

6th Grade iExplore Lab Scope and Sequence: 2021-2022

Sixth through eighth grade students are offered electives unique to each campus based on their signature programs. The scope and sequence will align with each specific elective. Elective courses will include discussions about related STEM career pathways and Dysart CTE programs.

| Topics | Design Thinking Process | Digital Citizenship | Technology Skills | Career Exploration |
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| Learning Objectives | Students will use a variety of resources within a design process to identify and solve problems by creating new, useful or imaginative solutions. | Students will recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world. Students will act and model in ways that are safe, legal and ethical. <i>(Because we no longer are required to have the core class you can fit the digital citizenship lessons in where you can.)</i> | Students will understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies. | Students will: <ul style="list-style-type: none"> ● Gain a better understanding of school programs and extracurricular activities (robotics, Skills USA, DECA, yearbook, etc.) and the importance of matching with a career path. ● Reflect on how their strengths can be used to accomplish their career goals ● Explore career clusters and Dysart CTE programs |
| Academic Vocabulary | brainstorm design thinking empathize define ideate prototype test blueprint communication creativity critical thinking collaboration | digital footprint citations MLA Style citations alteration distortion online only in-person face-to-face upstanding dilemmas privacy policies targets stereotypes | site-specific tech robotics coding | career clusters occupation CTE skills |

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| | | copyright cyberbullying | | |
| Lessons and Resources | <p>Design Thinking Website</p> <p>Defined Learning protocol</p> <p>Project Ideas</p> <p>PBSkids Design Squad</p> <p>Design Thinking Process</p> <p>Design Thinking Process TEMPLATE</p> <p>*Give simple directions*</p> <p>Create a robot that:</p> <ul style="list-style-type: none"> -is original -is presentable -can complete a task on its own -solves a problem <p>Create a boat:</p> <ul style="list-style-type: none"> -no more than 12 inches long -no more than 5 inches wide -has to hold 50 grams of weight -move from one side to another without you touching it <p>STEM lessons & resources:</p> <p>Try Engineering</p> <p>teachengineering.org</p> <p>vivifystem.com/</p> <p>Maricopa Co STEM</p> | <p>Common Sense Media: updated Gr 6 Lessons</p> <p>Don't Feed the Phish</p> <p>How can you protect yourself from phishing?</p> <p>Digital Drama Unplugged</p> <p>How can you de-escalate digital drama so it doesn't go too far?</p> <p>Finding Credible News</p> <p>How do we find credible information on the internet?</p> <p>Optional: Who Are You Online</p> <p>What are the benefits and drawbacks of presenting yourself in different ways online?</p> <ul style="list-style-type: none"> -Digital Footprint Article -Create a "digital footprint" using google drawing. -Digital Life 101 -Scams and Schemes <p>Be Internet Awesome Curriculum - lessons</p> <p>Interland: Dig Cit Game</p> <p>Be Internet Awesome PD</p> | <p>CS First Coding Kits</p> <p>CodeHS Middle School courses: coding, web design, virtual reality, etc.</p> <p>CodeHS.com</p> <p>CodeHS.com VR</p> <p>Scratch.mit.edu</p> <p>Code.org- grade level curriculum</p> <p>Virtual VEX coding: https://vr.vex.com/</p> <p>Coding Facilitative Questions</p> <p>Google Applied Digital Skills</p> <p>Exploring Google Docs: Google Docs Scavenger Hunt for Students</p> <p>Tinkercad</p> | <p>DUSD ECAP Scope and Sequence (Grades 5-8) - review for additional resources</p> <p>Personal/Social Exploration</p> <p>Identify and discuss what activities, clubs, or hobbies you would like to try before going to high school.</p> <p>Career Exploration:</p> <p>Major Clarity-Lesson plans</p> <p>Explore Career Clusters (16 total)</p> <p>https://www.mynextmove.org/</p> <p>Career conversation/activity-</p> <p>My Dreams worksheet</p> <p>Things I Like to Do worksheet</p> <p>ASCA Middle School Career Conversations</p> <p>CTE programs: www.dysart.org/CTE</p> <p>Explore CTE posters and programs at each high school.</p> <p>ECAP Middle Grades resources from ADE-</p> |

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| | Resources cyber.org Facilitative Questions for Maker Activities | | | <p>watch for updated ADE resources this summer</p> <p>Possible Futures Curriculum-</p> <p>Health Sciences, Engineering, IT, Career and 4Cs skills (Lessons are in Schoology.)</p> |
| Assessments | <p>Students have a design thinking rubric and do self assessments as well as peer assessments during their lessons.</p> <p>iExplore Rubric</p> | <p>Interland curriculum has an assessment at the end of each lesson. Students cannot move on until they pass the assessment.</p> | | |
| Suggested Standards | <p>ISTE Standards</p> | <p>Arizona Computer Science Standards</p> <p>AZ Ed Tech Standards by grade level</p> | <p>K-12 Computer Science Framework</p> <p>ISTE Standards</p> <p>Arizona Computer Science Standards</p> | |