Standard 1 Self-Reflection Worksheet

Instructions

Use this Self-Reflection Worksheet and the CSTA Student Standards detailed below to determine where to focus your professional learning related to Standard 1 (CS Knowledge and Skills) of the CSTA Standards for CS Teachers.

How to complete the worksheet:

1. Delete the rating and justification tables for grade level(s) you do not teach.
2. Select your rating for each student standard within each Standard 1 indicator as Growth for standards you are not yet comfortable teaching, differentiating, and assessing OR Strength for standards you feel comfortable teaching, differentiating, and assessing.
3. Add an explanation of your ratings choices as a justification for each of the Standard 1 indicators for each of the grade levels you teach. Describe evidence related to your rating choices, which could include:
    - Lessons plans
    - Courses or PD completed
    - Book study participation
    - PLC and/or CSTA chapter participation
    - Data from your students' coursework
    - Results of student surveys
4. Record Ideas for Growth & Next Steps. Examples:
    - Planned targeted professional learning
    - Social Media participation relative to CS
    - Book studies
    - Community engagement
    - Collaboration with peers, mentor teachers, teachers in other subject areas
    - Externships

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5. Record Professional Learning Goals based on growth areas.

9-12 Impacts of Computing Student Standard

Professional Learning Goals

Resources You May Need

- Computer Science Education Glossary
- Interactive Standards for CS Teachers
- CSTA K-12 Computer Science Standards
- CS Instructional Practice Evidence Guide

Standard 1. CS Knowledge and Skills

Effective CS teachers demonstrate and continuously develop thorough knowledge of CS content. They demonstrate proficiency with the CS concepts of the grade bands they teach, and they integrate these concepts with CS practices, including computational thinking. They also understand the progression of content before and after the grade bands they teach. The current content expectations are maintained in student standards aligned to the K-12 CS Framework.

1b. Apply knowledge of computing systems

Apply knowledge of how hardware and software function to input, process, store, and output information within computing systems by analyzing interactions, designing projects, and troubleshooting problems.

K-2 Computing Systems Student Standard	Rating
1A-CS-01 Select and operate appropriate software to perform a variety of tasks, and recognize that users have different needs and preferences for the technology they use. Practice(s): Fostering an Inclusive Computing Culture: 1.1	Select
1A-CS-02 Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware). Practice(s): Communicating About Computing: 7.2	Select
1A-CS-03 Describe basic hardware and software problems using accurate terminology. Practice(s): Testing and Refining Computational Artifacts, Communicating About Computing: 6.2, 7.2	Select

K-2 Computing Systems Student Standard	Rating
Understand the progression of computing systems content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1b in K-2 below.

Ratings Justifications	Ideas for Growth & Next Steps

3-5 Computing Systems Student Standard	Rating
1B-CS-01 Describe how internal and external parts of computing devices function to form a system. Practice(s): Communicating About Computing: 7.2	Select
1B-CS-02 Model how computer hardware and software work together as a system to accomplish tasks. Practice(s): Developing and Using Abstractions: 4.4	Select
1B-CS-03 Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies. Practice(s): Testing and Refining Computational Artifacts: 6.2	Select
Understand the progression of computing systems content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1b in 3-5 below.

Ratings Justifications	Ideas for Growth & Next Steps

6-8 Computing Systems Student Standard	Rating
2-CS-01 Recommend improvements to the design of computing devices, based on an analysis of how users interact with the devices Practice(s): Recognizing and Defining Computational Problems: 3.3	Select
2-CS-02 Design projects that combine hardware and software components to collect and exchange data. Practice(s): Creating Computational Artifacts: 5.1	Select
2-CS-03 Systematically identify and fix problems with computing devices and their components. Practice(s): Testing and Refining Computational Artifacts: 6.2	Select
Understand the progression of computing systems content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1b in 6-8 below.

Ratings Justifications	Ideas for Growth & Next Steps

9-12 Computing Systems Student Standard	Rating
3A-CS-01 Explain how abstractions hide the underlying implementation details of computing systems embedded in everyday objects. Practice(s): Developing and Using Abstractions: 4.1	Select
3A-CS-02 Compare levels of abstraction and interactions between application software, system software, and hardware layers. Practice(s): Developing and Using Abstractions: 4.1	Select
3A-CS-03 Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors. Practice(s): Testing and Refining Computational Artifacts: 6.2	Select
3B-CS-01 Categorize the roles of operating system software. Practice(s): Communicating About Computing: 7.2	Select
3B-CS-02 Illustrate ways computing systems implement logic, input, and output through hardware components. Practice(s): Communicating About Computing: 7.2	Select
Understand the progression of computing systems content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1b in 9-12 below.

Ratings Justifications	Ideas for Growth & Next Steps

1c. Model networks and the Internet

Model how computing devices connect via networks and the Internet to facilitate communication, and explain tradeoffs between usability and security.

K-2 Networks and the Internet Student Standard	Rating
1A-NI-04 Explain what passwords are and why we use them, and use strong passwords to protect devices and information from unauthorized access. Practice(s): Communicating About Computing: 7.3	Select
Understand the progression of networks and the Internet content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1c for K-2 below.

Ratings Justifications	Ideas for Growth & Next Steps

3-5 Networks and the Internet Student Standard	Rating
1B-NI-04 Model how information is broken down into smaller pieces, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination. Practice(s): Developing and Using Abstractions: 4.4	Select
1B-NI-05 Discuss real-world cybersecurity problems and how personal information can be protected. Practice(s): Recognizing and Defining Computational Problems: 3.1	Select
Understand the progression of networks and the Internet content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1c for 3-5 below.

Ratings Justifications	Ideas for Growth & Next Steps

6-8 Networks and the Internet Student Standard	Rating
2-NI-04 Model the role of protocols in transmitting data across networks and the Internet. Practice(s): Developing and Using Abstractions: 4.4	Select
2-NI-05 Explain how physical and digital security measures protect electronic information. Practice(s): Communicating About Computing: 7.2	Select
2-NI-06 Apply multiple methods of encryption to model the secure transmission of information. Practice(s): Developing and Using Abstractions: 4.4	Select
Understand the progression of networks and the Internet content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1c for 6-8 below.

Ratings Justifications	Ideas for Growth & Next Steps

9-12 Networks and the Internet Student Standard	Rating
3A-NI-04 Evaluate the scalability and reliability of networks, by describing the relationship between routers, switches, servers, topology, and addressing. Practice(s): Developing and Using Abstractions: 4.1	Select
3A-NI-05 Give examples to illustrate how sensitive data can be affected by malware and other attacks. Practice(s): Communicating About Computing: 7.2	Select
3A-NI-06 Recommend security measures to address various scenarios based on factors such as efficiency, feasibility, and ethical impacts. Practice(s): Recognizing and Defining Computational Problems: 3.3	Select
3A-NI-07 Compare various security measures, considering tradeoffs between the usability and security of a computing system. Practice(s): Testing and Refining Computational Artifacts: 6.3	Select
3A-NI-08 Explain tradeoffs when selecting and implementing cybersecurity recommendations. Practice(s): Communicating About Computing: 7.2	Select
3B-NI-03 Describe the issues that impact network functionality (e.g., bandwidth, load, delay, topology).	Select

9-12 Networks and the Internet Student Standard	Rating
Practice(s): Communicating About Computing: 7.2	
3B-NI-04 Compare ways software developers protect devices and information from unauthorized access. Practice(s): Communicating About Computing: 7.2	Select
Understand the progression of networks and the Internet content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1c for 9-12 below.

Ratings Justifications	Ideas for Growth & Next Steps

1d. Use and analyze data

Collect, store, transform, and analyze digital data to better understand the world and make more accurate predictions.

K-2 Data and Analysis Student Standard	Rating
1A-DA-05 Store, copy, search, retrieve, modify, and delete information using a computing device and define the information stored as data. Practice(s): Developing and Using Abstractions: 4.2	Select
1A-DA-06 Collect and present the same data in various visual formats. Practice(s): Communicating About Computing, Developing and Using Abstractions: 7.1, 4.4	Select

K-2 Data and Analysis Student Standard	Rating
1A-DA-07 Identify and describe patterns in data visualizations, such as charts or graphs, to make predictions. Practice(s): Developing and Using Abstractions: 4.1	Select
Understand the progression of data and analysis content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1d for K-2 below.

Ratings Justifications	Ideas for Growth & Next Steps

3-5 Data and Analysis Student Standard	Rating
1B-DA-06 Organize and present collected data visually to highlight relationships and support a claim. Practice(s): Communicating About Computing: 7.1	Select
1B-DA-07 Use data to highlight or propose cause-and-effect relationships, predict outcomes, or communicate an idea. Practice(s): Communicating About Computing: 7.1	Select
Understand the progression of data and analysis content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1d for 3-5 below.

Ratings Justifications	Ideas for Growth & Next Steps

6-8 Data and Analysis Student Standard	Rating
2-DA-07 Represent data using multiple encoding schemes. Practice(s): Developing and Using Abstractions: 4	Select
2-DA-08 Collect data using computational tools and transform the data to make it more useful and reliable. Practice(s): Testing and Refining Computational Artifacts: 6.3	Select
2-DA-09 Refine computational models based on the data they have generated. Practice(s): Creating Computational Artifacts, Developing and Using Abstractions: 5.3, 4.4	Select
Understand the progression of data and analysis content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1d for 6-8 below.

Ratings Justifications	Ideas for Growth & Next Steps

9-12 Data and Analysis Student Standard	Rating
3A-DA-09 Translate between different bit representations of real-world phenomena, such as characters, numbers, and images. Practice(s): Developing and Using Abstractions: 4.1	Select
3A-DA-10 Evaluate the tradeoffs in how data elements are organized and where data is stored. Practice(s): Recognizing and Defining Computational Problems: 3.3	Select
3A-DA-11 Create interactive data visualizations using software tools to help others better understand real-world phenomena. Practice(s): Developing and Using Abstractions: 4.4	Select
3A-DA-12 Create computational models that represent the relationships among different elements of data collected from a phenomenon or process. Practice(s): Developing and Using Abstractions: 4.4	Select
3B-DA-05 Use data analysis tools and techniques to identify patterns in data representing complex systems. Practice(s): Developing and Using Abstractions: 4.1	Select
3B-DA-06 Select data collection tools and techniques to generate data sets that support a claim or communicate information.	Select

9-12 Data and Analysis Student Standard	Rating
Practice(s): Communicating About Computing: 7.2	
3B-DA-07 Evaluate the ability of models and simulations to test and support the refinement of hypotheses. Practice(s): Developing and Using Abstractions: 4.4	Select
Understand the progression of data and analysis content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1d for 9-12 below.

Ratings Justifications	Ideas for Growth & Next Steps

1e. Develop programs and interpret algorithms

Design, implement, debug, and review programs in an iterative process using appropriate CS tools and technologies. Interpret algorithms, and explain tradeoffs associated with different algorithms.

K-2 Programs and Algorithms Student Standard	Rating
1A-AP-08 Model daily processes by creating and following algorithms (sets of step-by-step instructions) to complete tasks. Practice(s): Developing and Using Abstractions: 4.4	Select
1A-AP-09 Model the way programs store and manipulate data by using numbers or other symbols to represent information.	Select

K-2 Programs and Algorithms Student Standard	Rating
Practice(s): Developing and Using Abstractions: 4.4	
1A-AP-10 Develop programs with sequences and simple loops, to express ideas or address a problem. Practice(s): Creating Computational Artifacts: 5.2	Select
1A-AP-11 Decompose (break down) the steps needed to solve a problem into a precise sequence of instructions. Practice(s): Recognizing and Defining Computational Problems: 3.2	Select
1A-AP-12 Develop plans that describe a program's sequence of events, goals, and expected outcomes. Practice(s): Creating Computational Artifacts, Communicating About Computing: 5.1, 7.2	Select
1A-AP-13 Give attribution when using the ideas and creations of others while developing programs. Practice(s): Communicating About Computing: 7.3	Select
1A-AP-14 Debug (identify and fix) errors in an algorithm or program that includes sequences and simple loops. Practice(s): Testing and Refining Computational Artifacts: 6.2	Select
1A-AP-15 Using correct terminology, describe steps taken and choices made during the iterative process of program development. Practice(s): Communicating About Computing: 7.2	Select
Understand the progression of programs and algorithms content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1e for K-2 below.

Ratings Justifications	Ideas for Growth & Next Steps

3-5 Programs and Algorithms Student Standard	Rating
1B-AP-08 Compare and refine multiple algorithms for the same task and determine which is the most appropriate. Practice(s): Testing and Refining Computational Artifacts, Recognizing and Defining Computational Problems: 6.3, 3.3	Select
1B-AP-09 Create programs that use variables to store and modify data. Practice(s): Creating Computational Artifacts: 5.2	Select
1B-AP-10 Create programs that include sequences, events, loops, and conditionals. Practice(s): Creating Computational Artifacts: 5.2	Select
1B-AP-11 Decompose (break down) problems into smaller, manageable subproblems to facilitate the program development process. Practice(s): Recognizing and Defining Computational Problems: 3.2	Select
1B-AP-12 Modify, remix, or incorporate portions of an existing program into one's own work, to develop something new or add more advanced features. Practice(s): Creating Computational Artifacts: 5.3	Select
1B-AP-13 Use an iterative process to plan the development of a program by including others' perspectives and considering user preferences. Practice(s): Fostering an Inclusive Computing Culture, Creating Computational Artifacts: 1.1, 5.1	Select

3-5 Programs and Algorithms Student Standard	Rating
1B-AP-14 Observe intellectual property rights and give appropriate attribution when creating or remixing programs. Practice(s): Creating Computational Artifacts, Communicating About Computing: 5.2, 7.3	Select
1B-AP-15 Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended. Practice(s): Testing and Refining Computational Artifacts: 6.1, 6.2	Select
1B-AP-16 Take on varying roles, with teacher guidance, when collaborating with peers during the design, implementation, and review stages of program development. Practice(s): Collaborating Around Computing: 2.2	Select
1B-AP-17 Describe choices made during program development using code comments, presentations, and demonstrations. Practice(s): Communicating About Computing: 7.2	Select
Understand the progression of programs and algorithms content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1e for 3-5 below.

Ratings Justifications	Ideas for Growth & Next Steps

6-8 Programs and Algorithms Student Standard	Rating
2-AP-10 Use flowcharts and/or pseudocode to address complex problems as algorithms. Practice(s): Developing and Using Abstractions: 4.4, 4.1	Select
2-AP-11 Create clearly named variables that represent different data types and perform operations on their values. Practice(s): Creating Computational Artifacts: 5.1, 5.2	Select
2-AP-12 Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals. Practice(s): Creating Computational Artifacts: 5.1, 5.2	Select
2-AP-13 Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs. Practice(s): Recognizing and Defining Computational Problems: 3.2	Select
2-AP-14 Create procedures with parameters to organize code and make it easier to reuse. Practice(s): Developing and Using Abstractions: 4.1, 4.3	Select
2-AP-15 Seek and incorporate feedback from team members and users to refine a solution that meets user needs. Practice(s): Collaborating Around Computing, Fostering an Inclusive Computing Culture: 2.3, 1.1	Select
2-AP-16 Incorporate existing code, media, and libraries into original programs, and give attribution. Practice(s): Developing and Using Abstractions, Creating Computational Artifacts, Communicating About Computing: 4.2, 5.2, 7.3	Select
2-AP-17 Systematically test and refine programs using a range of test cases. Practice(s): Testing and Refining Computational Artifacts: 6.1	Select
2-AP-18 Distribute tasks and maintain a project timeline when collaboratively developing computational artifacts. Practice(s): Collaborating Around Computing: 2.2	Select
2-AP-19 Document programs in order to make them easier to follow, test, and debug.	Select

6-8 Programs and Algorithms Student Standard	Rating
Practice(s): Communicating About Computing: 7.2	
Understand the progression of programs and algorithms content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1e for 6-8 below.

Ratings Justifications	Ideas for Growth & Next Steps

9-12 Programs and Algorithms Student Standard	Rating
3A-AP-13 Create prototypes that use algorithms to solve computational problems by leveraging prior student knowledge and personal interests. Practice(s): Creating Computational Artifacts: 5.2	Select
3A-AP-14 Create prototypes that use algorithms to solve computational problems by leveraging prior student knowledge and personal interests. Practice(s): Developing and Using Abstractions: 4.1	Select
3A-AP-15 Justify the selection of specific control structures when tradeoffs involve implementation, readability, and program performance, and explain the benefits and drawbacks of choices made. Practice(s): Recognizing and Defining Computational Problems: 5.2	Select

9-12 Programs and Algorithms Student Standard	Rating
3A-AP-16 Design and iteratively develop computational artifacts for practical intent, personal expression, or to address a societal issue by using events to initiate instructions. Practice(s): Creating Computational Artifacts: 5.2	Select
3A-AP-17 Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects. Practice(s): Recognizing and Defining Computational Problems: 3.2	Select
3A-AP-18 Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs. Practice(s): Creating Computational Artifacts: 5.2	Select
3A-AP-19 Systematically design and develop programs for broad audiences by incorporating feedback from users. Practice(s): Creating Computational Artifacts: 5.1	Select
3A-AP-20 Evaluate licenses that limit or restrict use of computational artifacts when using resources such as libraries. Practice(s): Communicating About Computing: 7.3	Select
3A-AP-21 Evaluate and refine computational artifacts to make them more usable and accessible. Practice(s): Testing and Refining Computational Artifacts: 6.3	Select
3A-AP-22 Design and develop computational artifacts working in team roles using collaborative tools. Practice(s): Collaborating Around Computing: 2.4	Select
3A-AP-23 Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs. Practice(s): Communicating About Computing: 7.2	Select
3B-AP-08 Describe how artificial intelligence drives many software and physical systems. Practice(s): Communicating About Computing: 7.2	Select

9-12 Programs and Algorithms Student Standard	Rating
3B-AP-09 Implement an artificial intelligence algorithm to play a game against a human opponent or solve a problem. Practice(s): Creating Computational Artifacts: 5.3	Select
3B-AP-10 Use and adapt classic algorithms to solve computational problems. Practice(s): Developing and Using Abstractions: 4.2	Select
3B-AP-11 Evaluate algorithms in terms of their efficiency, correctness, and clarity. Practice(s): Developing and Using Abstractions: 4.2	Select
3B-AP-12 Compare and contrast fundamental data structures and their uses. Practice(s): Developing and Using Abstractions: 4.2	Select
3B-AP-13 Illustrate the flow of execution of a recursive algorithm. Practice(s): Recognizing and Defining Computational Problems: 3.2	Select
3B-AP-14 Construct solutions to problems using student-created components, such as procedures, modules and/or objects. Practice(s): Creating Computational Artifacts: 5.2	Select
3B-AP-15 Analyze a large-scale computational problem and identify generalizable patterns that can be applied to a solution. Practice(s): Developing and Using Abstractions: 4.1	Select
3B-AP-16 Demonstrate code reuse by creating programming solutions using libraries and APIs. Practice(s): Creating Computational Artifacts: 5.3	Select
3B-AP-17 Plan and develop programs for broad audiences using a software life cycle process. Practice(s): Creating Computational Artifacts: 5.1	Select
3B-AP-18 Explain security issues that might lead to compromised computer programs. Practice(s): Communicating About Computing: 7.2	Select

9-12 Programs and Algorithms Student Standard	Rating
3B-AP-19 Develop programs for multiple computing platforms. Practice(s): Creating Computational Artifacts: 5.2	Select
3B-AP-20 Use version control systems, integrated development environments (IDEs), and collaborative tools and practices (code documentation) in a group software project. Practice(s): Collaborating Around Computing: 2.4	Select
3B-AP-21 Develop and use a series of test cases to verify that a program performs according to its design specifications. Practice(s): Testing and Refining Computational Artifacts: 6.1	Select
3B-AP-22 Modify an existing program to add additional functionality and discuss intended and unintended implications (e.g., breaking other functionality). Practice(s): Creating Computational Artifacts: 5.3	Select
3B-AP-23 Evaluate key qualities of a program through a process such as a code review. Practice(s): Testing and Refining Computational Artifacts: 6.3	Select
3B-AP-24 Compare multiple programming languages and discuss how their features make them suitable for solving different types of problems. Practice(s): Communicating About Computing: 7.2	Select
Understand the progression of programs and algorithms content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1e for 9-12 below.

Ratings Justifications	Ideas for Growth & Next Steps

1f. Analyze impacts of computing

Analyze how people influence computing through their behaviors, cultural norms, and social interactions, as well as how computing impacts society in both positive and negative ways.

K-2 Impacts of Computing Student Standard	Rating
1A-IC-16 Compare how people live and work before and after the implementation or adoption of new computing technology. Practice(s): Communicating About Computing: 7	Select
1A-IC-17 Work respectfully and responsibly with others online. Practice(s): Collaborating Around Computing: 2.1	Select
1A-IC-18 Keep login information private, and log off of devices appropriately. Practice(s): Communicating About Computing: 7.3	Select
Understand the progression of impacts of computing content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1f for K-2 below.

Ratings Justifications	Ideas for Growth & Next Steps

3-5 Impacts of Computing Student Standard	Rating
1B-IC-18 Discuss computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices. Practice(s): Recognizing and Defining Computational Problems: 3.1	Select
1B-IC-19 Brainstorm ways to improve the accessibility and usability of technology products for the diverse needs and wants of users. Practice(s): Fostering an Inclusive Computing Culture: 1.2	Select
1B-IC-20 Seek diverse perspectives for the purpose of improving computational artifacts. Practice(s): Fostering an Inclusive Computing Culture: 1.1	Select
1B-IC-21 Use public domain or creative commons media, and refrain from copying or using material created by others without permission. Practice(s): Communicating About Computing: 7.3	Select
Understand the progression of impacts of computing content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1f for 3-5 below.

Ratings Justifications	Ideas for Growth & Next Steps

6-8 Impacts of Computing Student Standard	Rating
2-IC-20 Compare tradeoffs associated with computing technologies that affect people's everyday activities and career options. Practice(s): Communicating About Computing: 7.2	Select
2-IC-21 Discuss issues of bias and accessibility in the design of existing technologies. Practice(s): Fostering an Inclusive Computing Culture: 1.2	Select
2-IC-22 Collaborate with many contributors through strategies such as crowdsourcing or surveys when creating a computational artifact. Practice(s): Collaborating Around Computing, Creating Computational Artifacts: 2.4, 5.2	Select
2-IC-23 Describe tradeoffs between allowing information to be public and keeping information private and secure. Practice(s): Communicating About Computing: 7.2	Select
Understand the progression of impacts of computing content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1f for 6-8 below.

Ratings Justifications	Ideas for Growth & Next Steps

9-12 Impacts of Computing Student Standard	Rating
3A-IC-24 Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices. Practice(s): Fostering an Inclusive Computing Culture: 1.2	Select
3A-IC-25 Test and refine computational artifacts to reduce bias and equity deficits. Practice(s): Fostering an Inclusive Computing Culture: 1.2	Select
3A-IC-26 Demonstrate ways a given algorithm applies to problems across disciplines. Practice(s): Recognizing and Defining Computational Problems: 3.1	Select
3A-IC-27 Use tools and methods for collaboration on a project to increase connectivity of people in different cultures and career fields. Practice(s): Collaborating Around Computing: 2.4	Select
3A-IC-28 Explain the beneficial and harmful effects that intellectual property laws can have on innovation. Practice(s): Communicating About Computing: 7.3	Select
3A-IC-29 Explain the privacy concerns related to the collection and generation of data through automated processes that may not be evident to users. Practice(s): Communicating About Computing: 7.2	Select

9-12 Impacts of Computing Student Standard	Rating
3A-IC-30 Evaluate the social and economic implications of privacy in the context of safety, law, or ethics. Practice(s): Communicating About Computing: 7.3	Select
3B-IC-25 Evaluate computational artifacts to maximize their beneficial effects and minimize harmful effects on society. Practice(s): Testing and Refining Computational Artifacts, Fostering an Inclusive Computing Culture: 6.1, 1.2	Select
3B-IC-26 Evaluate the impact of equity, access, and influence on the distribution of computing resources in a global society. Practice(s): Fostering an Inclusive Computing Culture: 1.2	Select
3B-IC-28 Debate laws and regulations that impact the development and use of software. Practice(s): Recognizing and Defining Computational Problems, Communicating About Computing: 3.3, 7.3	Select
Understand the progression of impacts of computing content before and after the grade band(s) currently taught.	Select

Instructions: Please fill in your justifications for your ratings and ideas for growth for indicator 1f for 9-12 below.

Ratings Justifications	Ideas for Growth & Next Steps

Professional Learning Goals

Instructions: Now that you have reflected on Standard 1, please take a moment to consider your reflections overall. Pick your learning goals from those that you identified and choose the ones that you wish to focus on in the near future and as longer range goals. Think about:

- What impact will these goals have on your performance and student performance?
- What are the specific actions necessary for the goals to be accomplished?
- What types of resources and/or support do you need to achieve these goals? How will these be provided?
- How will you collect evidence to show implementation and impact?
- How will you ultimately know if you accomplished the goals?

Your Professional Learning Goals