



Spring 2020 Semester

February 3, 2020 – May 29, 2020

Title of Course: Gardening 101	
Number of Sessions: 5	Grade Levels: K-8
Total Hours: 30	Total Number of Credits: 2
Course Start Date: March 29, 2020	Course End Date: May 17, 2020
Course Location: New York Botanical Garden (Bronx)	
Maximum Course Enrollment: 25	
Instructor's Name: Shannon Haas	Instructor's Telephone: 718-817-8140
Instructor's Email: shaas@nybg.org	
Education Partner Fee: \$200	
Materials Fee if applicable:	
Registration Deadline	
<p>Instructions for completing registration and payment through education partner: To pay the \$200 Educational Partner fee using a credit or debit card, visit http://childed.nybg.org. To pay using check or money order visit http://childed.nybg.org/document/professional-learning-form/190738. For assistance, please call 718-817-8181.</p>	

Course Information

Course Description

Strengthen student engagement using your school garden! Participants will be challenged to use problem solving and critical thinking to address issues associated with garden design and financial and community support while integrating local resources into their teaching practice. This course is most useful for those starting or reviving a garden program at their school. Pedagogical support will be modeled through hands-on activities throughout the course and curriculum review. Content will be focused on how to translate this learning into practical applications in their individual school settings.

Target Grade Levels

K-8

Integration of *Danielson Framework for Teaching* Components

Dom. 1d: Planning and Preparation: Demonstrating Knowledge of Resources: Throughout the course resources for supporting instruction using informal settings will be provided. Teachers will translate this

experience to support classroom instruction through participating in a “garden challenge” with peers during each session.

Dom. 3c: Instruction—Engaging Students in Learning: Participants will be engaged as (teacher) learners as they explore life and earth science through a school garden using the Edible Academy at the New York Botanical Garden. Teachers will complete seasonal maintenance tasks, which highlight connections to ongoing instructional opportunities within their specific school garden settings.

Integration of Standards

New York State P-12 Science Learning Standards:

3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

NYS Next Generation ELA Anchor Standards

W.2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

R.7: Integrate and evaluate content presented in diverse media and formats.

SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners; express ideas clearly and persuasively, and build on those of others.

SL.4: Present information, findings, and supporting evidence so that listeners can follow the line of reasoning. Ensure that the organization, development and style are appropriate to task, purpose, and audience.

NYS Next Generation Standards for Mathematical Practice

MP.2: Reason abstractly and quantitatively

MP.5: Use appropriate tools strategically

Pedagogical Approach

Teaching strategies include interactive lecture, modeling and practice of hands-on activities, individual and small group work, peer to peer discussion, along with outdoor excursions that showcase how garden or plant-based learning can be integrated into a school environment. All learning activities and experiences will be “unpacked” by learners through guided reflection providing participants with individual time to consider how their personal learning can be applied to their classroom practice.

Application to Instruction and Student Learning

Teachers will take away concrete skills for engaging the school community in a school gardening program. Extensive tools are shared including lesson plans, videos, garden planning materials and contact with professionals in the field of garden-based learning. These resources can be directly adapted for use in classrooms and guest speakers can provide technical support in schools. Throughout the sessions participants will be asked to participate in an immersive learning experience while also reflecting on how strategies and tools are applicable to their schools. Participants will be asked to adapt and try out one new strategy or idea with their students and share successes and challenges with colleagues during the last session. Those not currently teaching will be supported in creating lesson plans for future use.

Assessment

Each session focuses on how to integrate a school garden into curriculum with particular emphasis on activities which support STEM based education. Teachers will do a garden site inventory, design a school garden (large and small scale) and develop a budget during the course as well as consider appropriate lessons/activities that integrate STEM topics. Many activities are conducted during each session, but one main, “garden challenge” activity must be completed by the teachers in cooperative groups daily. Teachers will receive direct feedback during each session as they work to create a final presentation for their peers to synthesize content learned.

Journal entries will be used between sessions and in class to promote practice of skills learned along with individual reflection. Participants reflect on their prior knowledge and comfort level with the subject matter as well as what knowledge and skills they have gained by taking the course.

Participants are required to complete a curriculum/activity review to collect, analyze and share garden related resources available to support student learning. Teachers are asked to assess how resources can be aligned to state and local standards including science, ELA and math. Participants will adapt one lesson plan from this review or utilize a new skill or strategy with students (if they are teaching). This lesson plan, skill or strategy will incorporate the concepts and techniques discussed, but will be tailored by the teacher to suit their grade level(s) and curriculum. Those not working with students directly will be supported in adapting a lesson plan.

Connection to Critical Consciousness

Participants will consider social, political and historical constructs that impact access to fresh, local foods as they address issues associated with garden design and financial and community support in starting or reviving a school garden. Focus will be on how race and socioeconomic status affects our relationships with access to food. In class assignments will provide tools for capacity building within each unique school setting.

Major Assignment	Due Date
Curriculum/Activity Review	April 5, 2020
Adapted lesson plan or activity	April 26, 2020
Group Presentations	May 17, 2020

Feedback

Daily group garden challenges will serve as informal assessments to guide facilitators in supporting all learners. Teams are provided with direct feedback daily from the facilitators as well as engage with peers to share successes and challenges they faced in each task. A final presentation at the end of the course will provide time for students to highlight what they have learned.

Grades

Student completion of the course will be evaluated on the following:

Participation:	20%	In-class participation; activities and presentation
Midterm Journal:	40%	Ongoing journal entries including curriculum/activity review
Final Project:	40%	Final group presentation

Rubrics are attached as an addendum at the end of this document.

Course Calendar

Session #1	
Date: March 29, 2020	Number of hours for this session: 6
Time: 9:00am-4:00pm	Assignments due today: Garden Challenge #1 & 2
Standards and Components Alignment:	
<u>NYS Next Generation ELA Anchor Standards</u> W.2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	
<u>NYS Next Generation Standards for Mathematical Practice</u> MP.2: Reason abstractly and quantitatively MP.5: Use appropriate tools strategically	
<u>Danielson's Competency:</u> Dom. 1D: Planning and Preparation – Demonstrating a Knowledge of Resources	
Objectives:	
Participants will be able to... <ul style="list-style-type: none">• analyze outdoor learning spaces for children, as well as explore pedagogical skills for supporting science content instruction using a school garden• conduct a school garden site survey, interacting with peers to use appropriate tools to observe, measure, and analyze their schoolyard as a first step in school garden design.• reflect on how to access informal resources outside of the school to enhance educational and social opportunities for students with a focus on garden-based projects.• explore critical consciousness through considering the systems that underlie their personal sphere of influence in individual school settings	
Topics and Agenda:	
<ul style="list-style-type: none">• Introduction and norming to establish tone for interaction with peers, 45 min• Review Syllabus and ASPDP policies and guidelines, 30 min• Garden journals and individual portfolios will be introduced as tools for writing routinely over extended and shorter periods for a range of tasks, purposes, and audiences as teachers work in small groups to design a school garden proposal. Participants will respond to journal prompt #1. W.2, 30 min<ul style="list-style-type: none">○ Journal prompt #1: <i>Why do you want to use a garden to support instruction? What questions do you want to explore during the course to support a garden program at your school?</i>• Garden Challenge #1: Teachers share their “garden visions” based on independent research. Informational text will be assessed, including resources for adults and for students including websites and children’s books listed on the New York Botanical Garden Teacher Resources website and in participant binders. Dom 1D, 60 min• Course Assignment Overview, 30 min• Facilitators will provide an overview of resources available to schools including the Grow to Learn Grant and GreenThumb training and giveaway events (free to schools registered with Grow to Learn). The Grow to Learn website will be used to showcase how activities from the Gardening 101 course will	

support teachers in registering as a Grow to Learn school as well as help them write a Grow to Learn grant. Dom. 1D, 30 min

- Best practices for outdoor classroom management, setting outdoor classroom rules, and tip sheets for setting up a positive learning environment will be shared through the New York Botanical Garden Online Resource: Gardening 101. Dom 1D, 30 min
- Teachers will analyze the design of an outdoor teaching space for children. Instructors will utilize a facilitator-led survey to help teachers assess the infrastructural elements of a school garden in Garden Challenge #2, MP.2, MP.5, 45 min
- Teachers will watch a video introducing critical consciousness. Using a protocol participants will consider personal connections to assumptions they have experienced that contribute to inequity. This work will lay the groundwork for connecting to student learning in the classroom throughout the remaining sessions. Dom. 1D, 30 minutes
- Journals will be utilized as tools for daily reflection as a means of enhancing instructional practices. Small and large group discussion will provide time for participants to consider journal prompt #2. Dom. 1D, 30 minutes
 - Journal Prompt #2: *Choose a word or phrase that stands out to you from the video that highlights a personal or institutional practice that may contribute to inequity within your sphere of influence. How might this affect how students are involved in the design, care or use of your school garden?*

Resources:

Grow to Learn: <http://www.growtolearn.org>

New York Botanical Garden Online Resource: Gardening 101 <http://www.nybg.org/edu/teacher/school-gardening-101>

Talks, T. E. D. (2014, March 10). The consciousness gap in education - an equity imperative | Dorinda Carter Andrews | TEDxLansingED. Retrieved from <https://www.youtube.com/watch?v=iOrgf3wTUbo#t=815>

Connection to Critical Consciousness/CRSE:

Criteria from Rubric:

Build capacity to identify and question underlying personal and institutional beliefs, norms, practices and assumptions that contribute to inequity

Activity:

Watch video and discuss initial understandings about critical consciousness. Build toward deeper ideas about how gardens and student led projects contribute to breaking down barriers to food access.

Application to Instruction and Student Learning:

- Online and print resources will be provided as tools to incorporate research and communication skills within a garden design project during Garden Challenge #1.
- Protocols and norming tools can be adapted for peer group work.
- The outdoor site survey (Garden Challenge #2) is directly applicable to a school garden design process and can be replicated with students or adults.
- Curricular materials can be used to adapt a lesson plan for curriculum review assignment, and can be directly utilized with students. Later sessions will allow participants to share their ideas and experiences in trying out lessons or new strategies with students.
- The journal process is a meaningful, structured way to create an organized ongoing record of experiences and reflections and to record necessary planning for a school garden project.

Assessment and Feedback:

Journal prompt #1: *Why do you want to use a garden to support instruction? What questions do you want to explore during the course to support a garden program at your school?*

Journal Prompt #2: *Choose a word or phrase that stands out to you from the video that highlights a personal or institutional practice that may contribute to inequity within your sphere of influence. How might this affect how students are involved in the design, care or use of your school garden?*

Garden Challenge #1 will serve as an informal formative assessment. This assignment will be reviewed by course instructors after the first session to assess the type of garden projects and the level of existing content knowledge and readiness participants possess. This will also aid instructors in assigning participants to project teams.

Application (please complete this in your journal): In your journal cite at least one curricular resource, either shared in class today or one that you independently locate, that can be used for your curriculum review assignment. What are the strengths of this resource? What are the weaknesses of this resource? How can you make this resource more accessible? How would you modify at least one activity from this resource to support instruction within your specific school setting? Be prepared to share this resource with your peers using a protocol during the next session.

Session #2

Date: April 5, 2020

Number of hours for this session: 6

Time: 9:00am-4:00pm

Assignments due today: Curriculum Review & Garden Challenge #3

Standards and Components Alignment:

NYS Next Generation ELA Anchor Standards

R.7: Integrate and evaluate content presented in diverse media and formats.

W.2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners; express ideas clearly and persuasively, and build on those of others.

NYS Next Generation Standards for Mathematical Practice

MP.2: Reason abstractly and quantitatively

MP.5: Use appropriate tools strategically

New York State P-12 Science Learning Standards:

3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

Danielson's Competency:

Dom. 1D: Planning and Preparation – Demonstrating a Knowledge of Resources

Dom. 3C: Engaging Students in Learning

Objectives:

Participants will be able to...

- create a basic garden map with a collaborative planning team.
- use a variety of informational texts (gardening catalogues and tip sheets from the New York Botanical Garden and Grow to Learn) to research garden supply needs and costs for a school garden.
- search for and pool resources to provide financial support for a school garden.
- gain new skills to establish a garden counsel at their school by including a variety of stakeholders from the school community.

Topics and Agenda:

- Participants will be assigned to a “garden council” team with a focus on creating heterogeneous groups that provide a mix of gardening experience and roles within a school. This is designed to mimic a garden counsel framework in a real school setting. Garden council members will discuss journal prompt # 1. Dom. 1D, 30 min
 - Journal Prompt #1: *What supports do you think you will need to begin a garden project? Who can play a role in advocating and supporting a school garden at your teaching site? How can your school encourage open and honest dialogue amongst community partners to foster a brave learning community?*
- Groups will be guided through the process of determining how to form a garden counsel team at their school as well as how to set goals for a school garden project using resources from Grow to Learn. Dom. 1D, 60 min
- Small and large group discussion will be focused on using collaborative learning strategies to facilitate effective cooperative group work within schools and classrooms. SL1, 30 min
- Teachers will begin analyzing their original “garden visions” shared on Day 1 of the course. A short lecture will be followed by small group work with multiple facilitator “check-ins”. In “garden challenge” teams they will begin working on Challenge #3 with real constraints such as space, access to light, water and soil to design a realistic school garden. Resources will be shared to help align the school calendar with garden planning as well as provide answers to individual questions as they arise. Facilitators will encourage group members to record work in journals. 3-5-ETS1-1, MS-ETS1-1, SL1, W.2, MP.2, MP.5, Dom. 1D., 120 min
- Using an online Collaborative Learning Guide (listed below) each team will unpack how they approached a challenging task. Large group discussion will focus on sharing strategies to encourage collaborative learning and equitable voices within schools and individual classrooms. SL1, 20 min
- Staff from the Edible Academy will lead participants in garden maintenance tasks based on seasonal needs. Dom. 3C, 60 min
- Journals will be utilized as tools for daily reflection as a means of enhancing instructional practices. Time will be provided for teachers to share resources from their curriculum review assignment with a focus on how resources can be utilized in their specific classroom or school setting. This will provide feedback for ideas leading to an application assignment for this session. W.2, 40 min

Resources:

- GreenThumb: <http://www.greenthumbnyc.org>
- Grow to Learn: www.growtolearn.org/view/howtostartagarden.html
- Collaborative Learning Guide: <https://www.isbe.net/Documents/collaboration-guide.pdf>

Connection to Critical Consciousness/CRSE:	
<p>Criteria from Rubric: Course incorporates clear structures and expectations for participation in a brave learning community</p>	<p>Activities: Collaborative group work focuses on making all voices heard. Engaging the school community through a garden counsel or larger garden project requires developing relationships and negotiating diverse experiences and perspectives. Levels of collaboration are modeled throughout this session and continue throughout the course.</p> <p>Establishing a garden counsel, setting norms and group roles, ongoing “check-ins” to determine a healthy group process, and a focus on collaborative communication strategies opens up a forum for open dialogue. This is a model for a school setting with the understanding that each school comes with its own unique needs.</p>
Application to Instruction and Student Learning:	
<ul style="list-style-type: none"> ● Resources provided are city-wide and applicable when creating a whole school garden program. ● Activities throughout the course prepare teachers to have the resources necessary to sign up as a Grow to Learn school. This provides access to free technical training, materials and grants. ● The garden planning, research and group process tools can be directly adapted for classrooms. Time will be provided for teachers to discuss how activities can be utilized in their specific classroom setting, with a focus on using project based work to encourage higher order learning. ● Curricular resources and ideas about how to adapt these tools directly support teachers in incorporating garden or plant based learning to support instruction in their classrooms. 	
Assessment and Feedback:	
<p>Informal assessment from Garden Challenge #3 will guide instruction.</p> <p>Journal entries will be assessed based on the following journal prompt: -Journal prompt #1: <i>What supports do you think you will need to begin a garden project? Who can play a role in advocating and supporting a school garden at your teaching site? How can your school encourage open and honest dialogue amongst community partners to foster a brave learning community?</i></p> <p>Curriculum review application assignment: <i>Application (please complete this in your journal): Adapt an activity or lesson that highlights a skill or strategy that we have used in class to support your student population using garden or plant based learning. You may adapt a lesson or activity from a curriculum/activity guide or write an original lesson. You will share this idea in draft format with your peers during our next session using a protocol.</i></p> <p>Journal reflections will generally lead into small or large group discussions of those reflections. Reflections (written and in discussion) will be assessed according to the attached rubric.</p>	

Session #3	
Date: April 26, 2020	Number of hours for this session: 6

Time: 9:00am-4:00pm	Assignments due today: Draft lesson and Garden Challenge #4
Standards and Components Alignment:	
<p><u>New York State P-12 Science Learning Standards:</u> 3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.</p> <p><u>NYS Next Generation ELA Anchor Standards</u> R.7: Integrate and evaluate content presented in diverse media and formats. W.2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content. SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners; express ideas clearly and persuasively, and build on those of others. SL.4: Present information, findings, and supporting evidence so that listeners can follow the line of reasoning. Ensure that the organization, development and style are appropriate to task, purpose, and audience.</p> <p><u>NYS Next Generation Standards for Mathematical Practice</u> MP.2: Reason abstractly and quantitatively MP.5: Use appropriate tools strategically</p> <p><u>Danielson’s Competency:</u> Dom. 1D: Planning and Preparation – Demonstrating a Knowledge of Resources Dom. 3C: Engaging Students in Learning</p>	
Objectives:	
<p>Participants will be able to...</p> <ul style="list-style-type: none"> • use a variety of informational texts (seed catalogues, seed packets, and online resources) to determine what specific plants are able to survive in NYC’s climate zone. • research and choose plants for small scale garden projects. • create a planting plan for a spring garden bed through a series of scaffolded learning activities. • determine how to integrate nutrition into a school garden program and curriculum. 	
Topics and Agenda:	
<ul style="list-style-type: none"> • Teachers will engage in a protocol to share lesson plan ideas for incorporation into their individual classroom settings. Peers will provide ideas and feedback. Dom. 1D, 45 min • Instructors facilitate an interactive lecture in conjunction with small group work focusing on theme based gardens, brainstorming plant selection and using seed packets and seed catalogues as leveled texts in researching plants for a spring salad garden. R.7, W.2, Dom. 3C, 45 min • Garden Council teams will complete Garden Challenge #4 and create a garden bed on paper using techniques from <u>Square Foot Gardening with Kids</u>. Each group will present their garden bed design. Peers and facilitators will critique based on criteria provided in instructor’s power point presentation. 3-5-ETS1-1, MS-ETS1-1. Dom. 3C, 60 min 	

- Instructors will model how to create a garden friendly culinary program to integrate local food into teachers' curriculum. Dom. 3C, 60 min
- Teachers will consider the elements of Danielson's Competency 3C and reflect on how teaching strategies were used throughout the day to engage them as learners individually and in small groups. Dom. 3C, 30 min
- Facilitators will lead an interactive lecture about persuasive argument. Participants will work in small groups to critique sample presentations from prior years. Participants will be asked to reflect on how they can adapt tools from the course to encourage student voice, culture and identity within the framework of a school garden project. SL.1, SL.4, Dom. 3C, 30 min
- Project teams will begin to finalize their garden proposal in preparation for group presentations. Throughout the process team members will be expected to support open communication and use teamwork to support whole class learning. SL.1, SL.4, Dom. 3C, 90 min

Resources:

Bartholomew, Mel. (2014). Square Foot Gardening with Kids. Minneapolis, MN: Cool Springs Press.

Connection to Critical Consciousness/CRSE:

Criteria from Rubric:

Course provides participants with multiple opportunities to assess/unpack/reflect on the complexities of their students' and their own individual identities and cultures, including influences on teaching and learning

Activity:

Participants will analyze past presentations with a focus on how to include student voice within a school garden proposal.

Application to Instruction and Student Learning:

- Seed starting and nutrition activities and tools are easily adapted for indoor or outdoor garden projects.
- Activities are taught using group lecture, peer discussion, read-aloud, independent reading and physical templates that address diverse learning needs. Time is provided for teachers to discuss how activities can be utilized in their specific classroom setting with a focus on engaging diverse student populations.
- Teachers will share lesson plan/activity ideas during the session that will be shared as a resource. These ideas and/or strategy modifications will aid participants in integrating garden or plant based learning with students in their specific school settings.

Assessment and Feedback:

Garden Challenge #4 will serve as an informal formative assessment. This assignment will help instructors coach groups and individuals based on the physical design of their garden bed. Feedback will also be provided based on specific participant or group questions.

Application: Implement your lesson plan(s) or a new strategy gained from our course with students. Be prepared to bring a piece of student work to our next session to share a success or challenge. If you are not currently working with students please bring a completed lesson plan to share.

Session #4

Date: May 3, 2020

Number of hours for this session: 6

Time: 9:00am-4:00pm	Assignments due today: Student work or completed lesson plan
Standards and Components Alignment:	
<p><u>NYS Next Generation ELA Anchor Standards</u></p> <p>SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners; express ideas clearly and persuasively, and build on those of others.</p> <p>SL.4: Present information, findings, and supporting evidence so that listeners can follow the line of reasoning. Ensure that the organization, development and style are appropriate to task, purpose, and audience.</p> <p><u>Danielson’s Competency:</u></p> <p>Dom. 1D: Planning and Preparation – Demonstrating a Knowledge of Resources</p> <p>Dom. 3C: Engaging Students in Learning</p>	
Objectives:	
<p>Participants will be able to...</p> <ul style="list-style-type: none"> • visit an urban school garden and experience activities that link the outdoor garden with indoor learning. • engage with teachers and administrators at a public school to explore how a garden or other outdoor programs support student achievement at their school. • use a case study to consider real world examples of critical consciousness in action within a NYC school garden project. • consider how to sustain a school garden (student and family engagement, funding, etc.). 	
Topics and Agenda:	
<ul style="list-style-type: none"> • Teachers will visit a real school garden (CS 211, 1919 Prospect Avenue, Bronx, NY) and will be provided with a tour of the site along with an opportunity to engage with the founding teachers and administrators for a five-year garden program. Dom. 1D, 60 min • A teacher and an administrator will answer questions that teachers have about using the garden as a learning space for students as well as share successes and challenges of using a garden program to support student achievement and family engagement. Dom. 1D, 60 min • Participants will consider a local case study with a focus on how student led community projects can empower children and families to overcome inequities within current systems of food distribution in urban settings. Participants will reflect on how examples from the day (school visit, review of case study) can inspire similar models within their unique school settings. Dom. 3C, 60 min. • Bronx Green-Up will lead an interactive “resource carousel” activity to elicit prior knowledge about school support systems as well as share information about grants, technical support, and free resources available to support school gardens. Resource lists co-created by class participants and instructors will be printed and shared as a resource. Dom. 1D, 60 min • Project teams will begin to finalize their garden proposal in preparation for group presentations. Throughout the process team members will be expected to support open communication and use teamwork to support whole class learning. CCRAS.SL.1, CCRAS.SL.4, Dom. 3C, 120 min 	
<p>Resources:</p> <p>Bronx Green-Up - http://www.nybg.org/green_up/</p>	

<https://theconversation.com/at-a-new-york-city-garden-students-grow-their-community-roots-and-critical-consciousness-117459>

Connection to Critical Consciousness/CRSE:

Criteria from Rubric:

Course de-centers whiteness by integrating resources and research that reflect racially and culturally diverse experiences and perspectives

Activity:

Conversations with teachers and administrators along with examination of case studies provides real world context to examine how different school environments and student populations influence teaching and learning in a school garden.

Application to Instruction and Student Learning:

- Resources shared during class will be distributed for teachers to use to support a school garden or plant based program at their school.
- Contact information from CS 211 staff and Bronx Green-Up will be provided to aid teachers in connecting with local support organizations.
- Presentation can be adapted for classroom use.

Assessment and Feedback:

In-class work on group presentations will serve as an informal formative assessment. This assignment will help instructors coach groups based on content knowledge and interpersonal group processes.

Session #5

Date: May 17, 2020

Number of hours for this session: 6

Time: 9:00am-4:00pm

Assignments due today: Group Presentations

Standards and Components Alignment:

NYS Next Generation ELA Anchor Standards:

W.2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners; express ideas clearly and persuasively, and build on those of others.

SL.4: Present information, findings, and supporting evidence so that listeners can follow the line of reasoning. Ensure that the organization, development and style are appropriate to task, purpose, and audience.

Danielson's Competency:

Dom. 1D: Planning and Preparation – Demonstrating a Knowledge of Resources

Dom. 3C: Engaging Students in Learning

Objectives:

Participants will be able to...

- present their group garden proposal and discuss how a garden or other outdoor program at their school can support students' academic and personal growth

- reflect on how to adapt free resources for individualized classroom needs.
- consider how to sustain a school garden (student and family engagement, funding, etc.).
- share student work, lesson plans and new ideas with peers about how informal resources can impact learning through a plant or garden based program.

Topics and Agenda:

- Participants will engage in a protocol to share successes and challenges in implementing new lessons, skills or strategies with students. Teachers will reflect on how their content understanding has changed focusing on the following journal prompt. 60 min
 - *“Before you engaged in our course, how would you individually assess your knowledge about creating or reviving a school gardening program at your teaching site? What skills and/or content knowledge do you feel you need to begin designing a garden space? Where do you think you can access this information?”*
- Project teams will finalize their garden proposal in preparation for group presentations. Throughout the process team members will be expected to support open communication and use teamwork to support whole class learning. SL.1, SL.4, 60 min
- “Garden Council” teams will present garden proposals to the class and use protocols for feedback. Each team will specify the audience that was selected as a focus for the presentation (administrators, teachers, parents, students). This will be done in 4-6, 20 minute rounds to ensure all team members are held accountable for group presentation material. Audience members in each round will provide “Glow” and “Grow” critiques which will be provided to each team at the end of the presentations for consideration and reflection about improving their presentation. SL.4, 120 min
- Teachers reflect on how the long term research, writing and presentation process can be utilized by students in their specific school settings using an Agree/Disagree Circle protocol to spur discussion. W.2, 30 min
- Staff from the Edible Academy will lead participants in garden maintenance tasks based on seasonal needs. Time will be devoted to discussing end of season school garden celebrations. Dom. 3C, 60 min

Connection to Critical Consciousness/CRSE:

Criteria from Rubric:

Course helps participants design and implement a learning environment that affirms students’ racial and cultural identities and contributes to their engagement and learning through the cultivation of critical inquiry

Activity:

Participants have the opportunity to share and reflect on their diverse experiences and relationships to plants and gardening through group presentations.

Application to Instruction and Student Learning:

- Protocols and shared presentations can be adapted for specific school or classroom needs.
- Resources will be shared from Bronx Green-Up
- Maintenance tasks practiced at the Edible Academy build technical skills that can be translated to a school setting

Assessment and Feedback:

Power point and other presentation materials will be assessed through peer review. Feedback and productive conversations will be encouraged to help individuals enhance or begin similar programs at their schools.

Gardening 101: Journal & Curriculum Review Rubric

Criteria	Exemplary (4)	Proficient (3)	Developing (2)	Unsatisfactory (1)
Critical Thinking	Journal entries are exceptionally rich with description and it is clear that critical analysis was completed.	Journal entries include description and content. Critical analysis is present, but not thorough.	Journal entries offer some description and content, but is basic and without critical thought and analysis.	Journal entries offer little description or content. Critical thought and analysis is not apparent.
Connections to course content	Journal entries provide clear connections to course topics and real-life examples. It makes new connections among related topics.	Journal entries provide some connections to topics, real-life examples, and/or prior knowledge.	Journal entries provide connections to course topic, but do not provide connections to content or real-life examples.	No effort is made to connect to course topic or content.
Pedagogical Practice	Journal entries address applicability to professional practice with detail and support using examples.	Journal entries address applicability to professional practice, but are not supported by examples.	Journal entries attempt to address applicability to professional practice.	No attempt is made to connect to professional practice.
Critical Consciousness	Journal entries demonstrate participants' ability to identify and question underlying personal and institutional beliefs, norms, practices and assumptions that contribute to inequity.	Journal entries address the underlying assumptions that contribute to inequity, but are not yet questioning personal assumptions.	Journal entries attempt to address norms and practices that contribute to inequity.	No attempt is made to address underlying personal and institutional beliefs, norms, or practices that contribute to inequity.

Gardening 101: Rubric for adapted Lesson/Activity/Strategy Share

Criteria	Exemplary (4)	Proficient (3)	Developing (2)	Unsatisfactory (1)
Content & Rationale	The work shared exhibits a thorough grasp of the concepts covered in the course. Provides clear rationale for how incorporating plant or garden-based learning will support instruction.	The work shared exhibits an understanding of course content. Attempts to provide rationale for how incorporating plant or garden based-learning will support instruction.	The work shared exhibits an understanding of course content, but may include a few misconceptions. Rationale for choice of activities is missing or incomplete.	The work shared contains incorrect information and/or shows no connection to the course.
Grade Level & Standards	Topic is appropriate for the grade level/student population selected. Standards are listed.	Topic is appropriate for the grade level/student population selected.	One component missing or components are inappropriate.	Components not listed.

Goals & Objectives	Goals and objectives are clearly stated and relevant. The work is exemplary in supporting the goals and objectives.	Goals and objectives are clear and relevant and are effectively supported by the work.	Goals and objectives are mostly clear and relevant. The work supports them, though some gaps may exist.	Goals and objectives are unclear and/or irrelevant.
Use of Resources	Plant or garden based resources are used creatively and are critical to the accomplishment of the goals and objectives.	Effective use of plant or garden based resources add value to the lesson and supports the goals and objectives.	Plant or garden based resources are used with mixed results. Goals and objectives may at times be better supported in other settings.	Plant or garden based resources are either ineffectively used or hinder the accomplishment of goals and objectives.
Differentiation	Original, thoughtful strategies to scaffold for success, for both ELLs and special needs students.	Includes clear strategies to scaffold success for ELL and special needs students.	Includes minimal or unclear strategies to differentiate for ELL or special needs students.	No attempt to think about or provide differentiation for different students.
Assessment	Assessment effectively gauges students' mastery of objectives and activities for the lesson or activity.	Assessment is aligned with objectives and activities but may not sufficiently assess students' mastery.	Assessment does not align with objectives and activities.	No assessment strategy used

Gardening 101: Rubric for Final Garden Proposal and Presentation

Criteria	Exemplary (4)	Proficient (3)	Developing (2)	Unsatisfactory (1)
Content and Rationale	The presentation exhibits a thorough grasp of the concepts covered in the course. Clear rationale is provided for how incorporating garden-based learning will support instruction.	The presentation exhibits an understanding of course content. Attempts to provide rationale for how incorporating garden based-learning will support instruction.	The presentation exhibits an understanding of course content, but may include a few misconceptions. Rationale for choice of activities is missing or incomplete.	The presentation contains incorrect information and/or shows no connection to the course.
Goals & Objectives	Goals and objectives of garden project are clearly stated and relevant. Stated objectives include evidence of student learning and are measurable.	Goals and objectives are clear and relevant. Stated objectives include evidence of student learning, but may not be measurable.	Goals and objectives are mostly clear and relevant.	Goals and objectives are unclear and/or irrelevant.
Use of Garden	Garden design/ resources are used	Effective use of garden resources	Garden resources are used with mixed	Garden resources hinder the

	creatively and are critical to the accomplishment of the goals and objectives.	that support the goals and objectives.	results. Goals and objectives may at times be better supported in other settings.	accomplishment of goals and objectives.
Map	Map clearly highlights cardinal directions, water sources, dimensions of beds and garden space, and entrances and exits.	Map highlights cardinal directions, water sources and dimension of beds	Map shows some required elements, but needs more detail to communicate design features.	No map shown.
Budget	Budget and supply list clearly match. Supply list and budget are clearly aligned to garden map and design.	Both a budget and supply list are included, but may be inconsistent with each other or with garden map and design.	A budget or supply list is included.	No budget and supply list included.

Gardening 101: Rubric for Participation

Criteria	Exemplary (4)	Proficient (3)	Developing (2)	Unsatisfactory (1)
Professionalism	Consistently demonstrates positive intentions and openness to learning even when challenged.	Demonstrates positive intentions and openness to learning even when challenged.	At times does not demonstrate positive intentions and openness to learning.	Does not demonstrate positive intentions and openness to learning.
Effort	Consistently comes to class prepared; Engages fully during each session; maximizes class time available.	Engages fully during each session; Usually gives best effort; completes work.	Engages during each session. Work is sometimes incomplete.	Not consistently engaged. Work is often incomplete.
Communication and Listening	Regularly shares ideas, but also shares air time with the group. Responds to other ideas to promote inquiry, questioning and group learning.	Shares ideas and also shares air time with the group. Responds to other ideas.	Occasionally shares ideas with the group.	Does not show evidence of communication with small or large group or dominates group discussions
Responsibility and Team Work	Not only responsible for personal learning, but also shows leadership in promoting small/whole class learning.	Responsible for personal learning and also promotes small/whole class learning.	Occasionally shows evidence of personal learning. May not always promote small group or whole group learning.	Does not show responsibility for personal learning or is disruptive.
Contribution	Comments and ideas are relevant and show consideration of content presented	Comments and ideas are relevant and show consideration of content presented	Comments and ideas are sometimes relevant and show consideration of	Comments are not relevant to course content and do not

	and others' ideas. Often includes connections to outside research and professional practice. Moves group learning forward.	and others' ideas. Moves group learning forward.	content presented and others' ideas.	move group learning forward.
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