



# **EMPOWERED LEARNING**

- 1a. Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.
  - Courses provide clear learning objectives in each lesson and unit, allowing students to set personal learning goals and develop strategies as they move through content. They receive immediate feedback after completing checkpoints and assessments, with opportunities to retake them (this can be adjusted by schools and districts). The feedback shows which questions they got correct/incorrect, giving them the opportunity to reflect on the learning, review materials prior to a retake, and improve learning outcomes.
  - Color-coded tips are embedded throughout lessons, containing relevant facts related to a lesson and study tips, such as strategies for review and callbacks to information learned earlier on in lessons or units.
- 1b. Students build networks and customize their learning environments in ways that support the learning process.
  - StrongMind courses include opportunities for students to collaborate and build networks, including discussion boards, which are asynchronous. Embedded project-based learning allows for applied critical thinking and more opportunities for collaboration, as well as some customization with how students choose to complete assignments. If enabled by the school, students can message one another through the StrongMind LMS, which is helpful for group projects.
- 1c. Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.
  - Courses provide numerous ways for students to demonstrate their learning in a variety of ways, including digital formative and summative assessments which range from no-stakes practice to high-stakes measurement of mastery. Students also complete performance tasks, such as projects, so they can master skills or concepts not easily assessed by other computer-scored testing.
  - Students receive personalized and timely feedback throughout each course that informs and improves their practice, including immediate results on digital checkpoints and assessments.
     For low-stakes practice, students receive detailed feedback that explains why an answer is correct/incorrect.





- In the gradebook, if enabled by the school, students can see their current grades and also enter in potential grades to calculate overall scores, which allows them to set personal goals as they move through content.
- 1d. Students 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.
  - Technical support is available for students and families to troubleshoot technology through a ticketing system. Students can also access the Student Help Center, where they can view documentation for common user suggestions 24/7.
  - Students complete an orientation at the beginning of their course, which walks them through the LMS and helps them understand the fundamental concepts of technology operations for StrongMind courses.

## **DIGITAL CITIZEN**

StrongMind courses include "tips for being a successful online student." The tips walk students through a variety of topics, including setting a schedule, establishing a workspace that will help them stay focused, how to stay organized, how to stay motivated, how to be positive, and how to reach out for help when needed.

StrongMind teacher resource guides contain a linkable document detailing required computer and digital literacy skills, which also outlines functional skills, creativity, how to find information, communication, critical thinking, and online safety through technology.

- 2a. Students cultivate and manage their digital identity and reputation and are aware of the
  permanence of their actions in the digital world.
  - The StrongMind resource shows students how to manage and build their digital identity and reputation, how to keep personal information safe, and reminds them that their actions in a digital environment can have lasting impacts.





- 2b. Students engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.
  - The StrongMind resource shows students the importance of engaging in safe, ethical, and
    positive behaviors when online and when interacting with others using technology. They are
    reminded to be mindful and to protect others' privacy, how to recognize and report unsafe
    behaviors online, and how to report misinformation and avoid spreading it.
- 2c. Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.
  - StrongMind promotes critical thinking in relation to the use and respect of rights and obligations of others' intellectual property, encouraging students to evaluate accuracy and credibility of sources, determine relevance of information to topic/goal, analyze and evaluate arguments, and assess information for its perspective and bias.
  - When completing research projects, students learn about copyrights, plagiarism, and how to avoid plagiarism so they can build and demonstrate understanding of and respect for the rights and obligations of using/sharing intellectual property.
- 2d. Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.
  - In addition to awareness about personal privacy (and the privacy of others), StrongMind promotes strong communication skills so that students can manage their personal information and security, helping students know what to share online and when. The StrongMind resource notes that each communication tool has its own considerations, data collection technology, and functionality, encouraging students to understand which tools are appropriate to use for different situations.





#### KNOWLEDGE CONSRUCTOR

- 3a. Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
  - Students complete research projects in a variety of courses. In Introduction to Graphic and Web Design, students learn about different types of formal and informal research methods, including focus groups, scientific experiments, and surveys. They learn about market research, how to verify information they discover, and employ effective research strategies to find information for their project(s).
  - Prior to starting the project, students are given information on sources, the importance of sources and how to evaluate credibility, and a list of different ways to find sources. They are shown how to properly cite sources as well.
  - Students also answer questions throughout lessons which ask them to refer back to sources and/or find the "supporting evidence" for a statement.
  - For research papers, students are given exemplars to use as a model. Students also receive a rubric prior to starting their papers or projects, which include a section on sources and citations and allow them to effectively plan ahead.
- 3b. Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.
  - Students complete research projects in a variety of courses. Before starting a project, students
    are given information on sources, how to evaluate credibility and accuracy, how to assess
    relevance of media and other sources, and how to properly cite sources.
- 3c. Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
  - Students complete research projects and papers throughout StrongMind courses, curating information from a variety of digital resources. In addition to information on how to research and how to evaluate sources, students are asked to include and cite sources relevant to their studies to demonstrate meaningful connections. Sources and citations are included in the grading rubric, which students are given at the beginning of a project/essay.
- 3d. Students build knowledge by actively exploring real-world issues and problems, developing
  ideas and theories and pursuing answers and solutions.
  - Students explore real-world issues and problems in all StrongMind courses as they build knowledge. For example, students taking our Chemistry course learn about the chemistry of Flint, Michigan's water crisis when learning about corrosion. All courses also include a variety of real images to support learning.





# **INNOVATIVE DESIGNER**

StrongMind courses contain a variety of activities and ways to show mastery, including projects, discussion boards, digital assessments, and assignments that require a file upload or typed answer, such as essays or open-ended questions.

- 4a. Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
  - Students complete various projects throughout StrongMind courses which allow them to solve authentic problems. In Algebra 1 students assume the role of an engineer to plan and test deliberate designs for a new device. They apply principles of quadratic equations as they work through the project, later expanding on the design by making packaging.
- 4b. Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
  - Students select and use digital tools to plan and manage design processes in several courses. In mathematics for 7th grade, students design a simulation that could be used to estimate the probability that two teammates on a given sports team may own a gaming system at home. Students must answer questions to consider risks and evaluate tools/ actions used to complete the simulation.
- 4c. Students develop, test and refine prototypes as part of a cyclical design process.
  - Students develop and test several ideas throughout courses. In 3rd grade Science, learners
    design a solution to a problem by creating a model of a device that uses scientific ideas
    about magnets. After the initial design, they test, evaluate, and improve their prototypes as
    part of a cyclical process.
- 4d. Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with openended problems.
  - Courses include a variety of questions and challenges, including open ended problems they
    must resolve. Students can complete this through essay questions, project-based learning,
    and short-answer.





# **Computational Thinker**

- 5a. Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.
  - Students use technology throughout courses to complete data analysis, work through and study algorithms, and learn about abstract models. In science 7b, students look at and manipulate graphs to analyze data end explore solutions to various problems. In Algebra I, students practice graphing parabolas using Geogebra and other tools.
- 5b. Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.
  - Students collect and identify relevant data throughout courses. They analyze and interpret
    digital graphs, and practice creating their own. In Algebra courses students use technology to
    graph plot points and parabolas. Students also complete research projects to facilitate
    problem-solving and decision-making, such as designing buildings or rollercoasters using
    data and other information presented.
- 5c. Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.
  - Students explore significant and complex issues throughout StrongMind courses. In our civics
    course, students study constitutional and civil rights, answering practice questions
    throughout the lesson(s) to help them extract key information. They complete short answer
    questions to develop their thinking before additional practice questions and an end-of-lesson
    assessment.
- 5d. Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.
  - Students use algorithms in several courses to solve problems and test ideas. Algorithmic
    thinking begins as early as with learning how to solve multiplication and division problems in
    3rd grade mathematics. In this course students multiply multi-digit whole numbers using the
    standard algorithm, including a three-digit number multiplied by a two-digit number. They
    complete a series of practice and assessment questions to check their understanding.
  - In other courses, students apply algorithmic thinking to project based learning. In science 6, students conduct an experiment to measure how temperature can affect plant growth. They also research relationships between plants and climate, both within the United States and around the world. Students develop and follow a sequence of steps to create and test their ideas related to plant growth.





#### **CREATIVE COMMUNICATOR**

- 1.6.a. Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.
  - Students complete various projects and assignments wherein they can choose the appropriate platforms and tools for meeting desired objectives. In many instances they can upload written documents (including PDFs), powerpoint presentations, audio recordings, or videos. In Spanish 7, students complete "Culture Projects" wherein they must create a multimedia research presentation about a Spanish-speaking country. In these projects they can choose how best to communicate their findings/ideas.
- 1.6.b. Students create original works or responsibly repurpose or remix digital resources into new creations.
  - Students complete several assignments wherein they can select the best methods for communication, such as projects, presentations, and open-ended answers. In English language arts for 5th grade, students choose an American historical figure they personally admire and create a research presentation about that person's life. The students are encouraged to include relevant graphics or other visuals for their presentation.
- 1.6.c. Students communicate complex ideas clearly and effectively by creating or using a variety
  of digital objects such as visualizations, models or simulations.
  - Students complete assignments and projects wherein they must communicate complex ideas clearly and effectively through a variety of means. In social studies 4, students examine early American culture and craft both a written and oral presentation for a sustained project. Students are encouraged to give one another feedback, which can be done in a number of ways including discussion boards.
- 1.6.d. Students publish or present content that customizes the message and medium for their intended audiences.
  - Students publish and present content in a number of ways, customizing the message and presentation for the audience or topic. In English language arts 5, students learn about different types of presentations, how to craft them, and different tips for effective presentations. They later develop and give their own presentations on an American historical figure they personally admire. In our Public Speaking elective, students create a presentation on a topic they're passionate about. Part of the steps for the presentation are to record a speech, watch their recording, and evaluate their presentation using a rubric. They later present this to peers and/or their teacher.





# **GLOBAL COMMUNICATOR**

- 1.7.a. Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.
  - StrongMind courses include real world problems and media which connects students to a variety of backgrounds and cultures. In our Spanish course, students complete "Culture Connection" lessons. In "Culture Connection: Cultura compartida entre Estados Unidos y Bolivia," students learn about differences and similarities between the countries within art, fashion, and religion. They also complete "Culture Projects" wherein they must create a multimedia research presentation about a Spanish-speaking country.
- 1.7.b. Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.
  - StrongMind courses incorporate several opportunities for students to work with their peers to examine issues and problems from multiple viewpoints. In Science 7, students examine different proposals for preserving the biodiversity of an ecosystem that is fragmented by a highway and determine the best solution to the problem. They apply critical thinking and can discuss with one another, or outside experts if permitted, to come up with solutions for the challenges presented.
- 1.7.c. Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.
  - StrongMind courses contain several projects, allowing students to constructively contribute to teams and work together to accomplish common goals. Teachers can assign roles to students as they complete projects so they have individual roles and responsibilities. For hybrid courses, projects include pacing guides for teachers with ideas for extension or remediation as needed for individuals.
- 1.7.d. Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.
  - Students explore local and global issues throughout StrongMind courses, collaborating with one another through projects and discussion, and other methods as permitted. Students taking our Chemistry course explore local issues when learning about the chemistry of Flint, Michigan's water crisis. In our American Sign Language elective, students explore sign languages around the world, looking at the differences in sign languages between countries and the best approach for interacting with a deaf person who uses another language.