



Community Problem Solvers

In this apprenticeship, students will become community problem solvers. They will identify community (school, neighborhood or beyond) strengths and needs based on their own experiences and will plan for how their own unique strengths and talents can be used to make their community a better place. They will use a problem-solving process to brainstorm, vet, and select a community need and a solution to that community issue. Students will then get to test out their solution through a community service project that addresses the community need they selected.

In the process, they will reflect on their experience, practice researching in various sources and learn how to conduct an impact assessment. The apprenticeship will culminate in a WOW! Video, which will showcase students' progress becoming community problem solvers.

Unit Standards and Objectives 21st Century Skill: Problem Solving

Given the nature of this apprenticeship, the focus of skills development is on the 21st century skill problem solving. While there are several places that are noted in the lessons where a specific ELA Common Core State Standard skill is introduced or built, these were not the skills the apprenticeship was designed around, although they are often present in service of the 21st century skill mastery. We've noted where a Common Core skill shows up in lessons to support the teaching teams in talking about and justifying the skills being mastered through this apprenticeship.

Standard #1: Problem Solving

Lesson Objectives:

Domain 1: <u>Gathering information:</u> Students should engage in pre-work related to the creation and/or execution of the actual solution of the problem. To do so effectively, students should:

- a. Define the problem being solved.
 - Students will generate and refine a list of community problems that could be solved.
- b. Generate a list of specific questions that need to be answered in order to solve the problem.
 - o Students will generate questions to guide their research on their community problem.
- c. Find and present the answers to these questions, including how those answers were found, whether by book research or physical investigations.
 - Students will conduct research to better understand their community problem.
- d. Evaluate the quality of each answer in reference to how helpful it will be in helping to solve the problem.
 - Students will evaluate the quality of their research and will articulate how it impacts their thinking about their solution.

Domain 2: <u>Selecting the best solution</u>: Students will create a list of potential solutions to the problem, and then narrow that list down to the best choice. While many factors could be considered, the two most important will be the potential solutions likelihood of success and its practical applicability within the confines of the apprenticeship (factors include time, space, & resources). To pare down to the best solution, students should:

- a. Identify the root cause or causes of the problem.
 - Students will conduct research to understand the root causes and impacts of their community problem.
- b. Brainstorm a long list of potential solutions, regardless of practical constraints (e.g., "send it to the Moon!").
 - o Students will brainstorm an exhaustive list of possible solutions to their community problem.
- c. Systematically pare down the list by eliminating potential solutions that are impractical (e.g. sending anything to the Moon) or unlikely to succeed. Strong reasons for each elimination should be provided.





- Students will evaluate their list of possible solutions against a set of criteria for quality community service and will pare down their list to the strongest solutions.
- d. Defend the remaining solution as the best solution. Why didn't it get cut like the others? What makes it more practical and more likely to succeed?
 - o Students will articulate their reasoning for choosing the solution they think will be most effective.
- e. Draw on past experiences in making these choices. For students to be successful they need to have prior experience with different aspects (parts) of the problem and solution. By experiencing what works and what doesn't for several little pieces of the problem, students can better synthesize a solution for the entire project.
 - Students will continually incorporate their own prior knowledge, and students' experiences and interests drive project selection.

Domain 3: <u>Reasoning:</u> Because an actual answer is unknown to students, they will need to use reasoning to make decisions with limited information. While demonstrating their use of reasoning, students should:

- a. Use the appropriate type of reasoning. Students do NOT need to know the different kinds of reasoning, and
 any true differentiation between types of reasoning (e.g., inductive vs. deductive) is secondary. The reasoning
 should be appropriate for the information provided and for what students are trying to get out of that
 information.
 - Students will be asked to use what they see and have learned to draw conclusions. Students will provide reasoning for their predictions and recommendations/decisions.
- b. Use reasoning to demonstrate an understanding of the system being studied. Students should understand why the problem needs to be solved and what will happen when it is solved.
 - Students will build on what they know and have researched about root causes and will use that to inform their planning for their project.
- c. Synthesize a new idea. Though they may be solving a problem that professionals solve all the time, and though their solution may be standard practice among those professionals, each student's solution should be new to them.
 - Students will generate a solution to their community problem that is informed by their own experience and research. Students will justify their reasoning for why this is the best solution.

Standard #2: Draw evidence from informational texts

- CCSS.ELA-LITERACY.SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes.
 - Students are asked to present findings/solutions/their experiences throughout the apprenticeship in Teach Backs, in their student interviews and through their WOW! video.
- CCSS.ELA-LITERACY.W.6.9 Draw evidence from literary or informational texts to support analysis, reflection and research.
 - Students conduct background research on the topic as well as continuing research throughout the process.
 Their work will include analyzing the researched info and reflecting on how it relates to what they think and know.

Essential Questions

- What are our community's strengths and needs?
- How can we work to solve a community problem?
- How can we pick the strongest solution to a community problem?
- What does it take to plan for and deliver impactful, meaningful community service?





Performance Task Assessment (WOW!)

Students are interviewed or recorded on video to share ideas with decision makers about specific community-based solutions (policies, practices, supports etc) for a challenge they have identified and worked to solve in their apprenticeship.

Goal: Students will present the problem solving skills they used in choosing, planning for and implementing a community service project.

Role: Community Problem Solvers (volunteers).

Audience: Decision makers, community members.

Situation: Students screen their service video and facilitate in a question/answer session. Note: this could take place at WOW! showcase and/or in Lesson 10 to an authentic audience.

Product: A video which documents their problem solving process and provides insights into their decision-making reasoning and lessons learned.

Standards: Students demonstrate mastery in all three of our Problem Solving domains (gathering information, selecting the best solution and reasoning) The final video is only one of the opportunities in this apprenticeship to evaluate students' mastery of 21st century problem solving skills. There are various assessment points built into Lessons 1-10.

- 21st Century Skill Performance Task Assessment Problem Solving Rubric
- Summative Rubric outlines where each of the skills can be assessed throughout lessons

See the additional "WOW! Video planning" section below for details.

	Lesson Plans At-A-Glance			
	L	esson Plans are available <u>here</u>		
Week	Lesson Objectives	Agenda	Outcomes & Work Products	
1	Domain 1: Gathering Information a. Define the problem being solved.	 Hook: Genie in a Bottle Introduction and Community Problem Solvers Roadmap to WOW! Activity 1: Personal Inventory Activity 2: Strength in Numbers (Human Machine) Activity 3: Video Discussion Assessment: Exit Ticket 	 Define problem. Brainstorm solutions. Identify individual and group interests and skills. 	
	Domain 1: Gathering Information a. Define the problem being solved. Domain 2: Selecting the best solution a. Identify the root causes or causes of the problem.	 Hook: Pair Introductions Introduction and Community Problem Solvers Roadmap to WOW! Activity 1: Community Strengths and Needs Gallery Walk and Discussion Activity 2: Break It Down (Think/Pair/Share) Activity 3: Blue Sky Collage Assessment: Exit Ticket 	 Identify community needs - define problem. Generate possible root causes. Create a vision for success. 	





3	Domain 1: Gathering Information b. Generate a list of specific questions that need to be answered in order to solve the problem. c. Find and present the answers to these questions. d. Evaluate the quality of each answer. Domain 2: Selecting the best solution a. Identify the root causes or causes of the problem CCSS.ELA-Literacy.CCRA.W.9 SL 6.4	 Hook: A Mile in Their Shoes Lesson Introduction: Big Reveal and Community Problem Solvers Roadmap to WOW! Activity 1: KWL Activity 2: Guided Small Group Research and Teach Back Assessment: Exit Ticket 	 Generate list of questions to guide research. Research answers to their questions. Evaluate the quality of their answer. Identifying root causes of social issues.
4	Domain 2: Selecting the Best Solution b. Brainstorm a long list of potential solutions, regardless of practical constraints. c. Systematically pare down the list by eliminating potential solutions that are impractical or unlikely to succeed. d. Defend the remaining solution as the best solution. e. Draw on past experiences in making these choices. Domain 3: Reasoning b. Use reasoning to demonstrate an understanding of the system.	Hook: Shark Attack Game Lesson Introduction and Community Problem Solvers Roadmap to WOW! Activity 1: Speed Brainstorm Activity 2: Takeaway Activity 3: Refine and Teach Back Assessment: Exit Ticket	 Brainstorm solutions list. Pare down solutions list based on criteria. Defend remaining solutions (based on personal experience and research) and provide reasoning.
5	Domain 3: Reasoning b. Use reasoning to demonstrate an understanding of the system. CCSS.ELA-Literacy.CCRA.W.9	 Hook: Paper Tower Lesson Introduction: Big Reveal Activity 1: Project Design Carousel Activity 2: Road to WOW! Activity 3: Subcommittee Work Assessment: Exit Ticket 	 Whole group project planning. Subcommittee project planning.
6-9	Domain 3: Reasoning c. Synthesize a new idea. (Plus other objectives depending on co- teacher lesson decisions.)	Essential Elements: 1. Students plan for the project. 2. Students carry out the project. 3. Students reflect and assess impact. ** Note alternative, modular structure for Less	sons 6-9.
10	Domain 3: Reasoning a. Use the appropriate type of reasoning. SL 6.4	 Hook: Video Reveal and Reflection Lesson Introduction and Community Problem Solvers Roadmap to WOW! Activity 1: WOW! Prep Activity 2: Appreciation Circle Closing Activity: Woven Together Assessment: Exit Ticket 	Articulation of reasoning through WOW! prep.

		Lesson Elements
ľ	Hook	The opening activity will vary from lesson to lesson but will often involve 1) reinforcing or framing a





	skill students will be introduced to or will need during the lesson or 2) providing an opportunity for students to access prior knowledge that they'll build on during the lesson.
Assessment How you will measure student learning (i.e., exit tickets, student writing, student presentations, etc.)	 Exit Tickets will allow for weekly assessment of student learning for objectives. Reflection questions built into Exit Tickets will allow for weekly assessment of student understanding and experience. Student Interviews will be conducted in weeks 9 or 10, which will assess student mastery of some skills that are difficult to assess elsewhere.
Structures Learning structures, tools or student grouping strategies	 Games: there are community-building games included in several lessons. These are important to set the stage for the success of this group service project, and teaching teams should plan for their successful delivery. Small group and whole class brainstorming occurs throughout the apprenticeship. Subcommittee planning and work time are essential structures to the planning and delivery of the service project in Lessons 5-9.
Procedures Special procedures used each class (handing out folders, rearranging seating, etc.)	 Student Community Problem Solver workbooks (which house Exit Tickets and any critical work products) are used each week. Plan a method of distribution and collection that maximizes efficiency. Videotaping will be occurring throughout the apprenticeship. This will include filming of lesson activities, small group work and individual interviews. Plan for how and where this filming will take place, and how to introduce it to students and build procedures that minimize distraction.

	Implementation Notes		
Supplies Materials, tools, technology	Other than the supplies listed below (which are needed for Lessons 1-5), the supplies list will vary significantly based on what community service project is chosen. You'll plan for and track any supplies needed for your specific project during your "State of the Project" meeting. Classroom materials needed: Occasional use of computer lab or laptop cart Occasional use of projector to show video Ball of yarn 5-8 pairs of shoes Collage materials Video camera (or high quality camera phone) with basic video editing software Chart paper Markers Post-It notes		
Budget	 Total cost of apprenticeship: Materials costs (chart paper/markers, etc.): \$20 Site visit: Incorporate your understanding of whether the budget allows for travel in your decision-making around the final service project. If there isn't money in the budget for a site visit, consider choosing a project that is within walking distance or is school-based. Community service project materials budget: will vary significantly depending on the project you chose. In your week 4-5 "State of the Project" meeting as a co-teaching team, evaluate the need for any materials that will cost money and brainstorm ways of acquiring 		





	them for free or low cost. Consider whether to have a fundraising subcommittee that works to source materials or
	raise money needed for project supplies.
Supporting Materials & Resources Handouts, books, materials	 Community Problem Solvers Workbooks will need to be printed and stapled together for each student.
Location	
Tables/desks, or classroom, gym, kitchen, outside, etc.	Classroom: a room with tables and chairs and a space to gather and play games in a circle; one with desks that can be moved together easily would also work.
	 Choice and voice are critical to provide youth buy-in to the project and an opportunity for students to see themselves as agents of change in their community. Youth voice and choice are meaningfully incorporated into the apprenticeship in all stages of the community service planning and delivery. To balance the demands of meeting curricular objectives with the important role of encouraging youth voice, the apprenticeship is designed to be "Youth Directed" instead of being entirely directed by youth. In this model, the decision-making will be informed by students but the adults will be the project leaders and will make the high-level decisions about the community project. Student's interests and ideas are taken into consideration. They are actively engaged in brainstorming and prioritizing, and contribute their ideas to the final decisions throughout the apprenticeship. Student individual strengths and talents are a theme. Subcommittee group work provides an opportunity for students to have voice/choices even if the final project selected wasn't their first choice.
Modifications for Student Needs Supports and changes to help meet the needs of all learners	 Students work in small groups and subcommittees throughout the apprenticeship. You'll need to figure out when to decide on grouping in advance while maximizing student choice. Err on the side of letting students work on what's important to them while making sure that the overall group makeup will support student and group success. Students who struggle with group work may need to be given a specific role or additional scaffolding or graphic organizers. Plan for individual student supports during videotaping, especially the "final interview." You may decide to have individual students write out their answers before filming. For students who may have difficulty speaking clearly on camera you may decide to have them write out their thoughts and have a classmate record. For students who struggle with writing (especially in their workbook): Consider pairing them with a willing partner. One teacher can act as a scribe, letting the student dictate ideas while the teacher records them. If a keyboard is available, typing may be a helpful accommodation.
Student Background Knowledge and Skills Needed	• Students will need sensitivity when doing on-site work (assess maturity and provide scaffolding). A student who struggles with this may need to be explicitly taught how to behave at a site and may need additional supervision. There are additional resources and strategies for this in the "Students Carry Out the Project" section of the Project Planning Guide (Lessons 6-9).
Academic skills, social emotional skills or developmental milestones needed	 Students will need to tolerate some level of frustration with the limitations to individual student voice and choice in selecting the final project. Some strategies to consider to help





	manage this on a group level include: Communicating upfront and in a positive way about the way student voice (and other factors, like feasibility) will inform the adult-decision making. Supporting individual students who are experiencing frustration by connecting them back to the strengths and talents they identified in Lesson 1 and how they can use those in their subcommittee work.
College and Career Readiness	 College skills: learning from examples of other young people, identifying and solving relevant problems, generating and evaluating ideas, group brainstorming and evaluation, interacting with members of a target population, critical thinking about community problems, needs and root causes of social issues.
Connections to college and career	Career connections: Non-profit work, a variety of business careers, careers in human services.
	 In addition to planning for effective co-teaching of lessons, you'll need to define your roles for the project planning and implementation work as well: You'll want one teacher to take the lead for the video filming and editing (estimated time required: 5-10 additional hours). You'll want one teacher to serve as the lead for project outreach/community partner contact (estimated time required: 5-8 additional hours).
Co-Teaching Roles	Team Teaching: Prior to each lesson, each teacher should identify which activities they will take the lead on. The other teacher should plan to: • Distribute materials • Keep time • Write on the board
Recommendations for co- teaching and planning	 Assist struggling students Videotape portions of the lessons for the WOW! video
	 Alternative Teaching: If a group of students is struggling or falling behind, one teacher should pull them aside to help them troubleshoot or prioritize, offering additional support and assistance. You can identify students who would benefit from this based on observation and/or the assessment of each lesson.
	Parallel Teaching: Some activities could be easily adapted to parallel teaching. This will be especially helpful during subcommittee planning and project delivery (Lessons 6-9). One advantage to parallel teaching is that it allows more time for each student to speak and ask questions.
	 Authentic experiences with the community problem, with people who are impacted by the problem, or people who are working to make the problem better, are important to strengthen students' engagement and the deepen their experience in this apprenticeship.
Special Resources Field trips, excursions, guest speakers	• There are multiple moments when this would be effective and ways that this can be done. When and how this looks will also vary significantly depending on the kind of service project that is chosen. Some community projects (like direct-service) will lend themselves naturally to site-based work and for other projects (like environmental advocacy), you'll need to be creative in thinking of how to provide authentic opportunities for students to interact with the problem and important people.
Field trips, excursions, guest	When and how this looks will also vary significantly depending on the kind of service project that is chosen. Some community projects (like direct-service) will lend themselven naturally to site-based work and for other projects (like environmental advocacy), you need to be creative in thinking of how to provide authentic opportunities for students.





	examples of how they could be incorporated into different kinds of community service
	projects
	• In weeks 1-5:
	 Guest speakers who can speak to the impacts of the community problem on their lives and the kinds of things that would make it better. Walking tour of community/school to document community needs/strengths. Guest talk by a staff member from a local organization, who is working on the same community problem the students have chosen (or from the organization they'll be partnering with) and who can provide vital background information on the issue, statistics, lessons learned. In weeks 6-9: Guest speaker from partner organization for co-planning, status updates, student questions. Subcommittee goes out in the community to conduct a survey or interviews (resource: Tipsheet: Interviewing Community Members in the Project Planning Guide). Project-specific examples will be available for fall 2016. In week 10: Ideally (if time allows) students will have an opportunity to screen their WOW! video and participate in a Q&A session. The audience should include
	decision makers who are prepared to hear about and engage around their problem-solving process and their recommendations around solutions based on their experience doing their service. This could happen in week 10 or at a WOW! showcase event.
	Note to Teaching Team: Create a poster-sized visual of the information listed below, display and reference weekly in your classroom.
	Visual overview for students of their 10 week apprenticeship:
	Week 1: What does our team have to offer?
	Week 2: What is our community like? What could it be like?
Road Map to WOW!	Week 3: Gathering information
	Week 4: Selecting the best solution
Visual overview for students of	Week 5: What's our plan?
their 10-week apprenticeship	Week 6: Our Community Service Project
	Week 7: Our Community Service Project
	Week 8: Our Community Service Project
	Week 9: Our Community Service Project
	Week 10: Getting ready for WOW!: Tell your story WOW!
	The Roadmap graphic is included <u>below in the additional resources section</u> . An editable graphic is <u>also available</u> .





Co-Teaching Structures Guide

Teaching Model	Description	Why should we use it?	When should we use it?
Parallel Teaching	Class is split into two (or more) small teams. Same content is taught to each team	·Low student-teacher ratio ·Greater proximity to high-risk students ·Co-teachers have equal presence and responsibility in the classroom	·When we can plan effectively together to ensure we teach the same content to each group well ·Classroom's physical structure permits it ·For lessons with heavy independent work ·Need to provide a lot of individual attention
Station Teaching	Class is split into two (or more) small teams. <u>Different</u> material taught to each group simultaneously and then teams switch or teachers switch	·Low student-teacher ratio ·Co-teachers have equal presence and responsibility in the classroom ·More variety in teaching methods for teachers and students	-When a lesson can be split into two mutually exclusive and equally timed parts (e.g. using a camera/critiquing a photo, chopping vegetables/measuring ingredients) -When the classroom's physical structure permits it -For lessons with a lot of knowledge or skill-building
Team Teaching	Both teachers actively teach the material taking turns during the lesson to lead teach. While one teacher is lead teaching the other goes around to groups or individual students	One teacher can pay attention to high-risk students while one teacher leads the full class Co-teachers have equal presence and responsibility in the classroom	-When it's difficult to effectively split a lesson into two stations -When a lesson has lectures and independent practice time -If most SPED students can follow wholegroup instruction -Best used with well-developed coteaching relationship -For lessons with a lot of group work





Alternative Teaching	One teacher remediates a small group of students (pre-teach, re-teach, supplement or enrich) and catches them up for the main lesson being taught by the other teacher	·Low student-teacher ratio ·To remediate in class for a small group of students ·To catch students up who may not have understood/missed previous lessons	When the benefits from a few minutes of remediation/ pre-teaching will pre- empt greater misunderstandings for the lesson When the classroom's physical structure permits small group in one part of the room (CTs should not be left alone in the classroom with students)
One Teach, One Assist	One teacher lead teaches the whole lesson and the other teacher works with individual students	·To redirect behavior from an especially low-functioning student ·To pay greater attention to a student who needs one-on-one interaction in order to keep up	If there is a particularly high-needs student(s) in the classroom who needs specific support During direct-teach sections of the lesson

The Pitch

Add description of a 2 to 3 minute interactive presentation of your apprenticeships. Presentations with props, interactive elements and models of products similar to WOW! are typically most successful.

Slide 1: Have you ever noticed something in your school or neighborhood that just wasn't right? A kindergartner being bullied by an older student on the bus? A playground with broken equipment in one neighborhood when the park in the neighborhood nearby is state of the art? The garbage cans filled with things that could be recycled? Maybe you've thought: "Somebody needs to do something about this!"

In this apprenticeship you're going to be able to do something to make a real problem in your community better!

Slide 2: Young people across the globe and right here in our city are **doing something** to change the world and make it a better place.

- Like Blare, who, two days after the devastating earthquake in Haiti in 2010, saw on the news a picture of little boy crying in a pile of rubble and decided he needed to do something about it. Blare worked with his teachers and friends at school to collect teddy bears to provide comfort for the kids impacted by the earthquake and so far has collected 25,000 teddy bears.
- Like Nicholas, who visited a homeless shelter and noticed that most of the children had poorly fitting shoes or shoes that weren't right for the weather or the playground. Nicholas has so far collected shoes for over 42,000 children in homeless shelters in 42 states throughout the country
- Or eighth-grader Julia, who noticed something a lot of teenagers notice, and a lot of teenagers complain about:
 that the girls featured in teen magazines are not only models, they're photoshopped to the point where they barely
 look human and certainly don't look like most teenagers. But rather than grumble about it, she stepped up and
 spoke out she and her friends created a petition which ultimately convinced Seventeen Magazine to only use real,
 untouched pictures of teenagers in their magazine





Materials Needed for Pitch Day

- Computer
- PowerPoint presentation <u>Pitch Slides</u>
- Projector

Project Selection and Project Planning for the Teaching Team

Preparing to deliver these lessons is only one part of what you'll need to do to effectively lead this apprenticeship. Alongside the lesson preparation, the teaching teams will be researching opportunities and building partnerships with local organizations. You also will be selecting the most feasible community need and solution, planning logistics for the community service project work and managing the delivery of a community service project. Because student interest, authentic community needs and campus-specific logistics drive the selection of the project, every apprenticeship will vary significantly.

To support teaching teams in planning for their specific apprenticeship, the following resources are available: Before Lesson 4:

- Each lesson lists actions that teaching teams need to have taken before the lesson (in Lesson Preparation section).
- Each lesson includes reminders of actions teaching teams need to take after each lesson (in Exit Ticket section).
- <u>"Choosing the Community Service Project"</u> A tipsheet that guides teaching teams in the criteria to consider when deciding on the final project (between Lessons 3 and 4).

After Lesson 4:

- The <u>Project Planning Guide for Lessons 6-9</u>, which supports the teaching teams in planning for the lessons during the service project.
- The "State of the Project" meeting <u>discussion guide</u> and resources for when teaching teams meet to plan between Lessons 4 and 5.

Checklist for Project Planning

After Lesson 1	 Review student exit tickets. Note students' individual interests and group strengths to inform future decision-making. Make a short list of the community problems students are expressing an interest in and begin initial research on potential projects/feasibility.
After Lesson 2	 Review students' Exit Tickets and the work on their handouts from Activity 2 (Break It Down) to make a refined list of the most popular two to three community needs. Continue or begin outreach to potential community partners to understand opportunities and potential for collaboration. Select the community need that is most feasible. (Resource Tipsheet: Engaging Community Partners).
After Lesson 3	 Ongoing outreach to deepen relationships with potential community partners. Schedule the "State of the Project" meeting for between weeks 4-5.





After Lesson 4	 Review student handouts from Lesson 3. Make a list of students' top one to two vetted solutions. Reach back out to the local organizations and campus leadership to arrange opportunities for service. Choose a final community service project. Use "Choosing the Community Service Project" tipsheet as a resource. Have "State of the Project" meeting with teaching team. Complete discussion guide.
After Lesson 5	 Draft lesson plans for Lessons 6-9 using the <u>lesson plan template</u>. Coordinate any details for project work in weeks 6-9.
After Lesson 6- 9	 Monitor and document project progress, student engagement and impact. Manage student and partner organization expectations. Meet as a teaching team to plan and course correct. Refer to lesson plan for Lessons 6-9 for more details.

WOW! Video Planning and Student Interview Planning

Planning for WOW! Video Collection

About the video:

The product that will be created throughout this apprenticeship is a video documenting students' development as community problem solvers. The video will capture the steps they take to demonstrate mastery on the problem-solving rubric. The best videos will include footage of some of the work students do early in the apprenticeship identifying community needs, understanding root causes, and brainstorming and vetting possible solutions. The video will also include action shots from the community service work, as well as interviews with each student in which they share their own reflections and key takeaways as community problem solvers.

It isn't necessary (or possible) for your video to show each student's every individual mastery or skill, however the final video should show as much as it can about how students have practiced and mastered the critical 21st century skills of problem solving. Remember, you'll be assessing each student's mastery separately using the <u>summative rubric</u> as your guide. You'll notice that a few 21st century skill objectives will be assessed in the individual student interviews, which you can videotape.

The final WOW! video should show students in your group:

- Defining and working to better understand the problem they chose
- Identifying root causes
- Brainstorming solutions and paring down their list
- Defending their final solution and sharing their reasoning for why they think it's the best solution
- Describing some of the conclusions they're coming to about the effectiveness of their solution and their reasoning behind those conclusions

Key moments that need to be videotaped:

• Each lesson plan includes suggestions for great video opportunities that capture critical moments in the problem-solving process.





Planning for Student Interviews

During the final weeks of the apprenticeship, you'll spend five minutes with each student interviewing them about their experience and what they've learned. Videotaping these for the WOW! is a great idea. But, the interviews are most important for assessing student mastery on a few of the 21st century skills that don't show up elsewhere. It may be a challenge to find time to interview each of your students, but if you plan to conduct your interviews over weeks 8-10 and you keep the time under 5 minutes, you should be able to spend time with all of your students.

Before each interview:

- By week 7, review your <u>summative rubric</u> for each student and see what areas you haven't been able to assess yet.
- Prioritize interview questions that help you assess for those missing areas as well as skills that may have been harder to assess during the apprenticeship, such as:
 - O 1a) Define the problem
 - O 3b) Use reasoning to demonstrate an understanding of the system
 - O 3c) Synthesize a new idea

Some questions you might ask:

- How did you think the solution your class chose would work to solve the community problem?
- Do you think we were right? How effective was our solution? How do you know (what's your evidence)?
- If you were going to do this project again and you wanted to have an even bigger impact, what would you do differently based on what you've learned?

Note: Depending on your students, you may consider having students prepare for these interviews by writing or chatting in pairs first.

Other questions you could ask:

- What is the community problem your class is working to solve?
- Why/how is it a problem?
- What are a few ways that this problem impacts people's lives?
- How did we decide this was the best solution?
- What are our reasons for choosing this solution? Why did we decide that this one was best?
- What impact did we hope we'd have?
- Do you think we made an impact? How do you know?
- What have we learned about our solution?
- What would we change about what we did?

Apprenticeship in Action

Coming Soon!

Please send examples of student work and your suggestions to share with future Citizen Teachers by emailing amyhoffmaster@citizenschools.org. Your apprenticeship could be featured here!

Connect disengaged students by engaging around their unique skills/talents. For example: if there's a student who is great on the computer, have them work on building out your surveys. I also found that I needed to manage student expectations around decision-making. They had LOTS of great ideas and wanted to make the decision about their project, but some of the ideas were not feasible.





Community Problem Solvers Citizen Teacher

It is critical to pick a project that actually can be done in the allotted time... We had to be aggressive in the beginning to narrow our focus and work with campus leadership to make sure it was feasible.

- Community Problem Solvers Citizen Teacher

Apprenticeship Description for WOW! Communications

This community service apprenticeship will teach students the skills they need to identify a problem, brainstorm and evaluate various solutions to the problem, and use reasoning and evidence to select the best solution. Students will apply these skills to identify and choose an issue in their community or school that they want to make better. Using research and their own experiences, students will choose the best solution to the community problem they selected. Students will test the quality of their solution and think about its impact on the community problem by doing a community service project. Ultimately, families and guests who attend the WOW! performance will watch a video that documents their students transformation into a community problem solver.

Apprenticeship Acknowledgements

"Community Problem Solvers" was developed and edited by Grace Bianciardi and Amy Hoffmaster based on a previous version of this curriculum, "Champions for Change," which was co-developed Citizen Teachers at several CS campuses. We'd like to offer a special thanks to the Citizen Teachers who provided feedback on the previous curriculum, especially Terry Yoffie and Alice Wang.





Additional Resources

Summative Rubric: Problem Solving

Complete each after the lesson(s) indicated in parentheses, responding to the questions posed in the assessment section of each lesson.

M = full mastery (you can answer "yes" to all questions)

P = partial mastery (you can answer "yes" to some questions, or "somewhat" to all questions)

N = no evidence of mastery (you answer "no" to almost all questions)

N = 110 evidence of mastery	() = = = = = = = = = = = = = = = = = = =	 	 7	 					
Ask yourself if student can:	student names> where in lesson:								
1a) Define the problem	video interview								
1b) Generate a list of questions	L3 - KWL activity								
1c) Find and present answers to questions	L3 - Teach Back								
1d) Evaluate quality of each answer	L3 - Notes Handout								
									i
2a) Identify root causes	L3 - Exit Ticket								
2b) Brainstorm solutions	L4 - Activity 1								
2c) Pare down	L4 - Activity 3								
2d) Defend remaining	L4 - Activity 3								
2e) Draw on past experience	L4 - Activity 3								
3a) Use appropriate reasoning	L6-9 Exit Ticket								

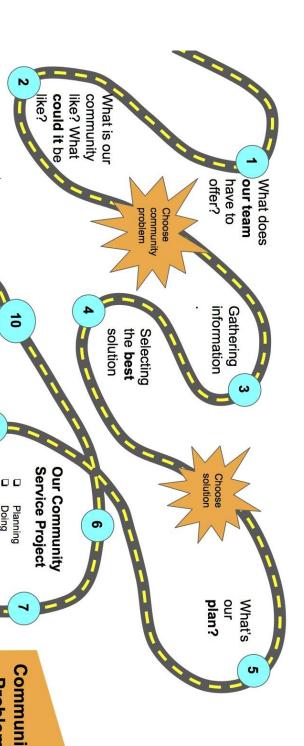




3b) Use reasoning to demonstrate an understanding of the system	video interview								
3c) Synthesize a new idea	video interview								











Choosing a Community Project/Solution: Tips for the Teaching Team

When selecting the final project from students' pared down lists, it is critical that you evaluate your options based on the following factors, as well as any others that you think are important.

If you're deciding between a few different project ideas, make multiple copies of the form below and complete one form for each project. Use the column at the right to note any modifications that could strengthen the project.

	Question	Yes	No	Necessary modifications/ notes
Time	 Is the project doable in the time we have? Is there a natural completion point or pass-off? Can the project be simplified or expanded as needed? 			
Students	 Do the students have the skills they need? Is this project important to students? Will students be able to see the change they made? 			
Impact	 Will the completed work make a difference to the organization, people served or community? Does the community want this project? Will the students feel as though they have completed something worthwhile when it's over? 			
Resources	 Can it be completed without a lot of fundraising? Do we have access to what we need to complete this project? 			





Community Partners (if applicable)	 Is our partner willing and excited? Have they committed a contact person? Is it clear how this project will meet their needs? Is it clear what they expect from us? 	
Other		