A.3 Program of Instruction

The Program of Instruction at NAS-Phoenix is designed to respond directly to the needs of students in the target population with explicit academic and affective support structures that will equip them with the tools they need to be successful in an increasingly global and complex world. While many of our students aspire to the American Dream, they face significant obstacles to post-secondary education or secure, steady jobs. NAS-Phoenix understands that when a young person is disconnected from school and work, the ripple effect can have enormous negative impacts on society. NAS-Phoenix is committed to reengaging young people who are off track to graduation, or disconnected from both education and work, placing them on a path to post-secondary success.

a) Curriculum Framework

Guiding Principles. NAS-Phoenix will develop and deliver high-quality college- and career-ready curricula with strong academic and social supports. Guided by the work of *Jobs for the Future*[1], all staff will create a college-going and career-ready culture:

1. From enrollment through graduation, all staff will deliver the message that NAS students are "college material" and that post-secondary credentials and career success are within their reach.
2. Through strategic use of assessment data, teachers will monitor academic progress and respond with targeted, intensive interventions when necessary.
3. NAS staff will create a learning climate focused on acculturation to academic and professional norms, mindsets, and practices and personal responsibility for one's own learning, career, and life goals.
4. The curricula will reflect the school's commitment to ensuring equity, access, and an excellent educational opportunity.
5. Through exposure to a comprehensive high school curriculum aligned to Arizona's State Standards, students will be exposed to a range of career options and understand their connections to post-secondary education. The curriculum plan will include vertical alignment of courses, assessment practices, and common assessments where applicable, and curriculum units will include detailed, scaffolded lesson plans, resources, timelines, and the skills and knowledge that are integral to success for students in our target population.

To ensure that students achieve state standards and expectations for English Language Acquisition, the school curriculum will provide comprehensive English instruction throughout all classes. Students will improve their English skills through academic work as well as through informal conversations with teachers and peers. Assessment in both language acquisition and subject content is important.

The curriculum framework is built around the research-based idea that delivering a curriculum to second language learners requires active and not passive learning. Project-based learning (PBL) is a research model for curriculum delivery and classroom activity that shifts away from the classroom practice of short, isolated, teacher-centered lessons in favor of learning activities that are long-term, interdisciplinary, student-centered, and integrated with real-world issues and practices.

All teachers, including those in content areas (such as math) provide instruction in language structure, listening, speaking, writing, reading and analyzing texts as well as in content-related vocabulary. To ensure that teachers focus on English Language Acquisition (ELA) standards, professional development centers on developing, understanding, and providing best academic practices for second language learners. Ongoing staff development provides techniques for, and the NAS curriculum development focuses on, teaching in a school attended by language learners of diverse levels. Ongoing curriculum review takes place through analysis of student work in professional learning communities (PLCs) and in daily classroom observations.

[1] JFF in Brief: www.jff.org

Within this framework, NAS-Phoenix will offer the Arizona high school common core curriculum.

Curriculum and Alignment. The NAS-Phoenix curriculum is the collective product of an inspired faculty and is guided by the belief that preparation for the demands of the 21st century is based on a strong academic foundation. NAS instructional staff will create curriculum in-house using such resources as Engageny.org and Achievethecore.org which offer multiple curriculum resources aligned to Common Core in ELA and mathematics. NAS teachers will ensure literacy and numeracy across the core academic content areas of English, mathematics, science, social studies, foreign language, and fine arts.

- English. The NAS English/Language Arts curriculum ensures students develop as readers, writers, and effective communicators within an increasingly complex and global society. Literature based and aligned with the Social Studies curriculum, English instructors will select texts that are relevant, rigorous, and culturally responsive.
- Social Studies. Social studies courses are designed to promote student understanding of historical, geographical, civic, and economic issues that have and will continue to shape the world around them. Social Studies will afford students increased opportunities to improve literacy.
- Science. NAS-Phoenix believes that a rigorous and relevant science curriculum will help prepare students for post-secondary success whether at college or in the world of work. Critical thinking, problem solving, and communication skills will be explicitly taught to help students master the science curriculum.
- Mathematics. NAS-Phoenix math curriculum highlights the interconnectedness between number sense, algebra, geometry, probability and statistics, and trigonometry. In addition to the core math curriculum, NAS will offer an introductory Principles of Mathematics elective to prepare students for Algebra I. In order to satisfy state graduation requirements, students may also complete a Business in Mathematics course.
- Foreign Language. NAS-Phoenix believes it will be advantageous for urban Phoenix students to become proficient in Spanish. As such, the school offers both introductory and continuing Spanish.
- Electives. Reflecting the NAS mission to empower students to achieve the American Dream, electives will be teacher-created courses such as Introduction to Technology, Personal Finance, and Public Speaking. Noting the importance of the arts in preparing well-rounded students, elective coursework will also include rigorous, relevant curriculum in the arts.

Curricula will be driven by the Arizona College and Career Ready Standards. To ensure viable pathways to academic success, the Core Standards will be broken down into scaffolded and interdisciplinary units, reinforcing skills necessary for career and post-secondary success. Backwards Design principles will support the alignment between NAS-Phoenix's curriculum and the Common Core standards. Guided by the work of Margaret Heritage with whom the NAS-Phoenix Founding Principal has worked extensively in developing Formative Assessment plans for schools in improvement, teachers will "plan backwards," beginning with the standard and then creating Learning Goals for lessons/units and explicit, measurable success criteria in student-friendly language, to demonstrate when those goals have been achieved.

College and Career-ready Curriculum and Instruction: Key Tenets

Curriculum emphasizes deep learning over test preparation, focusing on a solid understanding of key concepts within the core disciplines as well as in technical fields within high-demand career sectors.

- Curriculum is aligned, sequenced and/or contextualized toward increasingly challenging State Standards, building skills needed for entry into credit-bearing college coursework and/or career pathway programs of study.
- Reading and writing is embedded across the curriculum, every day, and is scaffolded through collaborative group work, literacy circles, digital literacy activities, and other strategies that enable learners with diverse skill levels to support and challenge their peers.
- All students develop thinking, listening, speaking, and inquiry skills through purposeful questioning, opportunities to talk about their learning, and project-based and work-based learning opportunities.

- Staff embeds in the curriculum ongoing opportunities to practice college-ready and professional skills and behaviors such as public speaking, time management, financial literacy, working in teams, using technology, and problem solving.
- Students have opportunities to explore careers through work-based learning opportunities, such as internships or job shadows.

b) Methods of Instruction

NAS-Phoenix instructional methodologies are designed to foster English language acquisition, college and career readiness in an increasingly global, competitive, and diverse society. As such, teachers will use the following approaches to teach Arizona's State Standards:

- Guarded and key vocabulary for establishing the foundation of the lesson as well as developing the big ideas of the curricular content
- Visuals, graphic organizers, and gestures to represent concepts and guarded vocabulary

The following methodologies will be used by NAS-Phoenix teachers. They emerge from the five keys to educational success discussed previously in Section A.1.b:

1. English Language Acquisition. To graduate with a high school diploma and become successful in American society, immigrants need excellent English skills. Our ELA teachers focus on reaching students through a variety of techniques and approaches. Teaching is not an isolated activity, but instead focuses on helping students complete their school tasks. This helps in two areas where English learners need practice: academic English and conversational English. Academic English is critical for success in school while conversational English is the language of daily life. Success in project-based learning includes both types of communication.

2. Scaffolding.[2] NAS teachers will use scaffolding - a variety of instructional techniques to move students progressively toward stronger understanding and, ultimately, greater independence in the learning process. Scaffolding bridges learning gaps as teachers provide successive levels of temporary support to help students reach higher levels of comprehension and skill acquisition that they would not be able to achieve without assistance. The supportive strategies are incrementally removed when they are no longer needed, and the teacher gradually shifts more responsibility over the learning process to the student. Given the unique needs of the target population, scaffolding is an essential element of effective teaching, and all NAS-Phoenix teachers will scaffold their instruction. By providing this support, scaffolding eliminates the negative emotions students experience when they are frustrated or intimidated by a learning task without the support they need to complete it. Examples of scaffolding include:

- The teacher provides a simplified version of a lesson, assignment, or reading, and then gradually increases the complexity, difficulty, or sophistication over time. To achieve the goals of a particular lesson, a lesson may be broken into a series of mini-lessons that progressively move students toward stronger understanding. Between each mini-lesson, the teacher uses formative assessment strategies to check for understanding, gives time for practice, and shows how the acquired skills will help them tackle more challenging problems.
- The teacher describes or illustrates a concept, problem, or process in multiple ways to ensure understanding. A teacher will use strategies to address the multiple ways students learn by using graphic organizers, multi-media presentations, oral descriptions of concepts, and cooperative groups.
- Exemplars or models of assignments are shared with students. Teachers share examples of excellent work and explicitly teach students how the work meets assessment criteria in a rubric. Examples of excellent work allow students to understand the learning goal and how to achieve it. Teachers may model a process – for example a step by step demonstration of a lab in science. This helps students see how the process is completed before they practice it themselves. Students may also model processes for their peers.

[2] http://edglossary.org/scaffolding/

- Pre-teach vocabulary. The teacher reviews vocabulary prior to reading of a difficult text. To help students understand the meanings of new words, teachers will use metaphors, analogies, and graphics to help students "own" the new words they will encounter in the text. They must have multiple exposures to the new vocabulary in order to make meaning out of the text.
- The teacher states the learning goal, success criteria, and assessment rubric. When students know why they are being asked to complete an assignment, and how their learning will be assessed, they are more likely to understand its importance and be motivated to achieve the learning.
- The teacher explicitly describes how the new lesson builds on the knowledge and skills students were taught in a previous lesson. By connecting a new lesson to prior knowledge, the teacher shows students how the concepts and skills they already learned will help them with the new assignment. To ensure relevance to the lives of their students, teachers will make explicit connections between the lesson and personal interests and experiences of their students.

3. Active Learning Techniques. NAS-Phoenix's instruction emphasizes active, not passive learning. Continual student-teacher interaction promotes the diagnosis of learning gaps which are bridged using scaffolding as well as the following active learning techniques:

- Previewing and building on prior knowledge
- Interactive work, not lengthy lecturing
- Demonstrations
- Graphic organizers and other visually-oriented aids that provide a non-linguistic structure for understanding key information
- Various methods are used to deliver information. For example, a teacher may verbally explain an idea and then use Total Body Response (TBR) to convey the same information
- Continual modeling by teachers of what kind of work is expected and how to create it
- An emphasis on relating students' culture to content, which engages students, maintains their interest and keeps students' heritage part of their lives
- Extensive group work that offers the opportunity to engage students in talking, interacting, problem solving and improving social skills

4. Sheltered Instruction. Sheltered English instruction is an approach that engages English Language Learners (ELL) above the beginner level in developing grade-level content-area knowledge, academic skills, and increased English proficiency. In Sheltered classes, teachers use clear, direct, simple English and a wide range of scaffolding strategies to communicate meaningful input in the content area to students. Learning activities that connect new content to students' prior knowledge, that require collaboration among students, and that spiral through curriculum material, will offer ELL the content instruction of their English-speaking peers, while adapting lesson delivery to suit their English proficiency level.

5. Project-Based Learning. Project-Based Learning (PBL) provides opportunities for interdisciplinary learning. Students apply and integrate the content of different subject areas instead of learning each subject in isolation. One immediate benefit of PBL is the unique way that it motivates and engages students. PBL provides opportunities for students to pursue their interests and make decisions about how they will find answers and solve problems. PBL also provides opportunities for teachers to build relationships with each other and with the larger community. Student work, which includes documentation of the learning process as well as the student's final projects, can be shared with teachers, parents, mentors and the business community, all of whom have a stake in the student's education. Other features of PBL include:

- Activities that include the entire group and give students experience in negotiating with a team (a situation students are likely to face in work)
- Work with smaller groups consisting of students of varying first languages, which requires intense use of spoken English, since students must speak English to accomplish their work

- Groups that consist of speakers of the same language, which reinforce students' literacy in their first language, as well as allowing students a way to express sophisticated concepts they want to discuss but cannot with their limited English proficiency

Research Support for Instructional Strategies Utilized. According to *Double the Work* by Short & Fitzsimmons, ELL students are required not only to learn content, but a second language simultaneously—or twice the work required of native speakers. "Adolescent ELLs are a diverse group of students whose needs overall have not been well served by the country's educational system. Most adolescent ELLs are moving towards the path of academic literacy, some move more slowly than others, because of certain factors such as, their native language literacy skills and educational backgrounds." NAS-Phoenix acknowledges the challenges facing ELL students to learn the English language and master content at the same time.

NAS-Phoenix has adopted five keys for success, loosely based on the work of the Center for Research on Education, Diversity and Excellence (CREDE).[3] These five standards for Effective Teaching and Learning express the principles of effective teaching/learning for all students. For the fluent English speaker, the standards describe the ideal; for ELL students the standards are vital.[4]

1. Teachers and students producing together (joint productive activity, modeling language)
2. Developing language across the curriculum (English and academic language development)
3. Making meaning: connecting schools to students' lives (contextualization)
4. Teaching complex thinking (cognitive challenge)
5. Teaching through interactive discussions (instructional conversation, project based learning)

c) Formative and Summative Assessment Plan

The Assessment System at NAS-Phoenix demonstrates how well the taught curriculum supports the school's mission. As teachers collect evidence of learning and assessment data are reviewed, the school will make appropriate revisions to more effectively align teaching and learning. Multiple measures of learning will occur through Measures of Academic Progress (MAP) unit tests, and daily exit slips or period checks for understanding. As illustrated in Margaret Heritage's[5] model, teaching *is* formative assessment and involves the setting of ***Learning Goals and Success Criteria.*** Learning Goals are specific curricular outcomes shared explicitly with students. A set of "I can" statements represent the success criteria - what students will say, do, or write to demonstrate mastery of the Learning Goal. Together, these components create a formative assessment system that is "fundamental and indigenous to the practice of teaching and learning."[6]

In this model:

- Teachers must be nimble in the classroom, constantly making instructional shifts in response to

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[3] For additional research supporting the NAS educational philosophy and approach see for example, **The Effects of Sheltered Instruction on the Achievement of Limited English Proficient Students**, http://www.ed.gov/offices/OERI/index.html); **Scaffolding and Differentiating Instruction in Mixed Ability ESL Classes Using a Round Robin Activity**, The Internet TESL Journal, Vol. XII, No. 3, March 2006, http://iteslj.org/; or **Immersion Education for the Millennium: What We Have Learned From 30 Years of Research on Second Language Immersion**. **Cummins, J. (2000).** Available online: http://www.iteachilearn.com/cummins/immersion2000.html.

[4] www.crede.berkeley.edu

[5] Heritage, Margaret. (2007). Assessment and Accountability Center (AACC)/ National Center for Research on Evaluation, Standards and Student Testing (CRESST) at UCLA.

[6] Heritage, Margaret. (2010 September). Formative Assessment and Next-Generation Assessment Systems: Are We Losing an Opportunity?

assessment evidence
- Students receive specific feedback about their learning with advice on what they can do to improve
- Students participate in the process through peer and self-assessment

A synthesis of the research on these practices reveals that "student learning gains triggered by formative assessment were amongst the largest ever reported for educational interventions with the largest gains being realized by low achievers."[7]

Fidelity to the Formative Assessment Strategy will ensure that:
- Students will meet the high academic standards established by the Arizona Department of Education
- The individual learning growth rate and learning ability is treated with respect and supported so that every NAS student improves academically
- Students will be successful as measured by the PARCC

Our strategy also aims to:
- Provide data that helps teachers plan instruction to effectively meet the needs of individual students
- Assist parents in understanding their child's achievement of academic standards
- Establish goals for professional development
- Provide information to assist curriculum committees in evaluating curriculum
- Provide information to the administration for evaluating progress in improving student achievement

A defining hallmark of NAS-Phoenix is a collaborative culture of achievement among teachers and peers, teachers and students, and students and peers. Critical to the learning community is teacher measurement and analysis of performance data through various formative and summative assessments. This 'culture of evidence' involves continual assessment of individual student progress toward performance measures as reflected in quarterly assessments aligned to pacing guides in the core academic areas and "just-in-time" formative assessments administered daily and/or weekly to support necessary remediation. Data from quarterly assessments will be disaggregated by subgroups and utilized to determine current need and to modify instruction. Progress reports will be issued and quarterly report cards will be distributed.

Upon enrollment, diagnostic data will be collected, including previous state test scores, a writing sample, and a math assessment to determine an intervention plan. Students will also participate in the NWEA MAP assessments. An analysis of quarterly assessment data will identify those students at risk of not meeting the standards. Remediation will be provided during extended day tutoring opportunities as well as a Seminar class, which is designed to provide additional individualized and group academic support. In addition to the formative and summative assessments measured by MAP[8], formative assessments are embedded in classroom lessons to provide ongoing feedback and to ensure improvement. Guided by this achievement data as well as that collected from weekly classroom walk-through observations, professional development will be provided in research-based best practices including the rigor and relevance framework[9] and Robert Marzano's "Attributes of Student Engagement." Interactive technology will also be used as an instructional tool to promote active student participation and improve achievement.

The initial placement and, then ongoing assessment process will enable NAS-Phoenix to choose appropriate learning strategies and ensure adequate yearly progress for our students. Differentiating instruction for individual students' needs is critical to the success of both students and the school. Assessment will inform every aspect of instruction, from planning to implementation to evaluation.

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[7] 10 Black, P.J. and William, D. (1998) Inside the Black Box: Raising Standards Through classroom Assessment. Phi Delta Kappan, 80, 139-48.
[8] Source: www.nwea.org
[9] Source: International Center for Leadership in Education (www.leadered.com)

Teachers will be expected to compile assessment data on an ongoing basis and work collaboratively to effectively analyze student data for the purpose of improving student achievement and developing appropriate curriculum. The minimum assessment expectations for NAS-Phoenix teachers include:

- Rubrics are to be posted in classrooms to display student expectations for major assignments/projects
- Current and useable word walls are posted in all classrooms
- Exemplars are displayed in classrooms allowing students to know what quality work looks like
- Learning goals and success criteria will be posted in all classrooms[10] (Margaret Heritage)
- Common assessments will be developed and aligned to Arizona content standards
- Teachers will work collaboratively in Professional Learning Communities (PLCs) to analyze assessments for the purpose of improving student achievement
- Final common assessments for all classes will be given at the end of each quarter. Common assessments that are missed must be made up before any credit on that test can be gained. If there is an administratively approved reason for missing these assessments they must be made up by a date established by the school administration or no credit will be awarded
- Makeup timelines for teacher-created assessments (other than end of quarter finals) will be determined by the teacher. Timelines are to be reasonable as determined by the school administration
- Informal assessment instruments to monitor the quality of work, social skills and academic adaptation may include but are not limited to: drawings, classroom participation, review of student notes, portfolios, written self-reflections, group exercises and peer evaluation
- Summative assessments to measure cumulative comprehension include but are not limited to: tests, quizzes, reading comprehension and writing assessments, oral reports and short answer questions
- A coherent strategy for supporting students who have not yet achieved standards will include remediation and/or re-teaching, utilizing additional assessments, and creating additional reporting documentation in the event that student performance falls below the standards

The NAS-Phoenix strategy to monitor student performance and assist educationally disadvantaged students to meet state academic content standards will utilize a variety of instruments:

- **Personal Student Interview**: Incoming student will personally interview with a NAS-Phoenix staff member discussing his/her past educational experiences, languages spoken at home, length of time in school, work schedule, time in the United States, information about the student's family, and other questions to determine whether the student meets "high risk" criteria. This information will be shared with our staff in order to make personal connections and understand our students' backgrounds.
- **Arizona's English Language Learner Assessment (AZELLA)**. NAS-Phoenix will use AZELLA to evaluate each incoming student's English language skills. AZELLA is a Standards Based Assessment that measures a student's proficiency of the English Language Proficiency Standard. AZELLA meets both state and federal requirements in assessing the language proficiency of students identified as second language learners and determines placement for appropriate instruction. These tests will allow NAS-Phoenix to place ELL in the appropriate ELA class and give teachers baseline and growth information on their English skills. The tests also provide data that will be used to drive curriculum and guide classroom and building level instruction for individuals and groups of students.
- **Measures of Academic Progress (MAP) Mathematics/Science/Reading and Language Usage:** In order to assess our student's math/science/reading and language usage levels, we will use MAP short cycle assessments three times a year. We will assess reading and language usage in English. MAP testing will help NAS-Phoenix initially place students in the appropriate mathematics, reading and language usage courses. The data derived from ongoing MAP testing will help teachers make decisions at the classroom level and NAS-Phoenix at the school level: MAP testing will aid teachers in diagnosing a student's instructional needs and monitor academic growth over time. MAP data will

[10] Formative Assessment and Next Generation Assessment Systems: Are We Losing an Opportunity? – A Project by Margaret Heritage and the Council of Chief School State Officers

identify the skills and concepts individual students have learned and will help NAS-Phoenix refer students to appropriate instructional programs. MAP will also provide the school a measure of longitudinal growth on a tri-annual and annual basis. As such, the data will drive the curriculum and the development of the school's School Improvement Plan. Finally, MAP longitudinal growth data will enable the school to communicate its performance to external stakeholders.

- **Informal Assessments:** Ongoing teacher created assessments, regular conferencing with students and parents, and narrative reports that highlight the academic progress students have met or need to meet for class credit will provide in-depth formative feedback to students. The data these assessments generate will be used to plan instruction at the classroom, individual and school level. This feedback will strengthen the quality of students' work and their understanding of themselves as learners.
- **Arizona's State Exam:** The mandatory proficiency exams will be administrated at the designated times indicated by the state.
- We will offer **ACT** and **SAT** where appropriate to aid students in post-secondary opportunities. Composite test scores will provide a measure to report school performance to external stakeholders.

Student Support System: Response to Intervention. In weekly team meetings, teachers will evaluate lessons and the progress of students. The school will use the RTI model to make adjustments to a student's instructional plan. As soon as student failing signs appear, our teaching community will address the situation proactively. Through our staff development, we prepare our educational teams to develop mutually agreed upon student plans with a family member if applicable, to determine the source of the difficulty. Based on the results, students will be provided with the following examples of interventions:

- Small group and individual tutoring
- Peer mentorships to offer support from peers who are more proficient in a given subject area to provide remedial support
- Additional English Language Acquisition support
- Retention at current level or required course for an additional semester
- Counseling that determines different program is more appropriate for the individual student's needs

Assessment Timeframes. The following is a model framework including expected completion dates in the development of NAS assessments, subject to approval by the Governing Council and school Principal:

- Conduct during new student registration process, personal interviews and first language assessments
- Administer the Pre-English language proficiency assessment placement to ascertain baseline proficiency by the 20th day of a student's enrollment
- Design/administer common quarterly assessment for each course every 9 weeks
- Administer common tri-annual assessments in MAP Mathematics, Science, Reading/Writing/Language Usage during the fall, winter and spring windows
- Administer the state assessments as required by ADE

Evaluation for remediation and intervention will occur regularly during the semester, and formally at the ninth week of the semester to determine the best placement for the student for the next session. All student achievement data will be analyzed in a timely fashion and presented to teachers and the Governing Council in a concise manner through charts, graphs and other dashboards in order that adjustments to instruction and intervention strategies can be made.

d) Alignment of Program of Instruction and the Academic Systems Plan

NAS-Phoenix's Academic Systems Plan for math and reading detail the action steps, timelines, and resources necessary to support implementation of the program of instruction, including accountability measures for instructional staff and school leaders.