

Wicked Problem Project Design Template

PART A: The Wicked Problem - A Need or an Opportunity

1. What is the important educational need that you are seeking to address? This element is fundamental in this project. Since we have limited time, energy, and resources, cool technology without a clear sense of why it matters or what we gain by it is of little value in the educational setting.

There is a large problem with student access to information. When students are absent, or if they did not understand the information in class the first time, the information is rarely presented in the same way again. There is a need for accessibility to information from class to ensure learning from all students. My school district is making a move to use the Moodle platform for classes. The beauty of this platform is the accessibility to content that students will have. There is a need to add screencasts, videos, podcasts, and discussions to the Moodle class to foster participation in the online portion. This will cover the student to content, student to expert, and student to student interactions. Students who are absent or need to view the information discussed and presented in class will be able to access the information. This addition to the Moodle class will create a personal touch to a platform that can seem sterile and daunting to students.

2. How you plan to address this educational issue with technology? You need to make a clear and convincing case that your proposed solution will make a real impact on the issue you identify, and that your proposed approach is a reasonable approach given its costs and possible alternatives.

Adding screencasts, podcasts, videos, and discussions to each Moodle course will add a personal touch to the site. Students will have constant access to the content from class, but will also be able to view lectures, instructions, and introductions to units and lessons. This will not only benefit students who are absent from class, but also those who need to review the content to gain understanding. These additions will also cover various learning styles, and will incorporate a visual and verbal component to Moodle. An added benefit is the review option for assessments. The access to this information will provide a great review for formal summative assessments. There will be an ongoing discussion between students and teacher. This is where students can question each other, display their confusion and get feedback. The discussion and information provided will make the content transparent.

3. Logistics of solution: For example...
 - a. What is the scope? (e.g., when and where will tool be used and for how long? Who all will use it?)

The tool will be used for the duration of the school year. Every student will have access to Moodle through a school account and server. Students have access to computers and the internet at all times during the school day. Students can also access the exact Moodle site and class from home. Units and lessons will be updated daily. Discussion forum for questions regarding the class will be monitored on a very consistent basis.

4. Relevant research and resources (from the Internet and elsewhere) including reports on the closest

effort you can find to what you are planning to do as well as ideas and materials you may be able to build upon in your own effort. Your description should include:

- a. The results of your search (What resources may help guide your project? What resources may help in the implementation of your project?)
- b. What you learned from performing this search. For example, which search engines did you use? What strategies did you use? What helped or hindered your search? How would you search again next time?

There are many great resources on the Moodle site (<http://moodle.org/>). The site provides tipsheets and instructions for using the platform, there is also troubleshooting information provided. *Moodle Magic* is a instructional manual that I have used in the past and will use for step by step instructions for the discussion portion of the additions. Moodle courses are blocked unless added as a viewer or student; therefore, it is difficult to see other Moodle courses and use them as examples. However, after a little research I found a site within Moodle that shares various courses and is associated with Creative Commons (<http://moodlecommons.org/>). Viewing various courses regardless of content area will be very beneficial when designing my courses. I was not able to find any research on the benefits of using Moodle in the classroom. Most of the results from Bing and Google were from the actual Moodle site, this hindered me from finding any other information.

5. A plan for the portion you will implement during this course and the portion you will implement after this course completes.

With only two weeks left of school, I will be surveying students regarding Moodle, frequency of use, and the additions. Throughout this course I will be designing my content, creating and composing various screencasts, podcasts, and videos to add to the corresponding content. The portion of the project that will be implemented after this course is over will be the actual use of the course with students. The discussion portion of the course will also be implemented next school year.

6. How would you know you were successful?

The participation and frequency of use by students will provide feedback. I will also survey the students at various periods throughout the school year to gain insight in to the value of the Moodle additions. I will also use this information to make any necessary adjustments and additions to the Moodle course as the year goes on.

PART B: Application of TPACK: Basic description of each of these areas and important characteristics of these areas as related to this project

1. What is the TP knowledge for the solution? (i.e., how does the technology you have chosen support the teaching strategies and methods you have chosen?)

2. What is the TC knowledge for the solution? (i.e., how specifically does this technology make the content in your problem more intellectually accessible? Be sure to think about representation.)

3. What is the PC knowledge for the solution? (i.e., how specifically do your pedagogical choices make the content in your problem more intellectually accessible? Be sure to think about how the student will experience the content given these instructional strategies.

Part C: Implementation Journal - You will need to implement a small part of your project. You will need to take notes on the implementation. Specifically you will need to report on the following key aspects of implementation:

1. Surprises
2. Unexpected bumps in the road (What would you revise)
3. Delights (What went well)
4. Pictures and/or vignettes

Please note: This posting to your blog must be a **podcast**. (An audio file posted to your blog -the blog will generate the RSS feed)

Part D: Findings and Implications

1. Formative: Did the project get implemented as planned?

2. Summative: Evidence of success in addressing the problem of practice

3. How would you approach another project of this type differently given what you've learned here?

4. What are the lessons learned that others might benefit from knowing about?

4. In what ways will you endeavor to do the same project again, and what will you change or not do?