

Online Learning Environment Project and Final Paper: addandsubtract4fun

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<http://addandsubtract4fun.wikispaces.com/>

Project Description

I have developed a Wikispace called **addandsubtract4fun**, allowing students to practice the kindergarten standard of basic addition and subtraction facts in the comfort of their own home with assistance from their parent(s). The Wikispace has seven main pages, *A Home Base*, *Practice Makes Perfect*, *Arcade Games*, *Do Your Best on the Test*, *For the Parents*, *Let's Learn How* and *Let's Talk*, for students to navigate through, completing the appropriate tasks on each page. The objective of this Wikispace is to help students master basic addition and subtraction facts, using manipulatives, practice worksheets, assessments, and interactive games.

The main page is called *A Home Base*, which is where the whole Wikispace is introduced to the students with the help of a video from the instructor. This page is so important to view because it helps the students get motivated to take part of the online learning experience!

The first page is called *Practice Makes Perfect*, which is where students will complete a pre-assessment each Monday and a practice sheet each Wednesday to show progress throughout the week. Students will complete the pre-assessment by logging into YPP and the results of the pre-assessment will be available for the teacher to access. The students will also complete a practice test sometime during the week, I recommend Wednesday. The students will complete the problems and ask for an adult to grade the paper and score it with the help of an attached rubric.

The next page is called *Arcade Games*, which offers many different websites for students to play games and practice addition and subtraction facts. The students will visit the websites offered on this page to practice adding and subtracting in a fun way. This

page will be a growing page because I intend to continue looking for helpful games and websites, as well as hoping that my colleagues will add content.

The third page is called *Do Your Best on the Test*, which is where students will go to complete an assessment every Friday. Students will log into YPP with their student username and password in order to complete the test. The scores will be accessed by the instructor to progress monitor students' scores, strengths and weaknesses.

The fourth page is called *Let's Learn How*, which provides youtube videos instructing how to add and subtract basic facts. The videos show students, and parents, how to add and subtract using a number line and number grid. Students can also learn catchy songs to help them remember how to add and subtract.

The last page is called *Let's Talk*, which is where students, parents, and instructors will go in order to have individual and whole group discussions. Participants will be able to leave comments or posts directly on the page, allowing others to view and add their own comments. This page will also include a link to Elluminate, where the instructor will hold meeting sessions for instruction and discussions amongst the students and instructor.

Design and Development Process

The development of this Wikispace started simple and then gradually became more challenging. One of the most important standards from the TPACK-T is for the teacher to be able to “design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity (Koehler & Mishra, 2008, p. 15).

I started off making an outline of what purpose the Wikispace needed to serve, which was creating a place for students, and parents, to practice and assess their progress of adding and subtracting numbers. I created the four main pages and listed what was going to be on each page. I then went from page to page and developed it, making it interactive, motivating, and appropriate for its goal for the students to participate.

The content on each page was developed based on the kindergarten standards and objectives coordinating with basic addition and subtraction facts. The use of YPP, Yearly Progress Pro, allows me to develop any specific assessment that is needed, as well as practice assessments. For the *Practice Makes Perfect* page, I was able to use assessments that I have collected from teaching kindergarten. I also used the existing assessments to create more, giving students a bigger option to choose from.

I feel that the most difficult page to develop was the *Let's Talk* page. The reason behind this is because I wanted to find an easy way for parents and students to comment or add posts for all to see, as well as private posts. I chose to place text boxes on the page for public posts, allowing students and parents to comfortably add their thoughts. I provided my e-mail address on the page for any private issues that parents or students wanted to present to me. I also provided the link to Elluminate, listing all sessions that students and parents were welcome to join to discuss progress, questions, concerns, and more.

TPACK and Online Pedagogy Impaction

Within the Wikispace, I have provided a variety of activities found on websites, worksheets, and assessments. I didn't want to rely on one media because I assume not all participants are as comfortable with certain ones. However, I will hold a workshop in the

beginning of the year for parents and students, introducing the Wikispace and how to navigate through all its content.

Providing multiple approaches and strategies within this Wikispace is one my main responsibilities as the instructor to be sure to reach each individual, whether struggling or succeeding. Learning through this Wikispace will be a focus through individual efforts, as well as cooperative learning within the classroom, whether real or virtual. Knowing that diversity is not only skin deep, it is imperative that the concept of individuality is taught throughout the classroom. Identifying students' strengths and weaknesses will allow the instructor to advocate social equity and impact learning for each unique student and their multiple intelligences. Using technology, such as this Wikispace, can be an effective way to reach this goal set by the instructor. The standard of "customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources (Koehler & Mishra, 2008, p. 18) is one way to meet the needs of a 21st century learner.

While developing this place of multiple strategies and approaches for my learners, I had to consider online pedagogy. Whether in a face to face or online class, the Constructivist and Progressive learning theories helped develop the design for this Wikispace. Richardson (2003) states that "The Constructivist Theory of learning allows students to create their own understandings through interactions with which they already know and believe and ideas and knowledge that they come into contact with in their learning" (p. 1624). Students will have already had exposure to adding and subtracting by the instructor, giving them multiple strategies to tackle a problem. With this

Wikispace, students will be able to display their previous knowledge and develop their learning.

Byrom (2010) stated, "Progressivism is a relatively new teaching philosophy. Many educators are turning from teacher-centered, to student-centered instruction. This means that, instead of the usual lecturing and note taking, the students learn through other means than the teacher transmitting information." With the Progressive theory, students will be able to find new ways to solve a problem and present their strategies to the class via a collaboration tool, such as Elluminate. With these two theories working together, students will be able to use what they already know and create new strategies to increase their abilities of solving basic addition and subtraction facts.

Student Use

Students will have the ability to use these learning theories and Wikispace at school and at home, which is the main goal. The instructor will have a workshop for the students and parents to attend, presenting the Wikispace and how to navigate through the content pages. Usernames and passwords will be given for YPP as well. The goal of the Wikispace is to provide a learning space for students at home. Students will visit the Wikispace each night throughout the week, completing the appropriate tasks. The instructor will present the following outlined schedule that serves as a guideline for students and parents:

Monday: Complete the pre-assessment found on the Practice Makes Perfect page. Completing this will allow me to see what your strengths and weaknesses are before you practice throughout the week.

Tuesday: Spend some time playing a game or two on any of the listed websites found on the Arcade Games page. Even though you are playing games and having fun, you are still practicing the skills of adding and subtracting numbers!

Wednesday: Spend about 15-20 minutes completing a practice worksheet found on the Practice Makes Perfect page, using a number line or grid if you need to. Ask

someone to grade your paper and score it following the attached rubric. Fix any mistakes that you may have made.

Thursday: Spend some time playing a game or two on any of the listed websites found on the Arcade Games page. Even though you are playing games and having fun, you are still practicing the skills of adding and subtracting numbers!

Friday: Go back and look over any completed practice sheets that you have completed to refresh your memory and skills for the test. Go to the Do Your Best on the Test page and log-in to YPP to complete one assessment.

Again, students are to visit the Wikispace at home. However, I know not all families have the same access to a computer or internet, so because of this I will present a permission slip to the students and parents. This permission slip will offer students to stay in during recess or any other free time throughout the day to work on that day's tasks. I want each student to have the same access and exposure to this extra practice, providing a fair and equal learning experience.

This Wikispace, **addandsubtract4fun**, was created for students to practice and eventually master the kindergarten standard of solving basic addition and subtraction facts. This space provides assessments, worksheets, and interactive games to strengthen their skills and abilities in the comfort of their own home.

StReferences

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