*Initial Analysis of
Challenges and Opportunities*

The ALPS Project Zone

A web based resource to support ALL students in expressing

their voice and choice through Project Based Learning

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1

Initial Analysis

The ALPS Project Zone

Napa Valley Unified School District is transforming instructional programs through staff development and implementation of project based learning to better prepare all learners for the 21st century workforce. In order to meet the needs of advanced learners, and provide web based resources for project based learning, the ALPS Project Zone was created.

Napa Valley Unified Advanced Learner Programs and Services (ALPS) formerly known as Gifted and Talented Education was using an outdated system-based tool, Renzulli, to help teachers with the development of Project Based Learning opportunities. This tool has not evolved to incorporate the current research and technology applications now available to us within the Project Based Learning setting.

The proposed ALPS Project Zone will improve upon our existing program by creating a web site designed to provide project based learning resources and models that are based upon innovative best practices and technological applications.

Purpose of the Study

How can we create a resource that all students and teachers can access? How can ALPS help our digital immigrant teachers provide open-ended project based learning opportunities for our digital native students? How can ALPS provide support for any student that shows a need to access with or with-out qualification?

Analysis of Problems and Opportunities

Reflecting on 17 years as a classroom teacher in Title 1 schools and my current assignment which has included GATE certification training and a role as K-8 advanced learner support for NVUSD has shown that we have many complex student mystery boxes in our classrooms. Some are easier to differentiate for than others. As teachers we can meet the needs of about 85% of our students. But when we have outliers at either end, we need to be flexible and 'think outside the box' to meet their needs. Often what is good for one outlier is good for ALL, but teachers need access to resources to help support and inspire ALL students to keep moving forward academically.

My current position has offered the opportunity to collaborate monthly with representatives from every elementary and middle school site to discuss how ALPS can help support teachers to meet the needs of advanced learners within the school day. Many teachers have reported that they do not have time to search for, build and scaffold projects. Teachers have varying needs just as our students do. They need resources that they can immediately implement and they need to know that support is available if needed.

Statement of the Problem

In 2008 Renzulli Learning was a project based learning resource that the ALPS office purchased for students across the district to assist teachers with differentiation. While this tool became widely used, a lot of support was needed to help teachers implement this resource. It was expensive, students needed an individual license, the projects created by teachers were owned by Renzulli, projects were not scaffolded for the varying needs of students or teachers, use also depended on technology access, and/or teacher comfort level using the tool.

3

Yong Zhao, Linda Darling-Hammond, and Malcolm Gladwell have research to support that while there are many factors that contribute to the Achievement Gap they encourage us to address the resource and opportunity gaps found within our educational system.

It has become evident that Renzulli Learning is causing opportunity and resource gaps.

Learners

1. **Sociocultural:**

   It has always been difficult to differentiate for outliers. Technology access provides endless opportunities to differentiate effectively. However, as teachers we are all digital immigrants and diffusion of innovation is dependent upon all of its members. Classroom instruction and differentiation looks different dependent on the comfort level, expertise, training, and support of the teacher. There are five categories of system member innovativeness: Innovators, Early Adopters, Early Majority, Late Majority, and Laggards. Innovators, Early Adopters, and most early majority will receive project based learning training and implement differentiated PBL opportunities right away. But how can we support our Late Majority and Laggards to ensure that they feel comfortable with implementing PBL units and provide students access to these opportunities?

   The ALPS project Zone will be a resource to help bridge that gap for teachers by providing open-ended, step-by step projects for teachers to begin the process of facilitating PBL opportunities in their classrooms.

2. **Technical:**

   Schools have varying amounts of technology availability. The ALPS Project Zone will allow students to go step by step through the projects online or they will be able to print and complete the project steps with paper and pencil if technology access is limited.

   Websites will be embedded for students to explore, and new technology application links will be provided to assist teachers and students with ideas for product development. A toolkit will also be available on the site with rubrics, completion certificates, and parent letters in English and Spanish.

4

3. **Informational:**

   The ALPS Zone will provide open-ended, creative; project based learning opportunities for students and teachers to access anywhere. The website content will allow for voice and choice begin with the topics of inventions, career exploration, environmental solutions, endangered animals, science fair, celebrate a hero, visual and performing arts investigations, and novel writing.

Evidence that Instruction is Appropriate as a Potential Strategy

According to Ruth C. Clark author of ***Developing Technical Training, A Structured Approach for Developing Classroom and Computer-based Instructional Materials,*** instructional technology is built on a systematic model used to plan, design, develop, and evaluate training. The model, known as the Instructional Systems Design (ISD) uses a systematic process to develop training so that you can "guarantee" learning outcomes. After doing a needs assessment of teachers, it became apparent that the Renzulli Learning website was not systematic and learning outcomes were not "guaranteed." Teachers and students needed a website that was easy to access, provided options for project development based on technology availability, and the projects needed to be scaffolded step-by-step to provide access for all. The ALPS Project Zone website will have open-ended projects broken down into activities. Links to websites for research will be available within each activity and virtual and non-virtual note-taking space will be provided. Project examples and applications that can assist with project development will also be included along with 4 C's rubrics to use for self-evaluation and assessment.

5

Justification for Instructional Product Chosen to Meet Learner Need

Renzulli Learning cost our district $28 per license. A well-researched, web-based resource incorporating current technology applications can be customized to meet the needs of our district would be a great way to support teachers in the 21st Century. Development of the ALPS Project Zone will save our district $11,000. It can be changed based on teacher feedback and can be aligned to our district goals and initiatives. Any teacher or student that wants access will be able to have access to this free resource. It will be scaffolded to support the varying needs of students and will be easy to navigate and implement for teachers. The money saved can go to the school site to assist with implementation and support.

User Goals

User Goals of the ALPS Project Zone:

- Engaging topics provide student choice and novelty with clear expectations and outcomes.

- Open-ended projects to be accessed from school or home to keep students moving forward with depth and complexity.

- Projects can be done in collaborative groups or individually.

- Assist teachers new to PBL with ready-made, scaffolded technology-based projects.

Instructional Goals

Instructional Goals of the ALPS Project Zone:

- Development and assessment of 21st century skills in communication, collaboration, creativity, and critical thinking.

- Developing Digital Citizenship and Ethics

- Students learn to navigate websites for research purposes.

- Students explore and access new technology applications to display their understanding in their final projects.

- Teachers become comfortable accessing and using technology resources with students in the classroom.

- Teachers incorporate PBL opportunities in to their classrooms.

- Connect Teachers through a Professional Learning Community, PLC.

Research

Sources and Methods of Data Collection

Sources of Data

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Methods of Data Collection

The data analysis plan that was used was The Constant Comparative Method which is a qualitative research design. The process included the collection of three types of data for analysis. Using Wordle, an excel spreadsheet and a table I looked for similarities, differences, and alignment between strategies.

Findings

To be reported later

Conclusions and Recommendations

Summary of Findings

To be collected and reported later

Appendices

Appendix A

http://www.wordle.net/

Wordle is a tool for generating "word clouds" from text that you provide. The clouds give greater prominence to words that appear more frequently in the source text.

Appendix B

Excel File used to sort strategies by program
Strategy/Program Why

Appendix C

Webbs Depth of Knowledge, Blooms Taxonomy, Kaplan's Icons Alignment Chart

Appendix D

Effective Strategies from Various Programs that Support ALL Students Through Project Based Learning Powerpoint