Section 2 – Curriculum Choices

Comprehensive Academic Program

As part of its blended model of instruction, PIE-AZ delivers courses of study through a web based platform that meets the current graduation requirements for the state of Arizona. PIE-AZ will require all high school students to pass 22 credits in order to graduate high school. Fifth Arrow's course titles and corresponding credits are listed in the table below:

Core Courses				
English	**English I**	**English II**	**English III**	**English IV**
Standards	AZCCRS 9-10	AZCCRS 9-10	AZCCRS 11-12	AZCCRS 11-12
Credits	1.0	1.0	1.0	1.0
Mathematics	**Algebra I**	**Geometry**	**Algebra II**	**Pre-calculus**
Standards	AZCCRS 9-10	AZCCRS 9-10	AZCCRS 11-12	AZCCRS 11-12
Credits	1.0	1.0	1.0	1.0
Social Studies	**World History**	**US History**	**American Government (.5)/ Economics (.5)**	**American Government (.5)/Economics (.5)**
Standards	AZCCRS 9-10	AZCCRS 9-10	AZCCRS 11-12	AZCCRS 11-12
Credits	1.0	1.0	.5	.5
Science	**Biology**	**Chemistry**	**Earth Science**	**Physics** (optional)
Standards	AZCCRS 9	AZCCRS 10	AZCCRS 11	AZCCRS 12
Credits	1.0	1.0	1.0	1.0
Electives				
	Art	**Health & Phys. Ed**	**Other Electives (up to 5 credits total)**	
Standards	AZCCRS 9-12	AZCCRS 9-12	AZCCRS 9-12	AZCCRS 9-12
Credits	1.0	1.0	5.0 Electives may include but are not limited to Foreign Languages (Spanish, French), as well as CTE/Vocational courses.	

PIE-AZ will contract with Edmentum to provide an extensive variety of online courses through their Plato Learning Environment. Edmentum's PLATO Learning Environment (PLE) courses are developed using rigorous state and national standards, including those from the National Council of Teachers of Mathematics (NCTM), the National Council of Teachers of English (NCTE), and the Thomas B. Fordham Foundation index of A-rated states. Teachers and program administrators also have access to state and national standards within the PLATO system, which allows them to customize courses to address local standards and pacing guides. Teachers can add, remove, or re-sequence course content to meet these local course requirements.

More than 100, one and/or two semester courses will be offered to students (See Course Catalog). A range of course options such as Advance Placement (AP), fine arts, world/foreign languages, career and technology education, and electives provides diversity in the program of study. Formative assessments (quizzes and topic tests) and cumulative exams will be provided in online format, and administered in front of a proctor.

All courses allow each student to demonstrate competency during a pre-test format. Students in credit recovery will also have access to pre-testing to determine content competency. Exceptions to pre-testing will be determined on an individual student's needs.

Edmentum courses are aligned to Arizona College and Career Ready Standards' which are aligned to the National Common Core Standards. PIE-AZ has determined that the Edmentum curriculum aligns with Arizona's College and Career Ready Standards. Edmentum performs content reviews on a regular basis to ensure that any changes in standards are updated in the content.

The Edmentum LMS affords PIE-AZ staff online customer support and curriculum reporting function. Edmentum LMS will provide technical support and assistance to PIE-AZ staff to troubleshoot identified errors so that corrective actions may be taken. Corrective actions with explanations will be aligned to coursework.

Post-Secondary Preparation

Fifth Arrow aims to deliver a high performing academic program. The rigor of the online curriculum meets student(s) needs to acquire effective problem solving and decision making skills. Technology enhances instruction and exposes students to skills needed both in college and career. Online curriculum will not only address but meet the Arizona College and Career Ready Standards. To enhance the traditional education program, students will have access to extra-curricular coursework, Career and Technology Education and AP coursework.

Curriculum Selection and Alignment

The 2011 International Association for K-12 Online Learning (iNACOL) identified national standards for online coursework. In following those standards (*National Standards of Quality Online Courses)*, PIE-AZ's Board together with PMG chose Edmentum as its online coursework provider. PIE-AZ considered the following in its selection of Edmentum: extensive course offerings, learning management systems, security, ease of content accessibility, instructional flexibility, accreditation and demonstrated success.

Plato Content and STEM

Providing rigorous and relevant curriculum that supports STEM literacy, PLATO online courses provide rigorous, and explicit instruction on concepts. The courses build higher order thinking and require students to apply learning to create solutions to problems in relevant, real-world situations.

PLATO online courses are designed with an interdisciplinary approach to instructional lessons that integrates concepts and applies real-world examples and problem solving across each STEM domain. PLATO online courses incorporate real-world scenarios and require students to solve real-world problems across STEM domains.

PLATO online courses are designed to apply learning to specific STEM careers, engage students in exploring STEM careers, and make STEM careers relevant to students within the context of our 21st century global economy.

Incorporating STEM resources from outside the classroom

PLATO online courses integrate both Web-based instructional resources and links to authentic information, data, media, and content from STEM professionals into lesson explorations and tutorials.

PLATO online courses model exposure to STEM professionals through a variety of contexts and situations.

Embedding technology throughout the learning process

In addition to offering a specific course in Computer Applications and Technology, all PLATO online courses leverage a wide variety of technology tools during the learning process to provide a rich, relevant, engaging 21st century learning experience.

- Software tools: PLATO online courses integrate word-processing, spreadsheet, and presentation software tools into the learning process to provide students with the experience of using these technology tools to conduct research, collect data, write papers, and make presentations. It is critical that high school students learn to effectively use tools that will be required in their post-secondary education and careers
- Digital drop box: This feature enables students to submit papers, research, or presentations to their teacher for review, feedback, and grading. The digital drop box helps facilitate communication between students and teachers in a 21st century technology setting.
- Discussions: The online discussion tool allows teacher-to-student discussion and monitored student-to-student discussion on topics that require students to synthesize knowledge and apply critical thinking skills to answer questions, form opinions, express ideas, and respond to the ideas and opinions of others.

PLATO online courses include inquiry-based activities that support the practices of prediction, hypothesis, and data interpretation, as well as lab investigations that are integrated into the overall instructional sequence of a course. Lab investigations take a variety of forms: wet labs to be experienced in a formal laboratory setting (the school science lab), kitchen sink labs that can be conducted at home with common household elements, and Web-based labs that leverage the Internet and online simulations. PLATO online courses also provide numerous opportunities for students to analyze experimental data and practice the process of drawing conclusions from laboratory procedures and outcomes.

Course Variety

The Edmentum Program makes web-based reteaching resources readily available. These resources maximize Fifth Arrow teachers' ability to remediate a student's learning to improve ongoing performance on formative and summative assessments.

Online instruction will make learning for the 21st century student more diverse. The web based program will allow for more flexibility in student academic scheduling so that the student can achieve a better-rounded lifestyle based on their social, cultural and emotional needs.

For college bound students, coursework contained within the Edmentum program, once completed, will ensure students meet high school graduation and college entrance requirements. Therefore, Edmentum, Fifth Arrow will provide instruction in the areas of Fine Arts (Art Appreciation and History), World Languages in tandem with traditional college preparatory coursework.

Career and Technology Education coursework will be provided to include, Computer Applications, Career Development, Health Science and Business. In order to enrich instruction, Fifth Arrow campuses will have Science labs that coincide with rigorous interactive virtual lab lessons.

Advance Placement (AP) Credit

Opportunities for Board approved dual enrollment and advanced placement credit courses are available to all enrolled Fifth Arrow students.

Edmentum's Advanced Placement coursework matriculates to college level coursework as overseen, and or determined by the College Entrance Examination Board. Official end of course, or final exams must be taken by all students enrolled in Advanced Placement courses as scheduled. Students must successfully complete the Advanced Placement courses, and pass the end of course exams for consideration of college credit, and or exclusion from taking additional coursework.

PLATO Learning provides the innovative courses with rigorous curriculum and instructional design for use in settings. Following are the primary features of PLATO Learning's approach to AP.

- Curriculum is centered on individual objectives in a scope-and-sequence built to meet College Board expectations.
- Syllabi are provided that document the course design for ready submission to the College Board for local course approval.
- Courses are correlated to individual state standards.
- Pretest results can be overridden to ensure that students review all material relevant to the curriculum.
- Interactive and engaging content is accessible in a self-paced setting.
- A mastery model confirms that learners understand each objective before they move on to additional material.
- Each semester-long course consists of 120 to 150 hours of instruction.
- Unit-level discussions and culminating activities deepen learning and extend understanding of rich curriculum.
- Assessments and activities are modeled on College Board exam formats to prepare students for AP exams.
- College Board lab experiences are integrated into science courses in a hybrid online/in-person model.
- Interactive elements present material in novel forms and confirm deeper learner understanding of the objective.
- Customized PLATO-structured courses that supplement lessons with local activities, other online resources, or modules from other PLATO courses are also available.

Dual Credit

Fifth Arrow will also offer dual credit courses allowing enrolled students to earn credit at area post-secondary colleges. Through a partnership with Rio Salado Community College, a member of the Maricopa Community College District, Fifth Arrow will also allow students to take concurrent coursework. Student advisors and PIE-AZ administration must authorize this accelerated tract. Edmentum enables Fifth Arrow students to enroll in core content and AP online coursework.
In order to better prepare students transitioning from high school to college, exposure to web based and distance learning activities will be accommodated through Edmentum. Since cohort 2013, Arizona high school students must successfully pass three science and four of mathematics courses. Through Edmentum's online coursework, students will have opportunity to complete those courses while also dually enrolled in college and, or career focused coursework.