Ingredients for Success

Specific factors support optimal development, including ability, task commitment, interest, passion, opportunity, motivation, creativity, and growth mindset (Subotnik et al., 2011). These ingredients help grow ability to unknown heights of potential:

1. **Task commitment**: The defining qualities of task commitment include perseverance, endurance, hard work, dedicated practice, self-confidence, and belief in self (Renzulli, 1986).

2. **Interest and passion**: These factors play a role in transforming ability into its greatest form. When students discover their interests and passions for learning, they can move toward high achievement in the “interest” domain.

3. **Perseverance**: Duckworth (2016) noted, “enthusiasm is common, endurance is rare” (p. 56). It is one thing for students to want to start a task or project, but following through to completion requires perseverance. Persevering is rooted in purpose and is maintained with motivation and a plan to work through obstacles.

4. **Opportunity**: Without opportunities to develop talent, it will not flourish. Without opportunities to work through challenges, task commitment and perseverance will not be strengthened. Access to opportunity matters. These opportunities may include access to high-level classes, resources, or even opportunities to step out of one’s comfort zone. When opportunities are presented, we must encourage students to take these opportunities.

5. **Motivation**: According to Deci and Ryan (2008), motivation, or self-determination to move forward or complete a task, stems from internal needs, including competence (“I think I can!”) and autonomy (“I have some control!”). If we want students to be motivated toward a task or skill, they must feel that they are capable of experiencing success and feel that they have some
control in their success. These two factors are critical in cultivating intrinsic motivation.

6. **Creativity:** Creativity allows for flexibility, originality, and fluidity of thinking (Torrance, 1974). We should prepare students to be creative producers in their area of interest (and eventually area of expertise). The hallmark of high achievement is creative production in a field, such as contributing new ideas that help solve problems in our world.

7. **Growth mindset:** What you believe about your intelligence can greatly affect how and to what extent you achieve. This is popularly known as *mindset*. Do students believe that their abilities have been and will remain stable, or do they believe that abilities are a starting point for further development? Dweck (2006) showed that growth mindset is the catalyst that helps other ingredients, including ability, grow. When students believe that they can get smarter (in a given domain), motivation to persevere will likely follow. When a student believes that mistakes are opportunities for learning, a student is much more likely to explore creativity. (See Part II for more discussion on growth mindset.)

This lesson provides an opportunity for introspective reflection, allowing students to consider how these factors are influential in supporting their continued success.

**Big Idea**

What factors are necessary to develop one’s potential?

**Objectives**

Students will:
- differentiate between potential and achievement,
- analyze the cause-effect relationships between the factors necessary for developing potential, and
- read “If” and analyze the poem’s meaning by relating it to the factors studied.

**Materials**

- Clear glass or plastic cup
- Baking soda (about 1–2 tablespoons)
- 1/3-cup of vinegar
- Bottle of water
- “If” by Rudyard Kipling (available online)
Lesson 1: Ingredients for Success

Introduction

Ask students: How do you define success? Can you be successful without being talented? Can you be talented without being successful? What is the difference between potential and achievement? Do they mean the same thing? In this lesson, students will continue to explore these questions.

Class Activities

1. Display a clear glass or plastic cup with about 1/3-cup of vinegar already in it. Explain that potential is like the cup: It is not completely full, but is capable of holding whatever is put there. Ability is like the clear liquid already in the cup. It is one of many ingredients that counts for “meeting one’s potential.” It looks like ability is not enough for someone to reach his or her potential. What else do you think is needed? List student responses on the board. As you work with the list, categorize them with student input. Lead students to articulate these factors: task commitment, interest/passion, perseverance, opportunities, motivation, and creativity. List them on the board.

2. Discuss each factor as you pour a bit of water, filling the cup only about 3/4 full. (Note. There are other factors essential for success. The ones in this lesson will be the focus of the unit, as they are explicitly discussed within talent development [Subotnik et al., 2011].)

3. Explain that there is one more important ingredient that actually “grows” these other factors, including ability. This last ingredient also interacts with the other factors to help one develop (or “reach”) his or her fullest potential. Ask: What do you think it is?

4. Pour about one tablespoon of baking soda into the cup. You may need to be close to a trashcan. The combined factors bubble over, reaching heights above defined potential. Explain: The baking soda represents one’s belief in his or her abilities (growth mindset). When you believe that abilities can grow, you are motivated to take on challenging experiences to grow further. You seek opportunities that will develop abilities and talents further; you see effort, hard work, or perseverance as essential to stretch your abilities further; and you are more likely to be intrinsically motivated to pursue passions and interests without fear of failure. You pursue high levels of achievement, not to prove your worth or value, but because of the drive to learn, improve, and challenge yourself to do something purposeful. As a result of cultivating a strong interest and passion, you are free to
create. Creativity in this sense means to produce something new for the world, to develop a new idea, to add to one’s field of study.

5. Ask students:
   - **Is the cup the best metaphor for potential? Why or why not? Was it big enough to hold all of the ingredients?** (Guide students to understand that a person’s true potential is unknown [see Dweck 2000, 2006]. We are not able to accurately measure a person’s future potential, only a person’s current ability. We really do not know how big the cup is. Even potential is expandable. Perhaps a better metaphor is an expandable cup.)
   - **Because potential is unknowable, how does this influence how we view the other ingredients?** (The more we add perseverance, the more we add motivation, the more we add passion, etc., the more likely we can achieve the potential. The good news is these factors are controllable.)
   - **What might be a better metaphor for potential?** (Consider a seed; we don’t know how big the tree can grow, but we can do everything we can to help it grow. The potential of the tree can be maximized when fertilizer is added.)
   - **According to Daniel Coyle, “Talent is not a possession, it’s a construction project” (as cited in Fogarty, Kerns, & Pete, 2018). Do you agree or disagree? Based on this lesson, how can you create your own metaphor for how talent is constructed?**

**Conclusion Connections**

Introduce the term **mindful excellence.** Ask: **What do these terms (mindful and excellence) mean in isolation? What might they mean together?** (Mindful simply means to be aware or conscious of something; excellence is the quality of being outstanding.) Tell students: **As we continue to learn about the qualities of success, we will refer to mindful excellence as being aware of how our thoughts, emotions, and beliefs about abilities affect how we pursue developing our own unknowable potential. Mindful excellence is about being aware of these factors and how they affect our behaviors, relationships, and pursuit of excellence.**
Curriculum Extension

Using the poem “If” by Rudyard Kipling, lead a Socratic Seminar or whole-class discussion.

- Which “If” statement is the most important? Why?
- What paradoxes do you notice in the poem? (A paradox is two seemingly different ideas existing at the same time, such as triumph and disaster.)
- Which ingredients essential for achieving potential are illuminated in the poem? (Remind students of the factors: perseverance, passion, motivation, and growth mindset.)
- How is the idea of mindful excellence evident in the poem?

Then, have students write their own “If” poem with at least four “If” statements based on what they know about the ingredients for success, ending the poem with “then you will reach ever greater heights.”

Personal Reflection

Have students respond to the following: Which “ingredient for success” is easiest for you to apply? How has this lesson made you think about these “ingredients” differently? By applying mindful excellence, what are your attitudes about some of these factors, and how might these attitudes affect the other ingredients?

Check for Understanding

Display the words opportunity, perseverance, motivation, passion, growth mindset, and creativity. Ask students to write these words on a sheet of paper and draw arrows between them with explanations to show how they relate to one another.