A.3 PROGRAM OF INSTRUCTION

Overview

Structure of the Instructional Day

Hirsch Academy: CFA will be a safe, caring, and enjoyable place to learn. On a typical school day, morning hours will be devoted to reading, language, and math, with integrated content from the sciences and social studies when meaningful. Active engagement in learning will be maintained with a rich and rigorous curriculum and with the use of best instructional practice to make learning interesting and exciting. Social studies and science are specifically taught when not integrated in the morning's reading, language arts, or math. Writing and the Six Traits will be taught as part of English language arts, and skills will be applied across content areas. Hands-on, interactive learning will be encouraged across all subject areas as appropriate. Recess and a special area class such as art, music, foreign language, physical education, and/or media offer non-core subject learning and enrichment opportunities for the whole-child, and support and enrich the Core Knowledge (CK) curriculum. Lunchtime includes recess and time for tutoring or help completing class work or making up tests. At the end of the day, students go home, are picked up to go to local day care centers, or remain on campus to participate in sports, clubs, or academic enrichment and tutoring options. Time for individualized or small-group tutoring is provided for before and after the school day to meet the potential remediation needs of students.

The CK curriculum, the Common Core State Standards (CCSS) for English Language Arts and Math, and the Arizona Academic Standards will guide academic instruction at Hirsch Academy: CFA for students in K-8. The CCSS have been adopted and refined in Arizona as the 2010 Arizona English Language Arts Standards: CCSS (AELAS) and the 2010 Arizona Mathematics Standards: CCSS (AMS). The AELAS: CCSS and AMS: CCSS align with CK for reading, language, writing, listen and speaking, and math. The Arizona Academic Standards align with CK for science, social studies, and the fine arts. CK specifies content to be taught in language arts, world and American history and geography, math, science, visual arts and music for grades K-8. Arizona Standards for Physical Education, Health and Educational Technology will be taught independently of the core subjects and will also be supported in the core content areas.

As stated in CK professional development materials, and in sync with the K-5 CCSS, "Standards are what children need to know and be able to do at the end of a specific grade. The standards do not include everything that must be taught for children to know and be able to do these things. The curriculum (*Core Knowledge Sequence*) specifies what needs to be taught."

The CCSS state specifically that students who are college and career ready in reading, writing, speaking, listening and language can demonstrate independence, build strong content knowledge, respond to the varying demands of audience, task, purpose, and discipline, comprehend as well as critique, value evidence, use technology and digital media strategically and capably, and come to understand other perspectives and cultures. Hirsch Academy: CFA will provide students with the opportunity to meet these expectations through an excellent equitable 21st century skills education, through social skills and through education towards effective and active citizenship as positive contributors to the community.

Curriculum

English Language Arts

Instruction and learning in English language arts (ELA) will occur both through the content areas, as specified in the CCSS, as well as in its own block. The Core Knowledge Foundation was "a consultant to the team writing the ELA standards. [CK's] influence is clearly visible in the importance placed on listening and speaking, the importance of coherent content, and the importance of reading aloud to children." This is reflected in the CK mission to "create a fairer and more literate society by educating America's youth in a coherent, content-specific, cumulative and context-specific curriculum." The CK curriculum is the specific content of a coherent, cumulative curriculum that will be used at Hirsch Academy: CFA to support the teaching of both literacy academic standards and content knowledge in all core subjects.

Reading is the foundation of learning. We know and understand at Hirsch Academy: CFA the learning progression for receptive and expressive language: oral language develops through listening and speaking before written language develops through reading and writing, which occur sequentially in this order. A systematic phonics program will be a major part of every K-3 child's education, and in higher grades as needed for intervention. Hirsch Academy: CFA will open using the Core Knowledge Language Arts Program (CKLA), a specific, systematic and sequential phonics and reading program. It mirrors the philosophy of Hirsch Academy: CFA, using both direct instruction and questioning techniques. Teacher training and resources are readily available. Grades 4-6 will use the Open Court Imagine It! basal reading series, reinforcing the use of non-fiction as well as fiction. Our 6th- 8th grade students will follow a literature based language arts approach aligned with the CKLA curriculum.

Reading is both decoding and comprehension. It requires the development of skill and the building of background knowledge. In CK, the steady building of background knowledge and vocabulary in a variety of domains over time is the key to growing a student's ability to comprehend complex text. The ability to read and comprehend increasingly complex text is both the gateway to success and the great equalizer in society. Increased text complexity is a cornerstone of the CCSS.

Students write across the curriculum and writing is embedded in the daily academic life of students. Writing instruction is guided by the skills specified in the CCSS and the *Core Knowledge Sequence*. The writing process is taught in steps, beginning with the simplest steps in Kindergarten. Students are taught to write persuasively, moving from opinion to argument, to write expository or functional pieces to explain or inform, and to convey experience through expressive writing. In a CK school, like Hirsch Academy: CFA, the content and skill found in authentic student writing is evidence of the breadth and depth of learning.

Mathematics

Hirsch Academy will follow *Core Knowledge Sequence* guidelines and will use the Singapore Math program to teach to the Arizona Mathematics Standards: CCSS. A curriculum and standards alignment of CK math content and the CCSS has been completed by the Core Knowledge Foundation and will be used by Hirsch Academy: CFA teachers when planning and delivering math instruction. The synchronicity of the *Core Knowledge Sequence*, CCSS, and Singapore Math is evident in the understanding that concept and skill development spiral to build increasingly complex understanding and skill, and must be aligned with problem solving using

real-life scenarios. Best practices are followed by adhering to research demonstrating that math instruction and learning should progress from the concrete to the representational (pictorial) to the abstract. Abstract mathematical instruction should take place only after depth of understanding has been achieved at the concrete and representational stages.

American schools tend to continue to move forward with math concepts and skills before depth of understanding is developed. And, as understood within the Singapore Math academic community, mathematical process tends to be the focus in American education over basic conceptual understanding. This approach has proven to paralyze American student achievement in math as evidenced in comparisons of math data worldwide through results reported for the 2007 TIMMS and 2009 PISA, or with slow to stagnant nation-wide growth as noted in NAEP results. Singapore Math teaches fewer topics, to mastery. George Polya, author of *How to Solve It: A New Aspect of Mathematical Method*, noted in his book that students should be able to 1) understand the problem, 2) devise a plan to solve it, 3) carry out the plan, and 4) look back and analyze the reasonableness of the solution, whether there is an easier method to find the solution and then use this knowledge to solve other problems. This belief is supported by the Singapore Math program's approach to problem solving.

The CCSS for Mathematics include an explicit expectation that the eight "mathematical practices" are to be taught at each grade level and that a conceptual understanding of these practices should be developed within the structure of the delivery of math content. Singapore Math explicitly addresses the same premise through the Singapore Curriculum Framework. With Mathematical Problem Solving at the center of the framework, there are five major components addressed: Processes, Skills, Attitudes, Metacognition.

CK will cover several topics not addressed in CCSS-MA, including ordinal numbers, Roman numerals, orientation in time (calendar), or temperature. CK Math addresses these topics, explicitly states more properties than CCSS, explicitly teaches math vocabulary, symbols and tools, and provides a tighter spiral for fully developing conceptual understanding and skills. The CK "*Sequence* guidelines provide opportunities to reinforce each of the CCSS Mathematical Practices…All of the (CCSS) can be met through the use of the *Core Knowledge Sequence*…" (Overview of Core Knowledge Support for the Common Core Math Standards (CCSS), Participant Workbook). By the end of 5th grade, the CK curriculum is one year ahead of the CCSS. Students who begin with Singapore Math in the early grades conceivably will reach the middle school years and "follow a more integrated approach, where concepts and examples from algebra and geometry are introduced progressively at each grade level" (United States Department of Education What Works Clearinghouse, 2009). The three tools working together effectively, and with integrity, will raise student achievement in math.

Social Studies and Science

The *Core Knowledge Sequence* and Arizona State Standards will guide instruction in the content areas. The CCSS for ELA will also guide integration of the language arts into the social studies and sciences. CK professional development will include the creation of curriculum plans, domain-based curriculum maps, unit overviews, lesson plans and formative and summative assessment to ensure that content and standards are closely aligned, taught and accounted for in

student achievement. World and American history and geography, and all three of the sciences (life, earth, and physical-chemical), are taught K-8.

Visual Arts and Music

The visual arts and music curricula are aligned with the *Core Knowledge Sequence* and the State Standards. In domain-based instruction the arts are integrated into the study of history and in some cases, the sciences. We believe the whole-brain child best learns and retains information when connections are made across subject areas. There are also direct correlations to the success in mathematics with the integration of the arts.

Methods of Instruction

Teacher-Led Direct Instruction

Teacher-led instruction of content has been proven exceptionally effective in all environments and with all student populations. It includes giving an overview of the lesson, modeling the skills to be developed, leading guided practice, and directing students to use the skills. Best-practice instructional strategies will be used (such as dictation, note taking, compare and contrast, summarizing, mind-mapping with graphic organizers, scaffolding for building skills and for differentiation, Bloom's Taxonomy, questioning techniques, etc.). Adaptations for student learning styles may occur in instructional delivery and/or assessment format, but all students will be exposed to the same rigorous curricula.

Small Group Instruction

Small group instruction is used to provide appropriate support and guidance for targeted-skill reinforcement or conceptual understanding. Flexible-group instruction may be used for math, reading, writing, or other core content areas. It will also be used for cooperative and collaborative learning experiences.

Differentiated Instruction

Using ongoing assessment, student learning can be differentiated for process, instructional delivery, skill development, or assessment. Scaffolding techniques are used to build knowledge and skill incrementally and cumulatively in a coherent manner.

Cooperative Learning

Our students have the opportunity to learn and practice 21st Century Skills through cooperative and independent learning experiences. Technology skills, innovation and creativity, collaboration, critical thinking, and problem solving can all be learned and applied when working together. Purposeful and meaningful learning will come from carefully planned cooperative learning experiences and will not be utilized simply for the sake of using this best practice strategy, which can be a pitfall of education trends.

Project-Based Learning

Engaging actively in learning, taking an idea and developing it thoroughly and with purpose and meaning, and learning to work with a variety of people are skills we want our students to have when they leave Hirsch Academy for higher learning. Again, and particularly important for this strategy, purposeful and meaningful learning will come from carefully-planned project-based

learning experiences when this strategy is appropriate and important to the building of knowledge and college and workplace readiness skills.

Independent Learning

Students are encouraged and taught how to own responsibility for their learning. They are expected to participate in learning as an individual, in class, and for work completed out of school, as well as a group participant. They are taught beginning in Kindergarten how to appreciate assessment as a tool for learning.

Critical Thinking and Problem-Solving

Instruction should move deliberately from teacher-led, direct instruction in the primary grades to greater use of Socratic methodology in the middle grades. Our teachers are trained through professional development how to use Bloom's Taxonomy for developing higher level thinking skills and in questioning techniques for Socratic methodology. Inquiry-based lessons can be incorporated into either cooperative or independent learning experiences that encourage critical thinking and problem solving.

Character Education

Responsible and effective citizenship is taught through the curriculum content areas where a natural connection can be made with personal choice and action. The pillars of character are taught in short lessons during morning announcements, focusing on one character trait per month, and then reinforced in various content-area lessons taught in classrooms school-wide. Acts of kindness and ethical behavior will be modeled and rewarded. Effort, hard work, and personal achievement will be recognized as a means to a goal and lifelong choice. Kids at Hope and Love & Logic work in sync with character education at Hirsch Academy: CFA.

Ongoing Applied Professional Development

Instructional Rounds are used for teachers to observe other teachers, learn, and reflect on effective instructional methods with student achievement as the focal point. Professional growth needs and opportunities are identified and provided to offer continuous improvement for our teachers. Student achievement data is used to guide instruction. We are of a continuous growth mindset, to always learn and grow professionally in the best interest of our students and academic achievement.

Summative Assessment Plan

Comprehensive Assessment System

Fully embracing the continuous improvement model, Hirsch Academy: CFA believes in instructionally-focused accountability, reflecting the Educational Philosophy described in section A.1 above. Based upon best practices found in the book *Driven by Data*, this plan for a school-wide system of assessment details how students and teachers will be held accountable for student learning of curriculum, and how instruction and summative assessment will ensure responsiveness to student needs.

There are two different types of assessments: assessments *for* learning – formative assessments used to adjust instruction in the classroom according to student need – and summative assessments *of* learning – summative assessments used as program evaluations of curriculum and

instruction. The school will use both types of assessments to determine students' progress towards mastery of CCSS, CK content, and Arizona State Standards.

Aligned Formative Assessments

Teachers will use the results of aligned formative assessments to drive and inform instruction. Aligned formatives will be backwards-designed to the expectations of summative assessments to give teachers an accurate portrayal of how students will be expected to perform on summative assessments. They will aligned to the content and rigor expectations of CCSS, CK content, Arizona State Standards for science and social studies, and AIMS and/or PARCC. Besides daily checks for understanding regarding mastery of standards, such as exit tickets, teachers will utilize monthly formative assessments to monitor student achievement and progress.

Aligned formatives for mathematics will align to Singapore Math, and aligned formatives for English language arts will align to CKLA, the Open Court Imagine It!, and literature studies, depending on grade level.

Teachers will utilize formative assessment that is best aligned to instructional methodology. For example, for direct instruction, these assessments may take the form of aligned assessment using multiple-choice or fill-in-the-blank, or true/false questioning styles. Project-based or cooperative learning will require alternative, authentic, and/or performance-based assessment.

As assessments for learning, the results of aligned formatives will be used to determine what a teacher will teach next, if a teacher needs to re-teach content using different instructional strategies, which students will be moved to further academic interventions, the membership of flex- and small-group learning, and what content will be covered during tutoring after school. Bi-weekly progress monitoring will be used for students targeted for reading intervention.

The following will be examples of aligned formative assessments:

- Nationally-normed NWEA tests for reading and math to provide data regarding Hirsch Academy: CFA's students' progress towards national mastery goals. NWEA will be delivered in the summer to establish a baseline for student proficiency and will be used to track student growth. NWEA will also be delivered in December as a progress monitoring assessment to track from the baseline and towards the national norm.
- Jerry Johns and Gates-MacGinitie for reading progress monitoring will be delivered during the summer to establish a baseline for student growth. They will also be delivered in January as a progress monitoring assessment to track from the baseline.
- Teacher-created monthly internal formative in-class benchmark assessments for reading, writing, math, science, and social studies, with clear rubrics and performance expectations that align to standards, scope and sequence documents, and pacing guides.
- CKLA reading assessments for grades K-2.
- Example assessments from Singapore Math and Open Court Imagine It!
- Project and authentic assessment.

Through delivery of these aligned assessments and effective usage of the data gathered from each, Hirsch Academy: CFA will be able to accurately determine student mastery towards CCSS, Arizona State Standards, and CK content.

Summative Assessments

Summative assessments are used to assess the efficacy of the school's total program of instruction. Such assessments assess students' mastery, not progress, and will inform Hirsch Academy: CFA as to whether or not it has met its objectives. Summative assessments include the end-of-year NWEA MAP, Stanford 10, AIMS, and/or PARCC. In addition, there will also be summative assessments created for Hirsch Academy: CFA for each course that will reflect student mastery of CCSS, Arizona State Standards, and CK content. These assessments will be based upon standards and the school's scope and sequence documents and pacing guides.

Hirsch Academy: CFA's summative assessments will align to the curricula implemented. Mathematics summative assessments will align to content from Singapore Math and CK, and English language arts summative assessments will align to content from CK, the CKLA program, Open Court Imagine It!, and literature studies, depending on grade level.

Summative assessments will also align to the instructional methodologies to be used. For example, for project-based learning, the aligned summative for the course will be a project.

All formative assessments throughout the school year will be aligned to the expectations of these summative assessments, such that Hirsch Academy: CFA will be able to accurately determine students' progress towards mastery of standards.

End-of-year NWEA assessments for reading and math and Jerry Johns and Gates-MacGinitie assessments for reading will be delivered in June to track year-long progress and assess for mastery of national reading and mathematics norms.

Usage of Summative Assessment Data

At the beginning of the year, Hirsch Academy: CFA will use summative assessment data from the previous year as a baseline for student performance. Data will be used to build an instructional and curricular program that addresses the needs and gaps illustrated by summative assessment data. Teachers will use data days to look at students' growth vs. the baseline identified by the summative assessment, and then teachers will personalize students' learning paths to target skill instruction while aligning to next year's summative assessment.

Assessment Analysis System

The School Director will meet with each team to address assessment results on a bi-monthly basis. These meetings will help school leadership plan professional development sessions based on needs of teachers throughout the school. These will be opportunities to discuss best practices and any support needs teachers may have to meet assessment mastery targets.

Based upon the results of Instructional Rounds observations and student assessment results, teachers will make changes to their instructional methodologies. In weekly team meetings, teachers will collaborate to identify best instructional practices for addressing content mastery goals, and teachers will make adjustments accordingly.

Rationale

Hirsch Academy: CFA will be focused on college and career readiness strategies for all grade levels. Accordingly, and in addition to the implementation of CCSS, a classical curriculum, and the methods of instruction noted above, there will be an emphasis on the use of 21st Century Skills as a way of thinking, doing and interacting. We will train and expect teachers to use various styles of presentation in the delivery of each lesson while being aware of and incorporating the type of instruction that best meets the needs of the students. We feel this sort of instructional background development will prepare each teacher to meet the needs of a variety of students and prepare the students for a variety of academic and real-world career settings.

We care about our students as people and as fellow citizens. Through curriculum and instructional methods noted above we also acknowledge the social and character growth of our students. Programs that encourage responsible citizenship and hope for the future, such as Love & Logic and Kids at Hope, teach respect for self and others and that it takes a school community to support and guide a child.

Intervention Plan

Response to Intervention (RtI) strategies, or RtI-like components, will be used to progress monitor students who are struggling academically. Data will be used to identify students that qualify for additional assistance, Title I support, or for Special Education services. Documentation of progress monitoring data points is useful at the classroom level and when referring students to the Special Education identification process. A packet of data input forms will be used by teachers to refer students to the Child Study Team (CST), as required for review. A school psychologist will be contracted to work with the school Special Education Teacher for management of the referral process, testing, identification, and writing the IEP, and to ensure compliance. Teachers will be contracted or hired with Special Education qualifications to serve students identified through the process. They will work with classroom teachers to create pull-out and/or push-in programs as determined to meet the needs of our students and their IEPs.

A grade of 75% or better will indicate *proficiency*. Proficiency is used to promote a student to the next grade level (See also Section A.3.1 Promotion & Mastery, p. 1.). A grade of 80% will be used to indicate *mastery* of a concept or skill of CCSS or CK content or skill expectation.

Sources

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