available throughout the course assignments. Active hyperlinks are utilized throughout the course and will link to the appropriate information when clicked. These include videos, podcasts, worksheets, online activities, journal articles and other resources.

**Moodle:** Moodle is a web-based course management system used to support flexible teaching and learning in both face-to-face and distance courses (e-learning).

[www.moodle.org](http://www.moodle.org) // [www.moodle.org/demo](http://www.moodle.org/demo) // <https://docs.moodle.org>

#### Course Dates

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

## National Standards Addressed in This Course

### National Teaching (NBPTS) Standards (<http://www.nbpts.org/five-core-propositions>)

First published in 1989 and updated in 2016, [\*What Teachers Should Know and Be Able to Do\*](#) articulates the National Board's Five Core Propositions for teaching. The Five Core Propositions - comparable to medicine's Hippocratic Oath — set forth the profession's vision for accomplished teaching. Together, the propositions form the basis of all National Board Standards and the foundation for National Board Certification. Course assignments have been designed so students can demonstrate excellence against these professional teaching standards whenever possible.

- Proposition 1: Teachers are committed to students and their learning
- Proposition 2: Teachers know the subject they teach and how to teach those subjects to students
- Proposition 3: Teachers are responsible for managing and monitoring student learning
- Proposition 4: Teachers think systematically about their practice and learn from experience
- Proposition 5: Teachers are members of learning communities

### International Society for Technology in Education (ISTE) Standards

(<http://www.iste.org/standards>)

1. Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.  
Educators:
2. Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.
3. Educators inspire students to positively contribute to and responsibly participate in the digital world.
4. Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.
5. Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.
6. Educators facilitate learning with technology to support student achievement of the ISTE Standards for Students.
7. Educators understand and use data to drive their instruction and support students in achieving their learning goals.

### Common Core State Standards (<http://corestandards.org>)

The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents 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.

College and Career Readiness Anchor Standards define what students should understand and be able to do by the end of each grade span.

Common Core Language Arts Standards addressed in this course include:

- Reading for Literature (RL): K-8, 9-10, and 11-12
- Reading for Information (RI): K-8, 9-10, and 11-12
- Writing (W): K-8, 9-10, and 11-12
- Speaking and Listening (SL): K-8, 9-10, and 11-12
- English Language Arts Standards (L): K-8, 9-10, and 11-12

### 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.

### Student Learning Outcomes (SLOs) for This Course

<b>Student Learning Outcomes for This Course</b> By the end of this course student will be able to:	<b>National Standards Addressed in This Course*</b>	<b>Continuing Education Program Student Learning Outcomes Addressed**</b>
1. Sign up for a targeted group of educational app accounts, and be able to utilize the platform for a variety of classroom functions.	<a href="#">NBPTS 1: ABCD</a>	CE 1
2. Build a continuous professional development rapport with other subject area educators throughout the world and reinforce productive relationships via collaboration and communication.	<a href="#">NBPTS 4</a>	CE 3
3. Develop blogs, video logs, review materials and other feedback loops to gain a deeper understanding of student needs with comprehension, attitude, understanding, and information collection.	<a href="#">NBPTS 4</a>	CE 4, 5

4. Create app. reviews and peer-led reviews and reflections.	<a href="#">NBPTS 2</a>	CE 2, 6
5. Re-evaluate classroom topics and introduce new subjects to students and peers.	<a href="#">NBPTS 1</a>	CE 2
6. Collaborate, utilize critical thinking, and problem solve.	<a href="#">NBPTS 1, 5</a>	CE 6

\* Please refer to the section on **National Standards Addressed in This Course**

\*\* Please refer to the section on **Continuing Education Program Student Learning Outcomes**

## Topics, Assignments, and Activities

Module Title	Module Assignments and Activities	Points Possible for Each Assignment
<b>Welcome Module</b>	<ul style="list-style-type: none"> <li>• Introduction video</li> <li>• Introduce yourself forum</li> <li>• Moodle online tutorial</li> <li>• Course syllabus</li> </ul>	
<b>Module 1 – Introduction to Problem-Solving Apps</b>	<ul style="list-style-type: none"> <li>• 1.1 - Selected Readings and Videos</li> <li>• 1.2 - Developing a List of Criteria</li> </ul>	5 points 10 points
<b>Module 2 – Reviewing Collaboration Apps</b>	<ul style="list-style-type: none"> <li>• Online collaboration reading and videos</li> <li>• Explore different Collaboration apps</li> <li>• 2.1 – Evaluating the Apps</li> <li>• 2.2 – Create an Action Plan</li> <li>• 2.3 – Defining App Choice Forum</li> </ul>	30 points 30 points 10 points
<b>Module 3 – Teaching w/ Collaboration Apps</b>	<ul style="list-style-type: none"> <li>• 3.1 - Create a Lesson Plan</li> <li>• 3.2 - Teach and Evaluate Effectiveness</li> </ul>	50 points 50 points
<b>Module 4 – Intro to Problem-Solving Strategies Apps</b>	<ul style="list-style-type: none"> <li>• Effective use of Problem-Solving Apps reading and videos</li> <li>• Explore problem-solving apps. Sign-up for a problem-solving app. and create content-based material for your students.</li> <li>• 4.1 – Defining what your students need.</li> <li>• 4.2 – Registration of Problem-Solving Apps</li> <li>• 4.3 – Defining App Choice Forum</li> </ul>	30 points 30 points 10 points
<b>Module 5 – Teaching with Problem-Solving Apps</b>	<ul style="list-style-type: none"> <li>• 5.1 - Create a Lesson Plan</li> <li>• 5.2 - Teach and Evaluate Effectiveness</li> <li>• 5.3 – Social Media or Email Share</li> </ul>	50 points 50 points 10 points

<b>Course Wrap-up: Grading and Evaluation</b>	<ul style="list-style-type: none"> <li>• Course Wrap-up</li> <li>• Final Reflection Forum</li> <li>• Course Evaluation</li> <li>• Grade Request</li> </ul>	
	<b>TOTAL POINTS</b>	<b>365 points</b>

## Grading Policies, Rubrics, and Requirements for Assignments

### Grading Policies and Rubrics

- Assignments will be graded per criteria presented in the course rubrics.
- A = 90-100% and B = 80-89%, (anything below 80% will not receive credit.)
- Students must earn a minimum of 80% to received credit for the assignment.
- The discernment between an A or a B is at the discretion of the instructor based on the quality of work submitted (see course rubrics).
- Coursework falling short of a quality equaling a B or a Credit Grade will be returned with further instructions.
- All assignments must be completed to receive a 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.

### Writing Requirements

- **Superior:** Writing is clear, succinct, and reflects graduate level expectations. Clearly addresses all parts of the writing task. Maintains a consistent point of view and organizational structure. Include relevant facts, details, and explanations.
- **Standard:** Writing is acceptable with very few mistakes in grammar and spelling. Addresses most parts of the writing task. Maintains a mostly consistent point of view and organizational structure. Include mostly relevant facts, details, and explanations.
- **Sub-standard:** Writing contains noticeable mistakes in grammar and spelling. Does not address all parts of the writing task. Lacks a consistent point of view and organization structure. May include marginally relevant facts, details, and explanations.

### Lesson Plan Requirements

- **Superior:** Instructional goals and objectives clearly stated. Instructional strategies appropriate for learning outcome(s). Method for assessing student learning and evaluating instruction is clearly delineated and authentic. All materials necessary for student and teacher to complete lesson clearly listed.
- **Standard:** Instructional goals and objectives are stated but are not easy to understand. Some instructional strategies are appropriate for learning outcome(s). Method for assessing student learning and evaluating instruction is present. Most materials necessary for student and teacher to complete lesson are listed.
- **Sub-standard:** Instructional goals and objectives are not stated. Learners cannot tell what is expected of them. Instructional strategies are missing or strategies used are inappropriate. Method for assessing student learning and evaluating instruction is missing. Materials necessary for student and teacher to complete lesson are missing.

### Discussion Forum Requirements

- **Superior:** Response was at least 1 page (3 fully developed paragraphs) in length. Thoroughly answered all the posed questions, followed all the assignment directions, proper grammar and

no spelling errors. Language is clear, concise, and easy to understand. Uses terminology appropriately and is logically organized.

- **Standard:** Response was ½ to 1 page in length (2-3 fully developed paragraphs). Answered all the questions but did not provide an in-depth analysis, followed most of the assignment directions, proper grammar and no spelling errors. Language is comprehensible, but there a few passages that are difficult to understand. The organization is generally good.
- **Sub-standard:** Response was less than ½ page in length (1 paragraph). Did not answer all the required questions and/or statements or responses were superficial, vague, or unclear, did not follow the assignment directions, many grammar and spelling errors. Is adequately written, but may use some terms incorrectly; may need to be read two or more times to be understood.

## **Instructor/Student Contact Information**

Throughout the course participants will be communicating with the instructor and their classmates on a regular basis using asynchronous discussion forums. A virtual office is utilized for class questions and students are provided with instructor contact information in the event they want to make email or phone contact. In addition, students are encouraged to email or phone the instructor at any time. Students will also receive feedback on the required assignments as they are submitted.

## **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.

## **Coursework Hours**

Based on the Carnegie Unit standard, a unit of graduate credit measures academic credit based on the number of hours the student is engaged in learning. This includes all time spent on the course: reading the textbook, watching videos, listening to audio lessons, researching topics, writing papers, creating projects, developing lesson plans, posting to discussion boards, etc. Coursework offered for FPU Continuing Education graduate credit adheres to 45 hours per semester unit for the 900-level courses. Therefore, a student will spend approximately 90 hours on a typical 2-unit course or 135 hours on a typical 3-unit course.

## **Services for Students with Disabilities**

Students with disabilities are eligible for reasonable accommodations in their academic work in all classes. In order to receive assistance, the student with a disability must provide the Academic Support Center with documentation, which describes the specific disability. The documentation must be from a qualified professional in the area of the disability (i.e. psychologist, physician or educational diagnostician). Students with disabilities should contact the Academic Support Center to discuss academic and other needs as soon as they are diagnosed with a disability. Once documentation is on file, arrangements for reasonable accommodations can be made. For more information and for downloadable forms, please go to <https://www.fresno.edu/students/academic-support/services-students-disabilities>.

## 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 per the procedures set forth in the Fresno Pacific University Catalogue - <https://www.fresno.edu/students/registrars-office/academic-catalogs>

## Technology Requirements

To successfully complete the course requirements, course participants will need Internet access, can 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. If 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. Moodle is easy to learn and has a friendly user interface. To learn more about Moodle, go to [https://docs.moodle.org/33/en/Student\\_FAQ](https://docs.moodle.org/33/en/Student_FAQ). There are also some student tutorials on the Center for Online Learning website at Fresno Pacific University - <https://col.fresno.edu/student>.

**Moodle Site Login and Passwords:** Students will need to have internet access to log onto <https://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 communication. If you need help with your username and password recovery, please contact the Continuing Education office at (800) 372-5505 or (559) 453-2000 during regular office hours - Mon-Fri 8:00 am to 5:00 pm. or email them at [prof.dev@fresno.edu](mailto:prof.dev@fresno.edu).

**Getting Help with Moodle:** If you need help with Moodle, please contact the Center for Online Learning (COL), by telephone or the website. Help by phone (559) 453-3460 is available Mon-Thurs 8:00 am to 8:00 pm and on Fridays from 8:00 am to 5:00 pm, or by filling out a "Request Services" form at <https://col.fresno.edu/contact/request-services>. Please identify that you are with the "School = Continuing Education".

## Final Course Grade and Transcripts

When all work for the course has been completed, students will need to logon to the Continuing Education website (<https://ce.fresno.edu/my-account>) and "Request Final Grade". Once the instructor receives the requests and submits the grade online, students may log back in to view their Final Grade Report or order transcripts online. Please allow at least two weeks for the final grade to be posted. For more information, see the Continuing Education Policies and Procedures at <https://ce.fresno.edu/ce-policies-and-procedures>.

## University Policies and Procedures

Students are responsible for becoming familiar with the information presented in the Academic Catalog and for knowing and observing all policies and procedures related to their participation in

the university community. A summary of university policies may be found on the university website at <https://www.fresno.edu/students/registrars-office/academic-catalogs>.

## Fresno Pacific University Student Learning Outcomes

<b>Student Learning Outcomes Oral Communication:</b> Students will <i>exhibit</i> clear, engaging, and confident oral communication – in both individual and group settings – and will critically <i>evaluate</i> content and delivery components.
<b>Written Communication:</b> Students will <i>demonstrate</i> proficient written communication by <i>articulating</i> a clear focus, <i>synthesizing</i> arguments, and utilizing standard formats in order to <i>inform</i> and <i>persuade</i> others.
<b>Content Knowledge:</b> Students will <i>demonstrate</i> comprehension of content-specific knowledge and the ability to apply it in theoretical, personal, professional, or societal contexts.
<b>Reflection:</b> Students will <i>reflect</i> on their personal and professional growth and <i>provide evidence</i> of how such reflection is utilized to manage personal and vocational improvement.
<b>Critical Thinking:</b> Students will <i>apply</i> critical thinking competencies by <i>generating</i> probing questions, <i>recognizing</i> underlying assumptions, <i>interpreting</i> and <i>evaluating</i> relevant information, and <i>applying</i> their understandings to new situations.
<b>Moral Reasoning:</b> Students will <i>identify</i> and <i>apply</i> moral reasoning and ethical decision-making skills, and <i>articulate</i> the norms and principles underlying a Christian world-view.
<b>Service:</b> Students will <i>demonstrate</i> service and reconciliation as a way of leadership.
<b>Cultural and Global Perspective:</b> Students will <i>identify</i> personal, cultural, and global perspectives and will employ these perspectives to <i>evaluate</i> complex systems.
<b>Quantitative Reasoning:</b> Students will accurately <i>compute</i> calculations and symbolic operations and <i>explain</i> their use in a field of study.
<b>Information Literacy:</b> Students will <i>identify</i> information needed in order to fully understand a topic or task, <i>explain</i> how that information is organized, <i>identify</i> the best sources of information for a given enquiry, <i>locate</i> and critically <i>evaluate</i> sources, and accurately and effectively <i>share</i> that information.