A.1 Educational Philosophy

Arizona Language Preparatory aims to provide the skills, tools, and competencies that our children will need to compete in the 21st century increasing student achievement in our target population, as referenced in A.2. The world is changing rapidly every day with advancements in science and technology, linking every corner of the world together. ALP was founded by community leaders who believe that the present-day school must prepare their children to navigate the world using fundamental core knowledge along with strong communication stills to navigate the global economy. It is the belief of ALP that students have an advantage by becoming proficient in the world's most spoken languages, Mandarin, Spanish and English. Students with multi-lingual skills will have an advantage of becoming global leaders, essential for the U.S. to be successful in the future.

This modern 21st century school must provide students with different skills that are now needed for children to compete with students from other countries, countries that are currently surpassing the United States in academic gains.

Heidi Hayes Jacobs asks in her book, *Curriculum 21, Essential Education for a Changing World,*

> "What year are you preparing your students for? 1973? 1995? Can you honestly say that your school's curriculum and the program that you use are preparing your students for 2015 or 2020? Are you even preparing them for today? (Hayes, 2010)

It is the belief of ALP that we need to prepare students to become members of the new "global citizenship". This word has been coined by many International companies including Microsoft, Hewlett-Packard, John Deere, Motorola, and Abbott laboratories. (Google search, keyword *global citizenship*, March 4, 2007) These advantages, we believe, will be vital in the future of global competition of resources. "Mike Eskew, CEO of UPS, talks about needing workers who are global trade literate, sensitive to foreign cultures, conversant in different languages." (Time Magazine December 10, 2006)

Dr. Tony Wagner in his book *The Global Achievement Gap* articulates,

> "In today's highly competitive global "knowledge economy" *all* students need new skills for college, careers, and citizenship. The failure to give all students these new skills leaves today's youth—and our country—at an alarming competitive disadvantage….. Work, learning and citizenship in the twenty-first century demand that we all know how to *think*—to reason, analyze, weigh evidence, problem solve—and to *communicate effectively*. These are no longer skills that only the elites in a society must master, they are essential survival skills for all of us." (Wagner, 2010)

Dr. Pascal D. Forgione, Jr., U.S. Commissioner of Education Statistics wrote in his speech,

> "Unless we re-tool education, there is a strong likelihood that America will get overtaken in education the way we did in automobiles. Before the 70's our

> economy was based on the automobile, but a complacent automobile industry failed to make changes. Japanese cars invaded, and canceled our dominance. The resulting outflow of dollars to Japan devastated our economy. It's about to happen again, this time to pay high salaries to well-educated workers overseas." (http://4brevard.com/choice/international-test-scores.htm)

A monumental effort has been made by The Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center). They have brought together a diverse group of experts, parents, teachers, school administrators to utilize current research to develop and support the highest state standards across the country and globe. These standards are called the Common Core Standards and they have been adopted by Forty-two states in the United States. Arizona is one of the states that has adopted them to make sure that every child across the country is given the tools they need to succeed. ALP is pleased and excited that the Common Core Standards mission statement is in alignment with ALP's beliefs including,

> "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."

Also the Common Core Standards website shows a portrait of what students should exhibit after mastering the standards,

> "Students appreciate that the twenty-first-century classroom and workplace are settings in which people from often widely divergent cultures and who represent diverse experiences and perspectives must learn and work together. Students actively seek to understand other perspectives and cultures through reading and listening, and they are able to communicate effectively with people of varied backgrounds. They evaluate other points of view critically and constructively. Through reading great classic and contemporary works of literature representative of a variety of periods, cultures, and worldviews, students can vicariously inhabit worlds and have experiences much different than their own."

These goals and student capacities are exactly what ALP envisions for our target population of students who complete their educational journey at ALP. Along with the Common Core Standards, ALP also believes that to "re-tool" education there are ten essential disciplines that will be vital for the development of the global citizen inculcating them with the skills to have a competitive advantage in the future and to guarantee that the United States remains competitive in the continuously evolving global economy.

- **Math** that emphasizes problem solving and reasoning, not just memorizing.
- **Global languages** that will be, "necessary for political, economic, and social interaction on the world stage." (Jacobs, 2010)

- **Technology** to enhance the educational experience of our students through the use of age-appropriate software and hardware. Internet based courses provided by various non-profit academic institutions (i.e. Khan Academy), will be key to learning new ideas and skills.
- **Science** that uses a problem solving approach where all students see themselves as scientists and inventors.
- **Social studies** that teaches a personal and local perspective and its relation to the student's place in the global world.
- **Contemporary English** language that expands current literary genres and a focus on effective written and oral communication.
- **Music** from the great classics to contemporary that inspires the universal language of mankind.
- **Art** that unleashes and allows students to grow their innate need to express themselves artistically.
- **Health and Physical Education** that utilizes a school garden to teach nutrition, food self reliance, and sustainability, including a composter. Daily exercises teach personal fitness and activity for life.
- **Entrepreneurship** that teaches children how to use market trends and personal interests to open new businesses that increase economic growth.

The Big Ten essential disciplines are chosen purposefully for the following reasons:

Mathematics

US student's math scores are dismal, "by grade 4, American students only score in the middle of 26 countries reported. By grade 8 they are in the bottom third, and at the finish line, where it really counts, we're near dead last." There are a number of theories as to why that is, the number system in English is highly irregular, while in countries with the highest math scores on the TIMMS, Japan, China and Korea the numerical system is very logical.

Students have been presented with a message that there is only one way to do math, a logarithm. An order of set procedures is the emphasis, not conceptual understanding. American students are also not getting it; mathematical literacy is a serious problem in the United States. (U.S. Department of Education, 2008) In lieu of these disparities math is traditionally taught whole class, sequentially from page one in the book to the last page. If students don't understand a concept they are usually left behind. ALP's solution to these problems is simple, we use individualized math instruction using Guided Math pedagogy with the Singapore Math curriculum. Guided math uses seven components to ensure that all of our students in our target population will be successful when it comes to learning math.

1. A classroom Environment of Numeracy
2. Morning Math warm-ups and Calendar board Activities
3. Whole-Class instruction
4. Guided Math instruction with Small groups of Students
5. Math Workshop
6. Individual Conferences

7. An On-going System of Assessment (Sammons, 2010)

Global Languages

It is the belief of ALP that if our students are proficient in Mandarin Chinese, English and Spanish they will have linguistic, cultural, and cognitive advantages compared to other students. These languages are vitally important regionally and globally, they are the top three most spoken languages in the world. Knowledge is power, and those people who have learned more than one language and are able to understand and communicate with more people in the world will have the power. Parents enroll their children in our school knowing that they are giving their children language skills that other children do not have.

The National Academy of Sciences warned in a 2007 report that,

> "The pervasive lack of knowledge of foreign cultures and languages threatens the security of the United States as well as its ability to compete in the global marketplace and produce an informed citizenry"(Committee to Review the Title VI and Fulbright-Hays International Education Programs, 2007)

In 2006 the Committee for Economic Development endorsed the recommendations of the report, Education for Global Leadership. The Committee warned,

> "Communicating in more than one language is vitally important in the interconnected world of the 21st century. There is growing awareness in the United States that creating a multilingual society is critical to our economic success, national security, and international relations. Promoting the teaching and learning of languages is a key component." (www.cal.org)

ALP has chosen to use a language immersion program to teach the students Mandarin, English and Spanish. Research has shown that an immersion education allows students in our target population to develop high levels of proficiency in their first and second languages and achieve above grade level on academic assessments. They also demonstrate positive "cross-cultural attitudes and behaviors." (Howard and Christian, 2002 in Freeman et. el. 2005)

Technology

> "Technology has the power to teach, motivate, captivate and transform a classroom into a training ground for the next generation of artists, entrepreneurs and leaders." (http://www.bizjournals.com/sanjose/stories/1997/04/07/editorial5.html#ixzz1IfDnQCdy)

Technology has permeated all areas of our lives. Children today are consumed by technology, when they leave school they sprint home to participate in their plethora of daily technological

interactions. They are not only playing games but are participating in online communities that define their new global culture and identity. They have developed communication acts with people from all over the world. They participate in fan fiction, blogs, Facebook, and know how to search for and read information on Google and other search engines.

Open source software has exploded; applications are on the devices that we all have in our hands. ALP believes that if our students learn computer programming, beginning in third grade, they will have the tools to participate in the creation of the future software programs that educate, aid, and drive the modern world.

Schools still are lacking in the use of technology in their classrooms. Our students are in the modern technology world and they are waiting for their teachers and curriculum to catch up. Students now have the opportunity to create an online community of learners by creating online portfolios, podcasts, and web quests.

A perfect example of this is the Khan Academy, an online website full of lectures on various subjects ranging from math and science to business and health-related topics. Students can watch videos using a simple web browser, and can access them from anywhere. This is a powerful tool that allows students to learn a subject at their own pace. Then the teacher can use the classroom time to build and enhance the student's knowledge with real world problems. Since the Khan Academy is supported by volunteers from around the world, subjects can be taught in any language, a core skill of ALP.

Teachers can record and broadcast their teaching including what they wrote on their interactive whiteboard and allowing children who did not completely understand can watch it at home for homework. Absent students can easily catch up with the lessons they missed from home. Now learning can happen anytime in any place. Technology will ensure that our target population receives a rich challenging curriculum.

Contemporary English

To participate as a global citizen it is imperative to be highly literate in English. English has now become the *lingua franca* of the world. ALP believes that English literacy is compulsory. 21st Century students need to be able to listen, speak, read, and write effectively in English to communicate and perform collaboratively in teams to achieve future job related goals. Vocabulary needs to be systematically taught through a five step process that is described in Marzano's book *Classroom Instruction that Works*. Using word walls is a powerful tool to review words and see how they are related.

Thirty percent of our student population will be English Language Learners using the current population percentages in the surrounding schools in our attendance area. ALP will provide SEI classes for our ELLs using ILLPs. Ensuring achievement from our target population.

Science/Social Studies (Thematic, inquiry based learning)

ALP wants all students to use their innate curiosity to figure out and learn about the world, so the

science and social studies thematic units will include inquiry based projects. "Inquiry" is defined as "a seeking for truth, information, or knowledge -- seeking information by questioning." Individuals carry on the process of inquiry from the time they are born until they die. This is true even though they might not reflect upon the process. Infants begin to make sense of the world by inquiring. From birth, babies observe faces that come near, they grasp objects, they put things in their mouths, and they turn toward voices. The process of inquiring begins with gathering information and data through applying the human senses -- seeing, hearing, touching, tasting, and smelling. Children at home from birth to five years old are continuously analyzing and exploring their world until they get to school.

“Unfortunately, our traditional educational system has worked in a way that discourages the natural process of inquiry. Students become less prone to ask questions as they move through the grade levels. In traditional schools, students learn not to ask too many questions, instead to listen and repeat the expected answers.

Memorizing facts and information is not the most important skill in today's world. Facts change, and information is readily available -- what's needed is an understanding of how to get and make sense of the mass of data.

Educators must understand that schools need to go beyond data and information accumulation and move toward the generation of useful and applicable knowledge . . . a process supported by inquiry learning. In the past, our country's success depended on our supply of natural resources. Today, it depends upon a workforce that "works smarter."

Through the process of inquiry, individuals construct much of their understanding of the natural and human-designed worlds. Inquiry implies a "need or want to know" premise. Inquiry is not so much seeking the right answer -- because often there is none -- but rather seeking appropriate resolutions to questions and issues. For educators, inquiry implies emphasis on the development of inquiry skills and the nurturing of inquiring attitudes or habits of mind that will enable individuals to continue the quest for knowledge throughout life.”
http://www.thirteen.org/edonline/concept2class/inquiry/index.html

ELL learners learn better when the content is delivered through thematic units. When they can access the curriculum at their own level and pace through inquiry based units. ALP will increase student achievement in our target population by allowing students to explore and digest the vocabulary and curriculum through inquiry based learning projects.

ALP will prepare students to see themselves as lifelong learners and investigators, who continuously look for answers to the world’s questions, inventing and constructing in the post-modern society.

Music

Music is an expression of ourselves. At ALP we want all students to learn about the many genres of music and the historical and cultural contexts describing how different types of music began. Classical, in particular, has a research based connection with mathematics. We want all children

to become acquainted with the classical geniuses.

Art

Art will be integrated with all subjects allowing students to connect to their artistic self, and learning about how art has inspired man over time. Art is a defining piece of a child's overall education. At ALP art will be integrated into all subjects.

Health and Physical Education

The growth of obesity in young children is growing at an alarming rate. We believe that if we teach children about nutrition and exercise, they will want to exercise and eat nutritious low-fat foods and stay healthy. Healthy children have better attendance rates and come to school ready to learn.

ALP will teach nutrition through the use of a school garden. Students will learn how to plant and cultivate their food, developing organic, naturally grown, nutritious food. The student benefits of gardening are teaching self sustainability, nutrition, horticulture, and life cycles. The garden can be the central focus point for many units of study.

Exercise and physical movement will be emphasizes at ALP. Morning exercises are an integral part of ALP's community. Each morning the entire school meets in the multi-purpose room to participate in exercises. ALP also has added time to the school day to allow students to have to recess two times each day allowing children time to get outside and exercise twice a day. Yoga will be offered to students as well teaching them how to connect with their bodies.

Entrepreneurship

We believe in the potential of kids and the need to inspire entrepreneurship at an early age. There are many studies that suggest that the environment you grow up in affects who you become. We would like to create an environment within our school teaching children about entrepreneurship where kids are given opportunities for valuable experiences to shape their futures. We believe that many future jobs in the knowledge economy will be technology driven companies that are created by visionaries, such as Google, Apple, and Facebook.

Achievement Gaps

ALP believes that two achievement gaps exist in the United States and if we don't close both of them we will be unable to hold our place in the global economy. There exists the gap between US students and other students in the world, and the achievement gap between economically disadvantaged children and those of the middle and upper classes.

We believe that every child regardless of their social economic background should be given the same opportunities to receive an equal education. Therefore, ALP intends to serve all children, including those in poverty and has a goal set of at least 30% of its enrollment would qualify as high risk and would be considered for free or reduced lunch.

Instructional Focus

ALP's instructional focus will be teaching the Common Core Standards through thematic unit integration. Thematic instruction will ensure our target population's success.

> "Thematic instruction creates a meaningful conceptual framework with which students are invited to use both oral and written language for learning content." (Peregoy & Boyle, 2005)

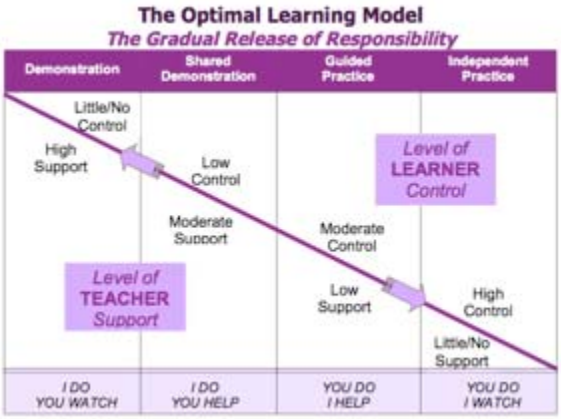
Thematic units also support comprehensibility of instruction, which increases second language acquisition and content learning. Collaborative projects also increase student's questioning, motivation, involvement and purpose.

Children are genuinely curious and want to learn about the world around them but all too many times "doing school" means participating in learning activities that have no connection to the everyday world. What learning that is done in school is usually very different from the learning activities the children choose to participate in at home. ALP will ensure that connections between home and school are made insuring that children are taught to use their natural curiosity and interests. ALP will include inquiry based learning units that allow students to discover and learn new information about what they are interested in. School will become an extension from home where all students will see that home and school are interconnected and that learning is a continuous life long process that happens in every place that we are, school, home, in our local communities and when we travel to new and exciting places.

It is the belief of ALP that just like lawyers and doctors who continuously keep up by reading and learning about the latest court cases and the newest medical studies in journals and medical literature, ALP believes that the newest educational research should be used to drive pedagogy and professional research investigations into tri-lingual language acquisition, something that hasn't been researched as of yet. This information will be used to drive instruction.

Instruction Strategies and Methods

Each lesson, which is a piece of the overall thematic unit of instruction, will be taught using the Gradual Release of Responsibility. The GRR model is ALP's pedagogical approach that seeks to support the individual instructional needs of each child in our target population while progressively moving them from a state of dependence to one of independent practice and skills application. This approach expects the teacher to make careful observations of each student's learning and use professional judgments in order to plan learning opportunities. This method is consistent with student achievement in our target population by providing more time to perform and learn the content through activities and cooperative learning. The ELL students will also be allowed to test their English skills in the small group setting, where risk taking is less stressful. The Gradual Release Approach will be evident in the learning arrangements that all teachers provide for the students and will also be evident in each child's Individual Learning Plan, or ILP.



The GRR is a pedagogical approach where the teacher begins the instruction teaching the new skill or strategy whole class, then lessening the support to the children in shared activities, then children either work in small pairs or groups or in the case of Guided Reading and Math the small groups are supported by the teacher instructing the specific cluster that those students have yet to master. The final stage of GRR is when students are ultimately practicing the skill independently and then an assessment is given.

ALP also believes that by using researched based strategies such as identifying similarities and differences using many types of mind maps are beneficial for children, "enhancing their understanding and ability to use knowledge." (Marzano, 2001) Students in ALP will be taught to use a variety of different similarities and differences including analogies, metaphors, comparing, and classifying. Many types of graphic organizers will be incorporated in the learning.

ALP is in agreement with Marzano, that using linguistic and non-linguistic representations is crucial in supporting bi- and tri-lingual children to learn and use other forms of representations such as imagery. The research demonstrates that children are better able to think about and recall knowledge.

Direct vocabulary instruction with visuals is the best way to learn new words. Direct instruction of new vocabulary also enhances the learning of the words in context. ALP will use Marzano's instructional sequence, a five-step process that teaches new terms and phrases, this can be exceptionally powerful when children are learning other languages. The classroom will be print-rich with words walls that are used frequently to reinforce new word assimilation.

A teacher's depth of questioning is crucial to deeper learning. When students have to analyze, synthesize, and evaluate they are called to use the information in different ways to create a deeper understanding instead of simply recalling or recognizing information. ALP will train teachers through on-going professional development to increase teachers use of high-order questioning skills to deepen student learning. The teacher training will ensure the success of our target population, learning the newest pedagogical techniques.

Multiage Classrooms

Multiage classrooms is ALP's strategy that is grounded in a philosophy that holds that every child can learn and has the right to do so at their own pace and that learning is a continuum rather than a series of steps. This philosophy supports our beliefs about the acquisition of language and academic growth as well as supporting the changes in the program.

"The goal of multi-age classrooms is to maximize the benefits and interaction among students of various ages. The teacher encourages students to help each other and to learn together. The classroom is child-centered and theme-based, with integrated curricula. Hands-on projects and experiences help to meet objectives. Every child at ALP will have their own Individualized Learning Plan so throughout the day teachers use flexible, temporary groups to give instruction to students, regardless of age, who need the same kind of instruction for specific skills. The ILP will ensure that all children are learning in their Zone of Proximal Development, or ZPD. Teachers will also guide students to maintain portfolios for authentic assessment.

A multi-age classroom offers many opportunities for our target population to develop skills intellectually, socially and emotionally. Students work in a collaborative environment, paralleling the workplace. Students design and produce projects that are authentic assessments of a theme- or problem-based curriculum. Students collaborate on these projects much as teams in an office assemble a presentation. Social interaction is imperative within these teams. Practice within the educational setting prepares students for the contemporary work force. These teams also allow children to practice using the target languages in real life, problem solving, and learning situations.

A multi-age classroom offers all students a chance to assume leadership roles in the areas in which they excel, regardless of age and first and second language abilities. Our target population will have differing strengths and weaknesses in the English language.

Multiage teaching has positive characteristics that relate to students' social skill development; it provides opportunities for enhancement of learning in the lower grade level group through exposure to upper grade level work, it offers reinforcement of earlier learning for upper grade level students, and it provides opportunities for children to learn through peer tutoring and example (Gaustad 1992, 1993, 1997; Katz, 1995; Veenman, 1995, 1996). Miller (1999) notes that students in multiage classrooms show increased self esteem, more cooperative behavior, better attitudes toward school in general, increased pro-social (caring, tolerant, patient, supportive) behavior, enriched personal responsibility, and a decline in discipline problems." http://www.mnmfa.org/cms/curriculum/multi-age-classrooms-faq.html

Student Achievement

ALP will serve a diverse group of students, from the local attendance area and students whose parents drive long distances to give their children the global education that ALP provides. Using these educational philosophies, ALP will be able to insure student achievement with our target populations. ALP implementing the gradual release of responsibility model, activity based learning in small groups, low class sizes and teacher to student ratios, a guaranteed and viable curriculum, and a comprehensive assessment plan will guarantee student achievement. Teachers

will analyze and triangulate the data from the three benchmark data points (Galileo, DRA, AimsWeb) to determine intervention strategies. These intervention strategies will ensure that all students are able to access the curriculum and are achieving.

The big ten ideas will ensure that our target population has a well rounded education and the tools to ensure that they achieve on the standardized tests and reach mastery in the Common Core standards. The philosophical approach and rational is that our research based strategies and pedagogy will serve all populations of students, regardless of their social economic status and primary language ensuring that our target population is served.

A cyclical approach to ensuring student achievement will be used. First data is collected for each strategy. Mastery of the Common Core Standards will be determined using that data, formative and summative. If the students are not mastering the standards then the team meets to create new strategies or intervention programs. After these strategies and intervention programs are used then more data will be collected and analyzed to determine if the new strategies or intervention programs were successful. This process continues indefinitely, it is a cyclical process using constant data collection of formative and summative assessments and determining if changes need to be made for individual students or curriculum.