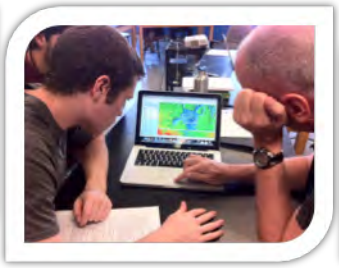
ENVISION 21

DEEP LEARNING

CATALINA FOOTHILLS SCHOOL DISTRICT

STRATEGIC PLAN

CITIZENSHIP ● CRITICAL THINKING & PROBLEM SOLVING ● CREATIVITY & INNOVATION ● COLLABORATION ● COMMUNICATION ● SYSTEMS THINKING

Catalina Foothills School District

Superintendent's Message • Governing Board

Dear Community:

We are pleased to share our *Catalina Foothills School District (CFSD) Envision21-Deep Learning Strategic Plan* that identifies our work priorities. It builds on achievements to-date and perpetuates our vision of 21st century learning.

Our plan outlines our commitment to prepare our students well for a 21st century life that is increasingly complex and global. We are determined to create a learning environment in which each student achieves intellectual and personal excellence.

Teaching and learning are at the heart of our enterprise. We know that a dynamic curriculum that engages students in deep learning taught by highly competent professionals who are held accountable for learning results is key to our students' success here.

The Catalina Foothills School District is the leading PreK-12 educational choice for families in the greater Tucson area. We hope that you will join us in getting the word out to others who are looking for a school where students are engaged in thinking deeply about complex issues. We have high expectations for achievement, and our students meet them. The vast majority of our students continue their learning at the college/university level. We are proud that they are prepared well for what comes next in their lives.

Sincerely,

Mary Kamerzell, Ph.D.
Superintendent of Schools

Governing Board

Carole Siegler, President
Eileen Jackson, Vice President
Amy Bhola, Board Member
Doug Hadley, Board Member
Amy Krauss, Board Member

Contact

Murphey Administration Center
2101 E. River Road
Tucson, AZ 85718
520-209-7500 Phone
520-209-7570 Fax

www.cfsd16.org

Administration

Mary Kamerzell, Ph.D., Superintendent
Mary Jo Conery, Ed. D., Associate Superintendent
Chad Knippen, Ph.D., Assistant Superintendent

Catalina Foothills School District

OUR MISSION

Catalina Foothills School District, a caring and collaborative learning community, ensures that each student achieves intellectual and personal excellence, and is well prepared for college and career pathways.

OUR VISION

Learning transfers to life beyond the Catalina Foothills School District experience, enabling each student to flourish as a responsible citizen in the global community.

OUR SHARED CORE VALUES

We believe that the human capacity to learn is boundless. Therefore, we embrace the obligation to actualize the following shared core values to create a learning environment that supports maximum achievement.

Equity — We accept and value the unique needs of all students, and allocate resources to provide the learning environment necessary to reach each student's potential.

Commitment — We believe in one's personal capacity to make a difference, invest in the hard work needed to realize goals, and seek ways to continuously improve.

Belonging — We create a culture in which each student feels safe, welcome, supported, included, and connected.

Compassion — We care about others; express kindness, concern, and empathy; and help others through action.

Responsibility — We understand and accept the impact and consequences of personal actions and decisions, and recognize and fulfill obligations to self, others, and the community.

Respect — We appreciate the unique qualities of others; seek to understand perspectives, and display courtesy and consideration for all.

Excellence — We invest in the intellectual and personal achievement of each student, set high expectations, and focus on continuous improvement.

Integrity — We meet high ethical standards and practice honesty and sincerity in relationships and actions.

Curiosity — We inspire inquisitive thinking, exploration, investigation, a thirst for knowledge, and a desire to learn.

Innovation — We encourage critical thinking and problem solving so that students explore and generate new ideas to create something valuable and unique.

Risk Taking — We develop an environment where errors and questions are welcomed as opportunities to learn.

Perseverance — We help students focus, follow through on tasks to completion, and seek ways to reach goals when faced with obstacles.

Resilience — We build the capacity to face, overcome, and ultimately be strengthened by challenges.

OUR DEEP LEARNING GOALS

Reduce the gap between current and desired student academic achievement.

- Increase the achievement of literacy and numeracy in all academic content areas by addressing students' diverse needs and abilities.
- Develop knowledge and skills that transfer to college, careers, and civic life.

Raise the engagement of students so they are highly motivated to set and achieve increasingly challenging goals for deep learning.

- Develop positive academic mindsets so students are more confident learners who feel they belong to the CFSD academic community, succeed in their learning, grow their competence with effort, and find value in their work.
- Develop the deep learning proficiencies of citizenship, critical thinking and problem solving, creativity and innovation, communication, collaboration, and systems thinking (5c + s = dlp).

Partner with families and community to ahieve our strategic priorities.

- Engage in regular meaningful communication about student learning.
- Foster strong relationships with and among CFSD alumni.

ENVISION21 – DEEP LEARNING

STRATEGIC PLAN OVERVIEW

The major aim of schooling is to enable students to become the architects of their own education so that they can invent themselves during the course of their lives.

-Elliot W. Eisner

INTRODUCTION

In the Catalina Foothills School District (CFSD), our mission and vision influence our strategic planning and subsequent improvement work. We want to graduate self-regulated lifelong learners who are well equipped for what comes next (and beyond) in their 21st century life as responsible citizens in a global society.

What comes next for most of our students after high school graduation is continuing education in the short-term. Hopefully, the long-term brings a satisfying, productive personal existence through which they contribute positively as citizens of the larger community. Basically, our mission is about helping our students become well prepared for college and career pathways, empowering them to take ownership of their learning, and enabling them to independently transfer their learning to new contexts.

Strategic planning contributes significantly to our ability to meet reasonable and appropriate goals and establish a culture of continuous improvement. We intentionally define goals for improvement that drive our professional work during a specific time frame. However, the strategies that drive the work of the plan are adaptable and responsive to changing circumstances and conditions. Because it is impossible to do everything that needs attention simultaneously, the strategic plan sets out the organizational actions that are of the highest priority.

The impact of the pandemic continues to shift some of our work priorities, but instead of putting our plan on hold, we have reprioritized actions to reflect the changing circumstances. Adapting to changing conditions, and staying true to the mission and goals that make us unique, requires increasingly collaborative efforts and expanded leadership capacity. Although some day-to-day priorities may have shifted, the goals of the CFSD Strategic Plan continue to be valid, and remain so, over time. They are goals that can be adapted when needed – they have strategic resilience.

We believe, based on multiple measures of performance and a long-established culture of continuous improvement, CFSD is a successful system of schools. However, we also know that there is always significant growth potential to improve learning outcomes.

ENVISION21: DEEP LEARNING

The aim of CFSD's strategic plan is *deep learning* – preparing students to apply an advanced set of skills that enables them to think about problems in new ways, design their own solutions, and to collaborate and communicate in diverse settings. It is no longer a question of academic success or work preparation or civic contribution, but rather a combination of all three, which are captured within the components of the strategic plan.

The CFSD *Mission* communicates the district's commitment or primary purpose, and the *Vision* describes the optimal future state the district aspires to for all students. The 13 *Shared Core Values* are deeply held beliefs that guide the district's actions and decisions in order to maximize achievement.

ENVISION21 - DEEP LEARNING

STRATEGIC PLAN OVERVIEW

The strategic plan sets out three main goals, each with two related sub-goals:

1) Reduce the gap between current and desired student academic achievement.
    - Increase the achievement of literacy and numeracy in all academic content areas by addressing students' diverse needs and abilities.
    - Develop knowledge and skills that transfer to college, careers, and civic life.
2) Raise the engagement of students so they are highly motivated to set and achieve increasingly challenging goals for deep learning.
    - Develop positive academic mindsets so students are more confident learners who feel they belong to the CFSD academic community, succeed in their learning, grow their competence with effort, and find value in their work.
    - Develop the deep learning proficiencies of citizenship, critical thinking and problem solving, creativity and innovation, communication, collaboration, and systems thinking (5c + s = dlp).
3) Partner with families and community to achieve our strategic priorities.
    - Engage in regular meaningful communication about student learning.
    - Foster strong relationships with and among CFSD alumni.

KEY CONCEPTS OF STRATEGIC PLAN

The primary focus of the *Envision21 - Deep Learning* strategic plan is to support and improve academic achievement. Defining the key concepts in the strategic plan, and building a collective common language around them, enables us to more consistently and effectively design professional learning and implement the goals and associated strategies that will lead to student success. Unless we have developed a common language with a shared understanding of the key concepts in our strategic plan, our call for deep learning will remain a worthy goal, but almost impossible to translate into purposeful classroom practice.

Six (6) key concepts were built into the plan that we believe will positively influence student outcomes. They are as follows:

- Deep Learning
- Transfer
- Deep Learning Proficiencies (DLPs)
- College and Career Readiness
- Academic Mindsets
- Learning How to Learn

These concepts are more explicitly discussed and defined below.

DEEP LEARNING

Deep learning for students requires deep learning for educators. The key to helping our students pursue and demonstrate deep learning is to invest in the ongoing professional learning that builds the capacity to do this work. The iterative process of working with others to use evidence of student learning to enhance individual and collective practice is vital to improved pedagogy that maximizes student achievement.

CFSD defines deep learning as requisite knowledge and skills that students use efficiently and effectively to succeed in college, careers, and civic life. Students develop a deep understanding of rigorous academic content, and are able to transfer and apply that understanding to novel problems and situations.

In classrooms where deep learning is the focus, students are highly engaged in and take ownership of their learning. They have positive mindsets that help them learn more efficiently, and they believe that what they are learning is important. The product of deep learning then is transferable knowledge and skills, and an understanding of how, why, and when to apply this knowledge to answer questions and solve new problems.

The table below shows the four interconnected dimensions that are associated with CFSD's definition of deep learning. They have collectively become the focus of a system-wide effort to create deep learning in our schools.

CFSD DIMENSIONS OF DEEP LEARNING

ACADEMIC SKILLS	DEEP LEARNING PROFICIENCIES	LEARNING HOW TO LEARN SKILLS	ACADEMIC MINDSETS
			
Mastery of Rigorous Academic Content Actively Participate in Learning Appropriate Level of Challenge Structure of Knowledge Foundational & Technical Knowledge and Skills Acquire, Apply, and Transfer Knowledge and Skills	**Application of Deep Learning Proficiencies** (5c + s = dlp) Citizenship Critical Thinking and Problem Solving Creativity and Innovation Communication Collaboration Systems Thinking	**Learning How to Learn** *Self-regulation and Ownership of Learning*: Planning & Goal-setting Self-instruction Help-seeking Collaborating Progress monitoring Reflection *Learning Techniques:* Time Management Study Skills	**Developing Academic Mindsets** ***Belonging*** I belong in this learning community. ***Growth*** My ability and competence grow with my effort. ***Self-efficacy*** I can succeed. ***Relevance*** This work has value and purpose for me.

KNOWLEDGE AND SKILLS THAT TRANSFER TO COLLEGE, CAREERS, AND CIVIC LIFE

TRANSFER

A definition of deep learning is not complete without the element of transfer. When students go out into the world and encounter new experiences, they will need to draw on previous learning to solve new problems and challenges.

Transfer is the ability to apply or extend what one has learned in one context to new contexts. In some sense, the whole point of school learning is to be able to transfer what is learned to a wide variety of contexts outside of school. Yet the ability to transfer knowledge and skills is not a given. Quite often, information learned in a specific way, or in a particular context, does not transfer to another context. For example, students may memorize vocabulary words for a quiz, but they cannot use the words in their writing. Students may learn how to solve percentage problems at the end of a unit on percentages, but they do not know how to apply percentages when they are confronted with a different kind of problem outside of school. Learning that is not applied or put into practice reduces the likelihood of later transfer. Real life application is almost always much more complex than decontextualized instruction or rote learning of discrete skills.

If transfer is the primary goal of instruction then learning needs to be organized around the kinds of authentic problems and projects that are most often encountered in non-school settings. Students need time to understand the meaning of new ideas, to draw connections to other ideas, to apply what they are learning to real tasks, to determine patterns of relationships, and to practice new skills. “Active” learning in which students are asked to use ideas by writing and talking about them, apply what they have learned to more complex problems, and construct projects that require the integration of many ideas, has been found to promote deep learning and stronger transfer.

Fast Forward. Although we have been focused on transfer since 2014, it’s only been in the last several years that we have recognized the central role transfer must play throughout our system. Transfer is the umbrella under which all areas of our educational programming is nested. To this end, we are deliberately designing structures and processes to achieve this outcome. We have collaboratively created and defined clear transfer goals across Prek-12. We are designing learning experiences that support deep learning and ultimately transfer, and developing assessments that will produce sufficient evidence of student progress. We are committed to helping our students actively put knowledge and skills into practice in new and challenging situations.

DEEP LEARNING PROFICIENCIES (DLPs)

Our students’ educational preparation continues to require an expanding skill set if they are to flourish in a constantly changing world as lifelong, creative, connected, and collaborative problem solvers. CFSD reframed the previous 21st century skills and titled them “deep learning proficiencies” (DLPs). There are 5Cs + Systems Thinking (5c + s = dlp). The CFSD deep learning proficiencies are as follows:

- Citizenship
- Critical Thinking and Problem Solving
- Creativity and Innovation
- Collaboration
- Communication
- Systems Thinking

CFSD developed a set of rubrics (K-2, 3-5, 6-8, and 9-12) for each DLP. Specific performance areas and indicators are used for teaching and measuring skill development. The rubrics provide a common vocabulary and illustrate a continuum of performance. By design, the rubrics have not been aligned to any specific subject area. They are intended to be contextualized within the academic content areas based on the selected performance area(s) and indicator(s) that will be taught and assessed. In practice, this means that not every performance area and indicator in each of the rubrics will be necessary in every lesson, unit, or assessment.

The inclusion of the DLPs in the strategic plan reaffirms the district's commitment to 21st century skill-building for all students. Our expectations for the ongoing development of these skills are clearly defined in the CFSD rubrics for each DLP. We intend to measure our students' growth in all of these skills.

COLLEGE AND CAREER READINESS

College and career readiness is an essential outcome of a PreK-12 education and is a key objective in CFSD's strategic plan. We aim to educate our students so that they are able to transfer their knowledge and skills to their lives after high school graduation. Every transition along the continuum from prekindergarten to kindergarten through high school to college and career is critical for student success, each building the necessary foundation for the successful next steps in the journey.

CFSD made significant use of the work of Dr. David Conley at the University of Oregon to define college and career readiness. He and his colleagues at the Educational Policy Improvement Center (EPIC) created an operational definition of "readiness" that goes beyond course titles, grades, and test scores: Students who are *ready* for college and career pathways will do better than those who are simply *eligible*. They can qualify for and succeed in entry-level, credit-bearing college courses leading to a baccalaureate degree, certificate, or career pathway-oriented training program without the need for remedial coursework.

Four key facets of readiness are depicted in a framework termed, *The Four Keys to College and Career Readiness*. Predicated on more than a decade of research and 20 years in public education, Conley developed the Four Keys framework so that students, families, and educators can identify and prioritize what knowledge and skills are needed to be successful after high school. It also provides a common language that we can use to organize student learning in four key ways:

- *Key Cognitive Strategies (Think):* Versatile and intentional thinking patterns for problem solving; the ability to choose among alternative learning approaches to solve a problem or complete a complex task
- *Key Content Knowledge (Know):* Understanding structures of knowledge and mindsets for learning; knowledge of key terms and factual information and proficiency in linking ideas and organizing concepts
- *Key Learning Skills & Techniques (Act)*: Skills and techniques to successfully own and manage learning; personal, self-management skills to successfully manage study and work habits in postsecondary studies and careers (student ownership of learning, goal setting, persistence, collaborative learning, technological proficiency)
- *Key Transition Knowledge & Skills (Go):* Skills and awareness to successfully navigate life pathways; practical knowledge about the transition from secondary school to postsecondary education (program selection, admissions requirements, financial aid, career pathways, postsecondary culture, agency)

In its simplest form, the Four Keys are referred to as Think, Know, Act, and Go. Students who are ready to be lifelong learners have the ability to THINK deeply about what they are doing; KNOW contextually why they learn; ACT purposefully to achieve their goals; and GO successfully through life's transitions. (inflexion.org, 2018 – formerly EPIC)

In the last decade, research has shown a convergence in the expectations of employers and colleges in terms of the knowledge and skills high school graduates need to be successful in postsecondary settings. The economy reflects these converging expectations. All students aspire to enter the workforce eventually, and to do so, all of them will need a set of similar foundational thinking skills, content knowledge, and learning strategies if they are to succeed in their careers and be productive members of society. In CFSD we are committed to doing our part to make this happen.

Academic Mindsets

The research evidence suggests that one of the best levers for increasing students' perseverance and improving their academic behaviors is by supporting the development of academic mindsets. Academic mindsets are students' beliefs about themselves in relation to school and learning. It has been shown that students with positive academic mindsets work harder, engage in more productive academic behaviors, and persevere to overcome obstacles to success. The University of Chicago Consortium on Chicago School Research released a pivotal report in 2012 that shows academic mindsets are a better predictor of student success than any other determining factor.

One of our goals is to help our students understand how they can positively influence their own learning. We are intentionally developing academic mindsets so that our students can set and achieve challenging goals. CFSD is focusing on four mindsets:

- Belonging: I belong in this community.
- Growth: My ability and competence grow with my effort.
- Self-efficacy: I can succeed.
- Relevance: This work has value and purpose for me.

Belonging refers to students' sense of connectedness to peers and adults in their classes and school. Students with a strong sense of belonging see themselves as members of not only a social community, but also an intellectual community. This is a strong motivator and helps students interpret setbacks as a natural part of the learning process.

Students with a *growth* mindset believe that they can change their abilities and competence with effort. They see effort as what makes people smart, persist in the face of setbacks, and are motivated to focus on continued growth. The growth mindset is the most powerful lever to improve learning because it is the driver of student behavior.

Related to the growth mindset is *self-efficacy* – the belief that one can succeed. Students must believe they are likely to achieve their goals if they are to sustain the hard work of learning something challenging. If students need help or resources, they must see a path they can take in order to obtain them. The stronger their growth mindset, the more students will seek ways to overcome adversities and search for alternate strategies to achieve their goals.

When students find academic work to be *relevant* to their lives, interests, and concerns, they are much more likely to engage in their learning in a sustained way and to perform well. It takes more energy to focus attention on a task that does not have direct value to the student.

In summary, when students feel a sense of belonging in a classroom and school community, believe that their efforts will increase their ability and competence, believe that success is possible and within their reach, and see work as interesting or relevant to their lives, they are much more likely to persist at academic tasks and to demonstrate the learning behaviors that lead to school success.

Learning How to Learn

The sixth and final key concept of the *Envision21 – Deep Learning* strategic plan is "learning how to learn." Learning how to learn is a skill-set that students need to own and manage their learning. David Conley (2014) refers to these skills as key learning skills and techniques. He argues, "No single factor may be more important to student success than the degree to which students take ownership of their learning and are allowed to do so" (p. 73). When students have acquired these skills and techniques, they are able to monitor and direct their learning. They set learning goals and keep track of their progress; they know and apply a range of strategies and study skills (e.g., time management, note taking, strategic reading, technological proficiency); they reflect on their learning experiences and are aware of their strengths and weaknesses; they seek out new learning; they use failures and/or setbacks as opportunities for feedback; they care about the quality of their work; and they continue to seek new ways to learn challenging material (Conley, 2014; Hewlett Foundation, 2013).

While mastery of content knowledge and proficiency with complex thinking skills are certainly important, students must be able to employ a range of skills and techniques that are essential to the learning process and the transition to postsecondary pathways. Over the long term, these skills end up being just as important as content knowledge and thinking strategies. It is important that our students learn to master these skills to succeed in their academic courses and to also continue to learn once they have concluded their formal education. To learn something deeply, students need to internalize it and make it their own. To be able to use that learning and influence issues that matter to them, students need to participate substantively in the learning process. These key learning skills and techniques prepare our students to be lifelong learners.

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