Practices of Edible Education

The following is an overview of the foundational practices of our work—the most important strategies we have identified for translating our theory of edible education into a living experience for our students.

Most of these practices are not explicitly represented in the lesson plans that follow, but are nonetheless foundational to every student experience at the Edible Schoolyard Berkeley—whether during a class, a quick visit after school, or at an evening family engagement class.

Building a strong classroom culture is the foundation of all our practices. It begins with identifying how we want our students to feel while they are in our classrooms. From there, we engage specific practices to meet those goals.

How we want our students to feel:

- I can do this.
- My presence and contributions matter and are appreciated.
- I feel safe.

- ▶ I have ownership of my body and voice.
- ► I know how I can be successful in this space; the people here want me to succeed and will support me in doing so.
- ▶ I feel welcomed, cared for, and respected.
- I am acknowledged, I am seen, and I belong here.
- I can be myself.
- My voice and opinion matter and are respected.
- The space, people, and structures are fair to me.
- ► I have the ability to grow and develop my skills, knowledge, and abilities through effort and practice.
- ▶ It is okay not to know.
- When I encounter a problem, don't know something, or feel unsure, I know how to get the support I need to figure it out.

How we meet these goals:

- 1. INVITE STUDENTS TO SHOW UP AS THEIR FULL SELVES IN THE CLASSROOM AND LET THEM KNOW THAT THEIR PRESENCE AND CONTRIBUTIONS ARE APPRECIATED.
- Greet every student at the door as they enter the classroom.
- Interact with every student one-on-one in each class.
- ▶ Talk to students with respect and kindness.
- ▶ Meet students where they are. Help students find space and time to process whatever they are bringing into the classroom. Support them in practicing self-awareness around this need and the strategies they can use to address it.
- ► Foster a "culture of yes": Think twice before answering "no" to a question and see if there is a way to accommodate a student's request.
- ► Feature crops, recipes, tools, artwork, and other objects from many cultures in the physical space.
- "Don't yuck my yum": Don't put down or deride things that other people like. Support students to do the same.
- Avoid commenting on students' eating habits (e.g. "Wow, you just inhaled that plate!") and support students in doing the same.
- When a student says they don't want to try a food, insist on serving a very small "no thank you" portion so they have the opportunity to try it if they change their mind, but do not insist that they try it.
- Serve up food with the stated goal of fairness and ask students to help you in achieving that.
- Make a positive phone call home to share a student's successes and achievements in class.
- Appreciate the difference between intent and impact: When conflict arises, recognize that frequently the harm caused was not intended, but that lack of malice does not mean a harm caused is not real. Support students to understand the difference.

- Model curiosity by asking questions: Invite students to share stories, thoughts, or perspectives that matter to them, and listen with curiosity. Support students to do the same. When conflict or friction arises, seek to understand its cause as opposed to making assumptions. Asking questions is an excellent way to promote students' self-reflection.
- ► Have fun with the students—learning should be pleasurable!
- 2. SUPPORT EVERY STUDENT TO SUCCEED WITH CLEAR, CONSISTENT EXPECTATIONS, EXPLICIT INVITATIONS TO ENGAGE, AND NUMEROUS OPPORTUNITIES FOR SUCCESS.
- Explicitly name and explain your expectations for student participation, and vary participation protocols—communication norms vary by culture and background. Not every student will have the same assumptions or comfort level with participation protocols often used in classrooms (e.g. one voice, calling on raised hands). Explicitly naming and explaining your expectations helps students to understand how to be successful in the space. Varying participation protocols can create access and promote buy-in for all students.
- ▶ Interrupt and explicitly name harmful or unacceptable behavior. Describe clearly what you are seeing and why it is not okay. Base your observations in firsthand experience and use "I" language to root your observations in a shared experience.
- ▶ Eliminate barriers to participation by providing gloves, work boots, aprons, kneepads, and ponchos to students in garden classes and aprons and latex gloves to students in kitchen classes. For students anxious about keeping their hands, shoes, or clothes clean and dry, protective gear gives them the opportunity to participate without having to sacrifice this priority. Similarly, though we ask all students in the kitchen to wear aprons, if this acts as a deal breaker for any student, we never force them to.

- Celebrate and share the unique strengths of each of your students and support students to do the same. Provide opportunities for students to engage in collaborative work in a variety of ways (e.g. group discussion or brainstorm, or independent research with a group report out afterwards). Have students reflect on the contributions of each group member.
- Invest in building relationships with your students.

 Take the time to learn about your students' needs and experiences at home and at school. Individually and organizationally, explore the impact of culture, identity, power, and privilege on the schooling experience. Build your skills in multicultural conversation and develop your teaching practices to ensure access for all students, especially those historically underserved by the educational system.
- Access students' prior knowledge and experience. Soliciting students' existing perceptions of and interactions with your program's content can validate their experiences, teach you more about their lives, and establish common interests and knowledge. Providing opportunities for students to share their opinions and stories sends a message that your program cares to hear them, which is a powerful tool in building student buy-in and engagement.
- Build academic language through "Structured Student Talk Time." Display questions—along with frames for possible responses—on clipboards or whiteboards to allow all students to access and practice using academic language. Sentence frames can be easily customized to support a variety of conversations. ("One method of conserving water is ____. I believe it is effective because ____.")
- Collaborate with the people at your school who are already working to support the students facing the greatest challenges at school (e.g. equity team, counselors, English-language development teachers, or the special education department).

3. MODEL AND ENCOURAGE A BELIEF THAT INTELLIGENCE AND ABILITIES CAN GROW THROUGH EFFORT.

This "growth mind-set" contrasts with a "fixed mind-set" that frames qualities like intelligence and talent as fixed traits that cannot be changed and that alone guarantee (or hinder) success.

- ▶ Engage students in challenging material and provide them with frequent opportunities to see and reflect on their own growth by prompting self-reflection and sharing your own observations of their growth.
- Practice giving specific positive feedback related to what students can control (effort, strategies, attitude). E.g. "I really love the focus I'm seeing here" instead of "Wow! You did a great job! This must be so easy for you!" or "It's OK. Not everyone is a natural at this. Let's move on to something you're better at."
- Give critical feedback on areas students can control based on specific, timely, personal observations.
 E.g. "I noticed that during that group discussion you had a lot of speaking time and some students didn't speak at all. Did you notice that?" instead of "You talk too much and should step back so other people can get a chance to participate."
- ► Share stories of developing your own skills through persistence, including mistakes and "failed" attempts.

4. TEACH TO THE WHOLE CHILD AND A RANGE OF LEARNING STYLES.

- ► Engage the five senses.
- ▶ Make space for art and creativity.
- Use interactive and engaging visual aids and props, or leverage elements of the garden or kitchen environments as illustrative and exciting teaching tools. These visual aids spark curiosity, support content delivery, and provide students with an opportunity to analyze and interpret visual information.

- Try putting action before content. Diving into a hands-on exploration of the garden increases student buy-in, provides context for future discussions, and supports kinesthetic learners.
- ➤ Structure lessons with the "Learning Cycle"
 (Invitation -> Exploration -> Concept Invention
 -> Application -> Reflection) by starting with
 an invitation to engage in more open-ended
 exploration before introducing specific content or
 engaging in "meaning-making." Once students
 have explored and made meaning of their
 experiences, give them an opportunity to apply
 what they've learned. Finish off the lesson with a
 chance to reflect on their learning to help it stick.
- ▶ Reinforce key concepts using multiple media. A combination of dynamic visual aids, interesting written material, group discussions of varying sizes, and hands-on activities gives students several opportunities to grasp and engage with the topic at hand.
- If you work collaboratively with other teachers, explore how your different personalities, interests, skills, and perspectives can enrich the learning experiences you're able to offer your students.
- 5. ENCOURAGE STUDENTS TO TAKE OWNERSHIP OF THEIR LEARNING THROUGH INQUIRY, EXPLORATION, AND INDEPENDENCE.
- Solicit student choice. Use a process that allows students to choose their gardening or cooking job, or find other ways to incorporate student choice into lessons. Providing students the opportunity to choose establishes mutual trust and builds buyin, and can be a way for students to develop an awareness of their own and others' interests and needs. Make space for exploration and free time as ways to investigate questions that arose during class, and develop students' ability to remain present and direct their own learning experience in times of independence. Outside of free time, structure open-ended exploration time into your lessons to engage students' curiosity and build

- observational skills.
- ▶ Encourage beneficial risk: Allowing students to engage with adventurous play can increase students' confidence and willingness to try new things, while also exercising their ability to reliably assess risk in their social, emotional, cognitive, and physical surroundings. We encourage our students to step out of their comfort zone academically and socially, and we also give them opportunities to physically test their boundaries with wheelbarrow rides, climbing trees, and using real tools.
- ➤ Teach students to use real tools. This sends a message that the objects in our lives are not always disposable and should be treated with care, and that we trust and expect our students to act as stewards of these communal resources. It encourages students to take ownership of the space and inspires buy-in and focus.
- PROVIDE OPPORTUNITIES FOR STUDENTS TO COLLABORATE, LEAD, AND DEVELOP THEIR VOICES.
- ▶ Make thinking visible. When making decisions, share your thought process so that decisions are seen to be logical and reasoned. Sharing your process with students allows them to develop the higher-level thinking skills, such as awareness of self and others, that we as teachers constantly employ.
- ▶ Use discussion routines. Maximize "student talk time" during lessons while helping students to develop their academic vocabulary, evidence-based argumentation, and confidence in public speaking by using discussion protocols that students learn and become familiar with. Some of our favorites are:
 - ▶ Walk and Talk: Good for transitioning between spaces. Ask students to form two lines and discuss, as they walk, a topic with the person next to them. Upon arriving at the destination, give each pair the chance to share out.

- ► Think-Pair-Share: This routine gives students time to silently reflect on a question or prompt, then discuss with a partner, and finally share out to the larger group. This is a great way to involve students who are more timid and avoid raising their hands even if they know the answer.
- ▶ Whip-Around: Pose an open-ended question to students, give them a moment to consider their responses, and then whip around the circle, hearing briefly from each student.
- Lines of Communication: In this activity, students form two lines facing each other. Pose a question to the students, who have an opportunity to share their answers with the person standing across from them. Direct the students in one line to rotate in one direction, thus providing every student with a new conversation partner.
- ▶ **Poetic Devices:** We often use this protocol during tasting activities, asking students to share a simile or metaphor to describe the food they're eating. This activity can be good for any of the five senses.
- ▶ Engage in project-based learning. Whether it's building new tables for your greenhouse, designing an art installation, or developing a cooking lesson for younger students, project-based learning allows students to identify real-world problems and develop solutions. This type of learning cultivates a tremendous level of ownership by exciting and motivating students to leverage their agency as learners. Students practice communicating their ideas, designing solutions that represent the entire group's vision, and collaborating to develop the skills needed to complete their project.
- ► Encourage student leadership. If a student has already worked on a kitchen or garden skill, ask them to teach their peers. For routines that students complete often, like a tasting or opening circle, invite a student to give the instructions or facilitate the conversation. Encourage a wide range of students to practice their leadership skills and

- help students appreciate the many ways in which leadership can manifest beyond speaking in front of a group.
- Build social-emotional skills through teachable moments. As a teacher, recognize moments in which you can give feedback or guidance to help students develop their awareness of self and others, ability to make responsible decisions, and communication and relationship skills.
- 7. HELP STUDENTS BUILD A TOOLBOX FOR
 LEARNING BY PROVIDING THEM WITH
 OPPORTUNITIES TO DEVELOP KEY ACADEMIC,
 SCIENTIFIC, AND OBSERVATIONAL PRACTICES.

We see the kitchen and garden as dynamic laboratories in which students can develop the skills needed for lifelong critical thinking. We've noticed that providing students with opportunities to make careful observations, conduct investigations, and engage in critical thinking or discussions not only increases their academic skills; it also invites them to fall in love with food and the natural world.

- ▶ Use the "I notice, I wonder, it reminds me of" routine. This practice, from Berkeley's Lawrence Hall of Science BEETLES program, invites students to focus on an object from nature and share with a partner, in alternating succession, what they notice about the object. Then, when instructed, they switch to what they wonder, and finally what the object reminds them of. This routine helps students develop a mind-set of curiosity and provides language tools to engage with the natural world. It also encourages students to relate nature to their own lives and share more about themselves in the process.
- Build on lessons over multiple classes/grade levels. By referencing a previous experience in the kitchen or garden, students are able to make connections, deepen their understanding, and build on skills. We use our scope and sequence document to determine how to intentionally sequence

- experiences and content over students' three years at King Middle School.
- ▶ Use questions to further students' thinking and prioritize the thought process over the final answer. Spark a conversation with open-ended questions that encourage students to synthesize information, draw on their experiences, brainstorm solutions to a problem, and develop their own opinions. Questions encourage students to take ownership of their learning process, rather than looking to teachers as the source of knowledge. By modeling the use of questions in academic conversations and explorations, you can help students develop their own questioning skills.
- Ask students to make a prediction/hypothesis. By pausing to invite students to think about what might happen next, we allow students to practice an important scientific skill who happen as a scienti
 - important scientific skill while encouraging them to develop their own ideas (and become invested in the discussion at hand).
- ▶ Engage in arguments from evidence. After posing interesting questions and problems, help students practice sharing the reasoning behind their thoughts. You might collect and analyze data from the kitchen or garden, develop and use a model, or draw from a hands-on or lived experience. Encourage students to evaluate a variety of opinions using respectful conversation skills.
- 8. SPARK STUDENT INTEREST BY HIGHLIGHTING REAL-WORLD CONNECTIONS AND SHARING YOUR PASSION.
- Draw students in with a thought-provoking question or a well-chosen visual aid. Consider what your students will experience at the very beginning of a lesson (even before you speak). What are they seeing? Are they invited to explore or generate questions? How are you engaging their

- five senses? Creating a buzz from the start of class will build student buy-in.
- ▶ Using food as a hook. In general, students love to cook (and eat!). Consider ways you can intentionally link food to your lesson's content, so it is more than just an "add-on."
- Plan for how students will get to interact in any activity. Oftentimes the best learning builds community through fun and memorable shared experiences.
- Provide learning opportunities unique and authentic to your classroom space. If you are working outdoors, consider whether you could do

HELP STUDENTS SEE THAT BUILDING SKILLS IN EDIBLE EDUCATION WILL PREPARE THEM FOR A LIFETIME OF LEADERSHIP, HEALTH, COMMUNITY-BUILDING, AND LEARNING!

- the activity you are planning indoors. If so, keep brainstorming to find an activity that helps students learn content in a way that meets the garden's needs and leverages the special elements of our garden space. If you are working in a kitchen, make use of everything the space and tools have to offer.
- ▶ Share your own passions, interests, or personal anecdotes to engage students and inspire them to care about lesson content. After sharing about yourself, ask them to share something about themselves.
- ➤ Connect the activity to students' lives and highlight real-world connections. Help students realize the "So what?" by sharing how the content you're learning impacts their lives or shows up in the world at large; link your lessons to current events in your community; bring personal stories about farming, environmental stewardship, and working in the food system; help students see that building skills in edible education will prepare them for a lifetime of leadership, health, community-building, and learning!