A.3 Program of Instruction

A. Core Content Curriculum with Alignment to Educational Philosophy and Arizona's College and Career Ready Standards

Highland Prep's curriculum program will be dynamic, rigorous and relevant to students who are preparing to compete with students from around the world in a new and increasingly innovative global arena. Greenfield will ensure that its curriculum and instruction is strategically designed to ensure that each student receives individual attention to their personal goals with innovative pathways. Highland Prep understands that it is the education team's responsibility to prepare students to be creative, adaptive and innovative in their thinking.

Highland Prep's curriculum program will be based on Arizona's College and Career Ready Standards (See A.3.2, and A.5), as well as other rigorous state standards. Highland Prep will ensure that the new standards are implemented with fidelity to ensure that a consistent set of English Language Arts (ELA) and Mathematics expectations are established that result in a high quality preparation of all students for college and career (ADE, 2015). The school's education team will commit to providing its students with:

- A clear articulation of the standards to ensure students understand what is expected of them with every lesson.
- Consistent expectations that ensure MHP students are both nationally and internationally competitive.
- Interesting and relevant content that supports the development of higher-order thinking skills consistent with successful post-secondary interactions, and workplace expectations.

English Language Arts Pre-AP Curriculum Materials

Highland Prep's thorough understanding of Arizona's College and Career Ready Standards for high school resulted in the school's selection of the College Board's *Spring Board* curricular materials (See A.3.2) as the foundation for its English Language Arts curriculum. The Common Core Standards for English language arts are organized by individual grade level bands in middle school and configured as shared bands in high school (i.e., grades 9-10 and 11-12). Each performance band contains vertically articulated "Anchor Standards" for reading, writing, communication, and language. Spring Board has a web link that provides highly specific examples of its ELA alignment to the Common Core available at: http://springboardprogram.collegeboard.org/commoncore . Spring Board adds value to the Common Core standards through its strong emphasis on reading analysis, writing in multiple modes, vocabulary acquisition, and language usage that build from basic language acquisition through effective use of rhetoric and complex syntax.

Mathematics Pre-AP Curriculum Materials

Highland Prep's thorough understanding Arizona's College and Career Ready Standards for high school resulted in the school's selection of the College Board's *Spring Board* curricular materials as the foundation for its Mathematics curriculum. The Common Core Standards for Mathematics are organized by the following categories: Number and Quantity, Algebra, Functions, Geometry, Modeling, Statistics, and Probability (See A.3.2, and A.5). These conceptual categories show the body of knowledge students should learn in each category to be college and career ready, and to be prepared to study more advanced mathematics. Again, Spring Board has a web link that provides highly specific examples of its Mathematics alignment to the Common Core available at: http://springboardprogram.collegeboard.org/commoncore . Highland Prep students will take one year of Algebra I as freshmen to ensure a deep and conceptual

understanding of algebra. In their sophomore year, students will take Geometry, and Algebra II. Juniors will take Probability and Statistics, and Trigonometry. Seniors will have the opportunity to take Pre-calculus, Calculus, and AP Calculus (See A.3.2).

Spring Board is also vertically aligned to the College Board Standards for College Success (CBSCS). A recent College Board study indicated a strong alignment between the Common Core State Standards and the CBSCS (College Board, 2010). The CBSCS includes the CCSS focus on required achievements and outcomes, but also "addresses the process elements and strategies essential to students achieving the final outcomes." Spring Board features rigorous curriculum materials, with embedded formative assessments and professional development support to ensure its accurate and effective implementation.

Highland Prep's selection of Spring Board was also influenced by its proven track record as a pre-AP program that increases participation and prepares a greater diversity of students for success in Advanced Placement (AP) classes (Elefonte, H., College Board & Jun Li, Fordham University, 2010). Spring Board is also a strong match for the school's students since it provides "culturally and personally relevant activities designed to engage students in problem solving, academic discourse and critical analysis." (College Board, 2010) Further, Spring Board's approach to personalized learning provides teachers tools to meet each student's needs, which is consistent with Highland Prep's *Personalized Education Plan* (PEP) program (See A.1). The Pre-AP preparation also fits well with the school's goal of every student graduating from the school college ready, and with at least one AP course completed (College Board, 2007). Spring Board, is also a good fit with the school's Science Technology Engineering and Math (STEM) program (See A.2, and A.3.2) since students who take AP math and science courses, "major in STEM fields at significantly higher rates than other students". (Seimens, 2011)

Social Studies

Highland Prep's curriculum for Social Studies will be aligned with Arizona's College and Career Ready Standards for literacy in history, which will be infused across the curriculum. Highland Prep's social studies program will begin in the freshmen year with World History, sophomore year with U.S. History, junior year with Economics and senior year with Government. Students will be able to take AP U.S. History in their junior year and AP Economics in their senior year. The aim of Highland Prep's social studies program will be to promote civic proficiency, the knowledge, intellectual processes, and democratic perspectives required of students to be active and engaged participants in public life. Civic proficiency depends on a commitment to democratic values, and requires the abilities to use knowledge about one's community, nation, and the world to apply discovery processes, data collection and analysis, collaboration, decision-making, and problem-solving through the examination of primary source documents, and secondary sources. Highland Prep will encourage its students to become educated, global citizens, with a social conscience, who will be able to serve as change agents in their local and global community (See A.3.2). Further, Greenfield will ensure that its entire class of 2017 is proficient on the civics test, consistent with the American Civics Act (HB 2064).

Science

Highland Prep's curriculum for Science will be aligned with Arizona's State Science Standards, although English Language Arts for literacy will be infused across the curriculum. The school will ensure that ELA literacy and connections to the Common Core State Standards through secondary alignment with the Next Generation Science Standards (NGSS). The NGSS were designed to reflect the increasing need "for scientific acumen in a complex, technological world", and the "emphasis is on demonstrating the scientific process." (Schachter, 2013)

Highland Prep's science program will utilize backward planning (McTighe & Wiggins, 2005; Jacobs, 2010) to bring students from whatever level that they arrive to the school, to AP readiness within two years of entry to the academic program. The school will accomplish this through discovery and experiential based learning, the development of background knowledge and skills, and a deep understanding of physical science. Students will use discovery and experiential based learning to discover the rules and principles that guide physical sciences. Highland Prep students will take Chemistry during their freshman year, Biology during their sophomore year, and Physics in their junior year. Students will also be able to take AP Chemistry in their junior year and AP Biology in their senior year (See A.3.2). Highland Prep will ensure that the lab component of its science curriculum supports a seamless transition to any college or university program.

Instructional Framework

The overall instructional program for Highland Prep will be guided by Charlotte Danielson's *Framework for Teaching, which* is a comprehensive model for effective teaching practices that incorporates a teacher and administrator development and evaluation system. The instructional model has four domains: *Planning and Preparation*, *The Classroom Environment*, *Instruction*, and *Professional Responsibilities* (Danielson, 2007). The model was also chosen since it was designed to support Common Core Instruction, and data-driven, formative assessment instructional practices. The *Framework for Teaching* model will be implemented during the summer in-service prior to the start of the inaugural school year, and will remain in place to ensure that the school evolves and improves its instructional effectiveness (See A.1, & A.5).

Special Education

Highland Prep is committed to creating a learning environment that ensures all students with disabilities receive a high-quality education, by providing services to children with disabilities in the same manner as the local school district. Including the specialized instruction, supplementary aids and related services, these allow for all individual students to fully participation in every aspect of the program as well as maximize the opportunity for overall achievement.

Highland Prep assures that it will comply with section 613(a)(5)* and 613(e)(1)(B)** of the Individuals with Disabilities Education Act by adopting Special Education Policies and Procedures that ensure all children with disabilities have the right to a free appropriate public education (FAPE). These services will be provided in an inclusive model with a continuum of special education and 504 services to meet the needs of all students with disabilities Students with Individual Education Plans (IEPs) progress steadily towards post-secondary preparedness and placement. The school will ensure that services for Students with Disabilities (SSD) are made through ACT, and the College Board for PSAT, SAT, and AP tests. The school will contract with special education specialists and service providers as needed. As well, classroom teachers will be trained on 45-day screenings, accommodations and modifications, and will be required to read and sign an acknowledgement that they have read each child's IEP prior to the start of each quarter for each student with a disability whom they teach.

English Language Learners

Highland Prep will provide appropriate English Language Learner (ELL) support to qualifying students in accordance with state and federal laws. The school will use their enrollment form and Home Language survey to identify students who need to take the Arizona English Language Learner Assessment (AZELLA). If a student scores Pre-Emergent, Emergent, Basic, or Intermediate, the student will be designated an ELL, and will receive English Language Services with parent consent. Services will be provided either through Structured English Immersion (SEI) or an Individual Language Learner Plan (ILLP), depending on the number of students who qualify. Highland Prep will ensure that students receiving English Language Services,

progress steadily through reclassification, towards fluency, and post-secondary preparedness and placement.

B. Key Instructional Methods that Incorporating Formative Assessment Strategies

Personalized Education Plans (PEP) provide Instructional Context

All new Highland Prep students will participate in an administrator/student/parent intake interview. Prior to the interview each student will take an assessment to measure their skills in reading comprehension, pre-algebra and algebra. In addition to previous school data, a rubric for each test will assist the administrative team in determining student needs. Where applicable, students may be placed in remedial classes and or, assigned to the Future Freshmen Academy, various workshops, tutoring with teachers, or online tutoring. Student test data and transcript analysis also assist in determining enrichment opportunities, which may include honors and advanced placement (AP) classes. The new information coupled with previous school data ensures that the intake process serves as a baseline from which to measure future growth.

Through this process, students will be assigned classes based on their academic history, graduation needs, as well as student and parent feedback. The interview process initiates the start of a Personalized Education Plan (PEP). Each student has unique characteristics, strengths and areas in need of remediation and enrichment. Each student's data will be tracked on datasheets that are updated by a specific grade level tracker (Holcomb, 2004). For example, freshmen will be tracked by one faculty member whose responsibility is to ensure that all freshmen are kept on track with their freshmen goals, which are articulated in their four-year graduation plan, which is a part of their PEP (See A.1, A.2, and A.5). Similarly, all sophomores will be tracked by a particular advisor, as will upper classmen. Highland Prep will ensure that each student participates in the creation of a personalized education plan (PEP) uniquely tailored to his or her own learning needs and goals. Encouraging students to take an active interest in their own education is essential. At least as important, is that true personalization requires that a "learning program and approach [are] specifically tailored to the abilities, interests, preferences, and other needs of the individual student, and that such considerations are driven by individual data at the classroom level (Wolf, 2010) through formative assessment instructional practices" (See A.1, A.2, A.3, & A.5).

Formative Assessment Instructional Practices Are Embedded in All Instructional Methods

As mentioned in the Educational Philosophy and Target Population sections, Highland Prep will utilize formative instruction and assessment as its primary means of instruction. In practice, the school's teachers will make immediate and ongoing instructional adjustments to direct instruction, Cooperative learning, Project-based Learning, Socratic seminar, and Experiential learning - based on their students' level of understanding . Highland Prep teachers will learn how to gather ongoing assessment evidence, analyze the evidence, and change teaching tactics wherever necessary, on a frame-by-frame basis. These instructional adjustments will be based on a combination of students' observed performance and self-reported levels of understanding or lack thereof (Popham, 2011b.). Highland Prep teachers will use a myriad of brief assessments on an ongoing basis throughout each class, making "instant, adroit instructional adjustments as required so that students will be on the receiving end of constantly perfected, truly tailored instruction" (Popham, 2011) in each of the following methods of instruction:

Direct Instruction

Highland Prep will use carefully articulated daily lesson plans to teach students explicit skill-sets through direct instruction that will include minute-by-minute formative assessment. Direct instruction will include lecture, and small-group, teacher-directed learning activities (See A.5).

Cooperative Learning

Highland Prep will feature instruction that organizes classroom activities into academic and social learning experiences. Students will work together in groups and learn to benefit from one another's resources and skills. In this format, the school's teachers will act as facilitators as students provide the information for learning. The school's cooperative learning tasks will be intellectually demanding, creative, open-ended, and will involve higher order thinking tasks (See A.5).

Project-based Learning

Highland Prep will integrate its STEM curriculum program through embedded projects. In support of the STEM program, the school will partner with Project Lead the Way (PLTW) in exposing its students to the Science, Technology, Engineering, and Mathematics (STEM) curriculum. The PLTW program engages students in activities, projects, and problem-based learning, which provides hands-on classroom experiences. Highland Prep's students will create, design, build, discover, collaborate and solve problems while applying what they learn in math and science. Students will engage in a myriad of learning experiences through a variety of individual roles within a team format. Students will learn individual and group accountability, and will participate in the creation and presentation of a product that makes use of integrated themes; utilizing content information, organized in a meaningful context. They will also be exposed to STEM fields through professionals from local industries who supplement the real-world aspect of the curriculum through mentorships and workplace experiences (A.1, A.2, A.3.2, & A.5). Also, the program meets CCSS and the new Next Generation Science Standards (NGSS). The school will also feature several Robotics programs, which include: SeaPerch, Vex, and Zero Robotics program sponsored by NASA & MIT.

Socratic Seminar

Highland Prep will use Socratic Seminar, otherwise known as Socratic Circles (SC) to encourage maximum student involvement and participation through ongoing peer interaction. SC instruction will generate multiple views on a particular issue or topic; resulting in a more thorough examination of the topic. Highland Prep's teachers will use Socratic questioning to establish and maintain the flow of the activity, and to help students connect the activity to their learning. The question style of Socratic questions is open-ended; focusing on broad, general ideas over specific information. Teachers will use this questioning technique to encourage higher-level critical thinking skill development (See A.5).

Experiential Learning and Digital Literacy

Highland Prep will use experiential or discovery learning provides students with an opportunity to learn by participating in activities, conducting experiments, and field work. Highland Prep also believes that digital literacy or, 21st century literacy is essential to reach students and bring relevance to instruction which includes "understanding wikis, blogs, digital media, and other new and emerging technologies (Jacobs, 2010)." For example, Digital Storytelling will be used across the curriculum to provide students with digital content that is merged and remixed into new forms of conceptual awareness. Students will be exposed to digital media tools – such as Garage Band, Audacity, Movie Maker, iMovie and other compilation tools that

will foster their ability to create multimedia products of their learning experiences through the use of digital storytelling. Students will learn how to digitize media by using picture and video editors, mix soundtracks and use microphones to overlay their narrations over digital music and sound effects (See A.5).

Real-life experience and Internships

Highland Prep students will be exposed to STEM fields through professionals from local industries who supplement the real-world aspect of the curriculum through mentorships and workplace experiences. Students will have the opportunity to participate in summer, evenings or weekends, and in their senior year of school during the school day. Highland Prep wants students to be able to confirm or rule out career choices, and to acquire a realistic understanding of the workplace (A.1, & A3.2).

C. Summative Assessment Plan that Supports Student Mastery of Arizona's College and Career Ready Standards

Highland Prep believes that summative assessment is key to measuring students' status with respect to curricular outcomes (Marzano, 2009). For this reason, teachers will provide a beginning of course (BOC) and end of course (EOC) assessment for every subject that they teach. This is important to determine individual student growth, and teacher effectiveness (See A.5).

Highland Prep will also conduct two benchmark assessments per year in order to determine longitudinal growth towards exit goals reflective of Arizona's College and Career Ready Standards, and College Readiness exams. Greenfield's digital, longitudinal assessment system will be used to drive the school's remedial intervention program. Specifically, the education team will use ACT's new digital assessment system – ACT Aspire to generate a concept analysis for each and every student in the school. Each student will be able to remediate identified weak skill-sets through an online tutoring program. Students will also be able to remediate weak skill sets with one-on-one assistance from teachers before and after school. Additionally, ACT Aspire will be used to generate strand analyses that will be used to create workshops throughout the year. Students will be assigned to specific workshops commensurate with areas targeted for remediation of individual weak skill-sets during the after during the student activities hour on regular school days. Highland Prep believes that summative assessments should not me conducted merely to collect data that measures status without using the data to help students (McMillan, 2007). Therefore, all summative data will be shared with students and their families in a timely manner so that interventions may be scheduled in support of remedial needs. Further, information generated by the two benchmark assessments will be used to provide feedback to teachers in areas that should be strengthened or reinforced in their curriculum (See A.1 & A.5).

College Readiness

Once Highland Prep students have mastered Arizona's College and Career Ready Standards, they will become eligible to access the school's Advanced Placement curriculum. Students will also take the PSAT, ACT, and SAT college readiness assessments. In 2013, ACT, and the College Board (PSAT, and SAT) reformulated their tests to reflect alignment to the Common Core Standards. College readiness test data will be analyzed and used to help each student gauge readiness for particular college programs. High quality data gathering isn't just helpful for identifying problems; MHP will use data to illuminate opportunities for students to benefit from enrichment programs such as honors, and AP classes. MHP believes in exposing as many students as possible to the AP curriculum with the goal of each of its students taking at least one AP course prior to graduation (See A.1).

D. Alignment of Program of Instruction and Academic Systems Plan

Madison Highland Prep's Academic Systems Plan for math and reading outlines the action steps, timelines, and materials necessary to fully support successful implementation of the program of instruction, including successful oversight and accountability from staff, the administrative team and the Governing Board.

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