Professional Development Institute

Flex Course Syllabus

Digital Projects that Inspire and Support Student Learning (K-12)

PDI Course Number: 148T02

UCSD Course Number: EDUC42586

If you would like information about receiving post-baccalaureate (graduate) credit for completing this course, please click here.

Course Timeline

Participants have one year to complete the course. Participants must spend a minimum of three weeks in this course.

Course Description

Does using technology for class projects excite you? Would you like to learn how to design dynamic, content-focused technology projects that engage and inspire students? This online course is designed to help K-12 teachers design authentic, multimedia digital projects to showcase students' learning. The course starts with a discussion on shifting the focus from students consuming knowledge to being producers of knowledge by leveraging technology to enhance learning. Teachers will dive into the Four Cs of 21st Century Learning to foster students' critical thinking skills as well as explore how the backward design method can aid in designing student projects that align with content standards. The course presents three frameworks for teachers to follow for designing projects that require students to use various thinking skills, engage in inquiry and application to deepen their understanding of content, and apply their learning in an authentic and meaningful context. Supporting students as they complete challenging projects is important, so instructional and differentiating strategies are provided to help teachers guide students through their projects. Teachers also gain their own hands-on experience with various digital tools that students can use to create digital content, including eBooks, comic books, infographics, podcasts, videos, websites, apps, and virtual experiences. Additionally, teachers are introduced to artificial intelligence tools that students can

use to support their learning. By the end of this course, teachers will have the confidence and skills to design engaging digital projects that inspire and support students' learning.

Educational Outcomes

1. Teachers will learn the definition of transfer of learning.
2. Teachers will learn the characteristics of transfer goals and how they can be used to teach and assess students in a way that promotes the transfer of learning.
3. Teachers will learn about the Framework for 21st Century Learning to engage students in higher-order thinking skills.
4. Teachers will learn about Understanding by Design® and how the framework allows students to create digital content that also aligns with content standards.
5. Teachers will learn three frameworks (Depth of Knowledge, Facets of Understanding, and GRASPS) to design authentic and rigorous digital projects.
6. Teachers will learn several criterion-based evaluation tools (criterion performance list, holistic rubric, and analytical rubric) to evaluate student products/performances.
7. Teachers will learn the definitions of copyright, fair use, and creative commons.
8. Teachers will learn how to locate Creative Commons work and properly attribute Creative Commons materials.
9. Teachers will learn various methods to prepare and support students as they embark on a class project.
10. Teachers will learn how students can create eBooks using WriteReader and Adobe Express as well as explore several primary and secondary eBook project ideas.
11. Teachers will learn how students can use Book Creator, StoryboardThat, and Canva for Education to create comic books.
12. Teachers will be introduced to several types of infographics and how students can create them using Adobe Express, Canva for Education, and Piktochart.
13. Teachers will be introduced to a simple podcast-creation process and learn how to create podcasts using Spotify for Podcasters and Audacity.
14. Teachers will learn how students can create content-focused video projects using ChatterPix Kids, Stop Motion Studios, and Clipchamp.
15. Teachers will understand that different types of explainer videos exist and how students can use Screencastify, Canva for Education, and Powtoons to create explainer videos.
16. Teachers will learn how Wix and Google Sites can be used to create a website to demonstrate student learning.
17. Teachers will understand the different stages of building an app and learn how students can build an app without any coding knowledge using Glide apps.
18. Teachers will learn how students can use 360Schools to create virtual field trips and CoSpacesEDU to design virtual experiences.
19. Teachers will learn the definition of artificial intelligence and explore how students can use ChatGPT, Image Creator from Designer, and Hello History to brainstorm and support their class projects.
20. Teachers will learn how students can use online tools to create Jackson Pollock-style, pixel, collage, and pop art.
21. Teachers will explore digital tools students can use to make music, including Chrome Music Lab, Incredibox, and BandLab for Education.

Instructional Media

- Online Discussions
- Online Engagement
- Online Collaboration
- Instructor Feedback
- Instructor Interaction
- Online Resources and Websites
- Supplemental Instructional Materials
- Printable Classroom Resources

Evaluation

- Test #1 (5% of final grade)
- Test #2 (5% of final grade)
- Test #3 (5% of final grade)
- Test #4 (5% of final grade)
- Test #5 (5% of final grade)
- Autobiography and Goals for the Course (10% of final grade)
- Article/Video Reflection (15% of final grade)
- Course Collaboration/Share Ideas with the Class (10% of final grade)
- Design an Authentic Project (20% of final grade)
- Culminating Practicum (20% of final grade)

Topical Outline

Unit One

- Promoting the Transfer of Learning with Technology Projects
- Students as Digital Content Creators
- Frameworks for Designing Authentic Projects
- **Assignment #1**
  Write an autobiography including information about yourself, your grade level and what you specifically hope to learn about designing content-focused digital projects to enhance students' learning. Your autobiography should be a minimum of three paragraphs.
- **Test #1**

Unit Two

- Evaluating Technology Projects
- Copyright, Fair Use, and Creative Commons

- Supporting Students as They Take on Technology Projects
- **Assignment #2**
  As an educator, it is important to be aware of the research, studies, and professional work done in the field. In the course, you will find an article and video that are relevant to the specific course content. Read the article and then write an essay with your thoughts.
- **Test #2**

Unit Three

- Ebooks
- Comic Books
- Infographics
- **Assignment #3**
  Online Discussion Board Participation/Engagement: Please post a tip, strategy, or idea that specifically relates to designing and evaluating authentic digital projects, as well as supporting students as they complete their projects. Your assignment should be a minimum of three paragraphs and detailed enough for another teacher to easily follow. This is a great opportunity to share and collaborate with other teachers at your grade level around the country. Take time to review and respond to other postings that are relevant to your classroom population in order to gain effective ideas to use immediately in your classroom
- **Test #3**

Unit Four

- Podcasts
- Video Creation
- Explainer Videos
- **Test #4**

Unit Five

- Design a Website
- Create an App
- Design Virtual Experiences
- **Test #5**

Unit Six

- Artificial Intelligence
- Technology Tools for Art Projects
- Technology Tools for Music Projects
- **Assignment #4**

Design an authentic project for an upcoming topic/theme. The project should be appropriate for the grade level and subject area (if applicable) that you teach. The project should also require students to create a final product using one of the digital tools discussed in the course. To obtain full credit, be sure to follow all the parameters set forth in Assignment 4.

- **Assignment #5**
The culminating practicum is a three-step process. (1) In the first assignment, you were asked what goals you had and what you hoped to learn from the course. Think back to your original goals for this course. Write a minimum two-paragraph reflection specifically describing how what you learned can be used to help you reach those goal(s). (2) Next, write a minimum three-paragraph plan that specifically describes the ways in which you intend to implement a particular strategy you learned in this course into your own teaching situation. (3) Last, write a minimum two-paragraph reflection describing a student you have or have had in the past. Then, discuss how the strategies you learned in this course will specifically benefit that student as you put your plan into action.

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