



Essential Classroom Skills for ACT Success



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Time Frame 50-60 minutes

Essential Question(s)

Why are college and career readiness skills important?

Summary

College and career readiness is a predictor of a student's success in postsecondary endeavors. Critical thinking and analysis are two powerful skills that support college and career readiness. In this session, participants will be placed in the role of their students and be asked to explore and apply some instructional strategies that support critical thinking and analysis using sample questions and passages from the four subsections of the ACT exam. Participants will also make connections regarding how these strategies align with components of authentic teaching practices. Participants will then plan on how to implement one or more instructional strategies in their classroom instruction.

Learning Goals

- Develop an understanding of authentic strategies that support the skills needed for success in college or career setting.
- Discuss and commit to an authentic strategy in your own subject area that supports college and career readiness skills.

Attachments

- [ACT Standards for College and Career Readiness—Essential Classroom Skills for ACT Success.docx](#)
- [ACT Standards for College and Career Readiness—Essential Classroom Skills for ACT Success.pdf](#)
- [Authentic Learning and Teaching Chart—Essential Classroom Skills for ACT Success.pdf](#)
- [K20 Resources—Essential Classroom Skills for ACT Success.docx](#)
- [K20 Resources—Essential Classroom Skills for ACT Success.pdf](#)
- [Presentation Slides—Essential Classroom Skills for ACT Success.pptx](#)
- [Strategy Cards—Essential Classroom Skills for ACT Success.pdf](#)
- [Using Instructional Strategies—Essential Classroom Skills for ACT Success.docx](#)
- [Using Instructional Strategies—Essential Classroom Skills for ACT Success.pdf](#)

Materials

- Session Slides (attached)
- K20 Resources handout (attached, 1 per participant)
- Authentic Learning and Teaching Chart (attached, 1 per participant)
- Using Instructional Strategies handout (attached, 1 per participant)
- Strategy Cards (attached and linked)
 - [Examples and Non-Examples](#)
 - [Claim, Evidence, Reasoning \(CER\)](#)
 - [WIS-WIM](#)
 - [Try It, Talk It, Color It, Check It](#)
 - [Cubes Squared](#)
- ACT Standards for College and Career Readiness handout (attached, 1 per participant)
- ACT practice questions for each subject (optional, linked in narrative below)
- Poster paper
- Markers
- Red, yellow, and green plastic cups or cards (optional, 1 set per group)

5 minutes

Engage

Facilitator's Note: Session Preparation

Before participants enter the room, place the poster paper and markers on each table for the Chalk Talk Activity.

Display **slide 2** from the attached **Session Slides** as participants enter the room. Ask participants to sit in groups according to their discipline. Inform participants they do not need to do anything with the poster on their table until instructed.

To begin the session, display **slide 3**. Introduce the session and the presenters.

Move to **slides 4–5** to share the session's essential question and learning objectives.

Display **slide 6** and introduce the [Chalk Talk](#) instructional strategy to participants. Inform participants that they will be using the poster and markers to answer a question. They can respond in any way with writing or drawing, but they should each answer the question independently. Emphasize to participants that they will answer the question on the slide without speaking to one another. Read the question, "In your area/discipline, what skills do your students need to prepare them for college and career readiness exams, such as the ACT/SAT?"

Provide participants with time to answer the question using **slide 7** that includes a timer. Encourage them to think about how they might respond to other participants' answers as they wait for everyone to complete their poster.

After an appropriate length of time, display **slide 8** and bring the group back together to answer the follow-up questions. "What did you notice about what your group wrote?" and "What are you wondering now?"

15 minutes

Explore

Display **slide 9** and pass out the following instructional strategy cards to each of the different departments.

- English: [Examples and Non-Examples](#)
- Social Studies: [Claim, Evidence, Reasoning \(CER\)](#)
- Science: [WIS-WIM](#)
- Math: [Try It, Talk It, Color It, Check It](#)
- Extracurricular: [Cubes Squared](#)

Have each group read through the strategy and discuss the skills a student would gain from using this strategy.

Facilitator's Note: ACT Practice Questions Preparation

Choose three to five questions from each subsection of an ACT practice. The website [CrackAB.com](https://www.crackab.com) has sample practice questions that you could use. Create a handout for each subsection and pass that out to participants. The following are links to the practice questions for each subsection:

- English: <https://www.crackab.com/act/english/>
- Social Studies (Reading): <https://www.crackab.com/act/reading/>
- Science: <https://www.crackab.com/act/science/>
- Math: <https://www.crackab.com/act/math/>

For extracurricular, create a combination of two questions from each of the above subjects for a total of eight questions.

After an appropriate amount of time, display **slide 10** and inform participants that they will be working in groups to applying the skill taught from their instructional strategy to an ACT practice passage. Pass out the ACT practice questions that you created or share the links that correspond to each section of the ACT:

- English
- Social Studies
- Science
- Math
- Extracurricular (two questions from each section)

Provide time for each group to explain how the skills discussed in their instructional strategy helps to complete the sample ACT questions. Once each group has finished answering the questions, check the answers as a small group. Display **slide 11** to show an example using the science instructional strategy and the skill that it strengthens. Give participants about 10 minutes to complete this activity.

Display **slide 12** and have groups use [I Notice, I Wonder](#) to discuss the use of strategy when applying it to the sample ACT questions.

When participants have finished their I Notice, I Wonder discussion or time has run out, pass out the attached **Resources** handout, which lists other instructional strategies that can be used in each discipline. Explain to participants that this is provided so that they have multiple strategies to use in their classrooms.

5 minutes

Explain

Display **slide 13** and ask participants to reflect on the strategy that they used and to think critically about the ACT passage/sample questions. Pass out the attached **Authentic Learning and Teaching Chart** and instruct participants to independently read and circle the skills fostered during that activity within their group. Give participants time to complete the activity.

After you see that participants have completed the activity, “click” the slide to transition in the question. Ask participants, “How does making test prep authentic enhance a student’s college and career readiness skills?” Discuss this question as a group.

15 minutes

Extend

Display **slide 14** and instruct participants to consider the instructional strategy they just used. Ask them to think about how they would incorporate that instructional strategy into that lesson so that they authentically support critical thinking and analysis. Encourage participants to work at their table with teachers who work in the same department. As they begin their discussion, pass out the attached **Using Instructional Strategies** handout. Ask participants to record what they discussed in the first row of the handout.

Display **slide 15** and introduce participants to a modified version of the [3 Stray, 1 Stay](#) instructional strategy. Inform participants that some of them will stay at their table while the others move to different tables throughout the room. Number participants 1–5 (one number for each table you have in the room). Place all the 1's at a table, all the 2's together, and so forth. Once at their table, inform them that they are going to share the strategy on their **Using Instructional Strategies** handout with members of the other departments. When another member of their group is sharing, they should write down the strategy and information on the next rows of their handout.

After 10 minutes, have a couple of volunteers share out how they plan to integrate the strategy into their lesson.

5 minutes

Evaluate

Display **slide 16** and introduce the [Point of Most Significance \(POMS\)](#) instructional strategy to the group. Ask participants to think about everything they discussed in this session. Ask them, “What was the point of most significance?” Discuss as a whole group.

Research Rationale

Instructional strategies are techniques that teachers use to help students become independent, strategic learners. When used effectively, instructional strategies can increase a student's critical thinking, engagement in their learning, and shape their identity through changing their mindset and becoming an active-learning student (Silver et al., 2019; Rittle-Johnson et al., 2021; Monahan et al., 2018).

High school teachers who incorporate cognitive learning strategies will find a positive improvement in their students' learning, especially "retaining, accessing, and using their knowledge in various contexts, from formal academic environments to real-world situations" (Swiderski, 2011). Instructional strategies also facilitate student-centered learning where students are able to actively take ownership in the learning process. A student-centered environment enables students to reflect on their learning and evaluate their own and other's solutions or ideas, which helps students learn and builds confidence (Rittle-Johnson et al., 2021).

According to some scholars, teachers play the critical role in successful implementation of authentic classroom practices (Boaler, 2016; Darling-Hammond, 2000; Denis & O'Hair, 2010; Sanders & Rivers, 1996). Ultimately, when teachers implement instructional strategies, they can create a positive student-centered classroom.

Resources

- ACT. (2017). ACT college and career readiness standards. ACT. <https://www.act.org/content/act/en/college-and-career-readiness/standards.html>
- Boaler, J. (2016). Mathematical mindsets: Unleashing students' potential through creative mathematics, inspiring messages and innovative teaching. John Wiley & Sons.
- Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, 8(1), 1-49.
- Dennis, J. & O'Hair, M. J. (2010). Overcoming obstacles in using authentic instruction: A comparative case study of high school math & science teachers. *American Secondary Education*, 38(2), 4-22.
- K20 Center. (n.d.). 3 stray, 1 stay. Strategies. <https://learn.k20center.ou.edu/strategy/85>
- K20 Center. (n.d.). Chalk talk. Strategies. <https://learn.k20center.ou.edu/strategy/197>
- K20 Center. (n.d.). Claim, evidence, reasoning (CER). Strategies. <https://learn.k20center.ou.edu/strategy/156>
- K20 Center. (n.d.). Cubes Squared. Strategies. <https://learn.k20center.ou.edu/strategy/70>
- K20 Center. (n.d.). Examples and non-examples. Strategies. <https://learn.k20center.ou.edu/strategy/163>
- K20 Center. (n.d.). I notice, I wonder. Strategies. <https://learn.k20center.ou.edu/strategy/180>
- K20 Center. (n.d.). Point of most significance (POMS). Strategies. <https://learn.k20center.ou.edu/strategy/101>
- K20 Center. (n.d.). Try it, talk it, color It, check it. Strategies. <https://learn.k20center.ou.edu/strategy/2329>
- K20 Center. (n.d.). WIS-WIM. Strategies. <https://learn.k20center.ou.edu/strategy/1201>
- Monahan, J., Lombardi, A., & Madaus, J. (2018). Promoting college and career readiness: Practical strategies for the classroom. *Teaching Exceptional Children*, 51(2), 144-154.
- Rittle-Johnson, B., Farran, D. C., & Durkin, K. L. (2021). Marginalized students' perspectives on instructional strategies in middle-school mathematics classrooms. *Journal of Experimental Education*, 89(4), 569-586. <https://doi-org.ezproxy.lib.ou.edu/10.1080/00220973.2020.1728513>
- Sanders, W. L., & Rivers, J. C. (1996). Cumulative and residual effects of teachers on future student academic achievement. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.
- Silver, R. E., Kogut, G., & Huynh, T. C. D. (2019). Learning "new" instructional strategies: Pedagogical innovation, teacher professional development, understanding and concerns. *Journal of Teacher Education*, 70(5), 552-566. <https://repository.nie.edu.sg/bitstream/10497/21688/1/JTE-70-5-552.pdf>
- Swiderski, S. M. (2011). Transforming principles into practice: Using cognitive active learning strategies in the high school classroom. *The Clearing House*, 84(6), 239-243. <http://www.jstor.org/stable/41304383>
- White, D., & Braddy, Alisa H. (2017). Ready-to-go instructional strategies that build collaboration, communication, & critical thinking. Corwin.