


# Power Tools for Comprehension: Strategically Supporting Authentic Learning

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**Time Frame** 50-75 minutes

## Essential Question(s)

- What is comprehension?
- What comprehension skills support college and career readiness? How and why?

## Summary

In this session, participants will explore authentic strategies that promote comprehension across content areas. They will then make connections to these strategies and opportunities in their own classrooms to support college and career readiness.

## Learning Goals

- Identify higher-order comprehension skills that support college and career readiness.
- Develop an understanding of authentic strategies that build a toolbox for comprehension in the classroom.
- Discuss and commit to an authentic comprehension strategy in the participants' own subject area that supports content-focused comprehension.

## Attachments

- Agenda—Power Tools for Comprehension.docx
- Alternative Role Cards—Power Tools for Comprehension.pdf
- Authentic Learning and Teaching—Power Tools for Comprehension.pdf
- Comprehension Mind Map—Power Tools for Comprehension.docx
- Comprehension Mind Map—Power Tools for Comprehension.pdf
- Cube Template for Activity on Slide 4—Power Tools for Comprehension.pdf
- Cube Template—Power Tools for Comprehension.pdf
- ELA Reading - Our Deportment—Power Tools for Comprehension.docx
- ELA Reading - Our Deportment—Power Tools for Comprehension.pdf
- Instructional Strategy Note Sheet—Power Tools for Comprehension.docx
- Instructional Strategy Note Sheet—Power Tools for Comprehension.pdf
- MAX Cubing - Chapter 13—Power Tools for Comprehension.pdf
- Math Reading - Wheelchair Project—Power Tools for Comprehension.docx
- Math Reading - Wheelchair Project—Power Tools for Comprehension.pdf
- Professional Development Slides—Power Tools for Comprehension.pptx
- Reciprocal Teaching Role Cards—Power Tools for Comprehension.pdf
- Science Reading - Cystic Fibrosis—Power Tools for Comprehension.docx
- Science Reading - Cystic Fibrosis—Power Tools for Comprehension.pdf
- Social Studies Reading - The Nuremberg Trials—Power Tools for Comprehension.pdf

## Materials

- Comprehension Slides
- Power Tools for Comprehension Agenda
- Instructional Strategy Note Sheet
- Constructed Cube Template (or cubes or dice with sides labeled as "Describe," "Associate," "Compare," "Analyze," "Apply," and "Argue for or Against")
- Comprehension Mind Map template
- Science Reading, "Cystic Fibrosis" from the Genetic Science Learning Center
- Social Studies Reading, "The Nuremberg Trials" from the United States Holocaust Memorial Museum
- ELA Reading, "Our Deportment, or the Manners, Conduct, and Dress of Refined Society" by John H. Young
- Math Reading, "ADA Accessibility" Letter
- Reciprocal Teaching Role Cards from Power Tools for Adolescent Literacy: Empowering Strategic Learning
- Alternative Role Cards from Power Tools for Adolescent Literacy: Empowering Strategic Learning
- Chapter 13: Cubing from MAX Teaching with Reading and Writing: Classroom Activities to Help Students Learn Subject Matter While Acquiring New Skills (additional resource/reference)

# Engage

### Presenter's Note: Preparation

Have handouts and materials available on the table for participants. Each participant should receive copies of the attached **Power Tools for Comprehension Agenda**, **Instructional Strategy Note Sheet**, **Comprehension Mind Map**, **Authentic Learning and Teaching Rubric**, and **Chapter 13: Cubing Reading**.

Tables should be organized into small groups. Before the presentation, make sure to organize the readings by content area and organize the **Comprehension Role Cards** by subject area. (ELA and Social Studies use the Reciprocal Teaching Role Cards, while Math and Science use the Alternative Role Cards.) More details are provided in the Explore section below and introduced on slide 11 of the Comprehension Slides.

Welcome participants and briefly introduce yourself and the professional development session using **slide 2** of the attached **Comprehension Slides**. Identify the session agenda and highlight the "LEARN 5E Instructional Strategy Note Sheet" as a place to take notes on each strategy modeled during the session.

Change to **slide 3** and introduce the Critical Thinking Cube strategy. Ask participants, "Is anyone familiar with Dr. Mark Forget's (pronounced *forjáy)* MAX teaching strategies, specifically Cubing?" If yes, "How have you used it?" *(NOTE: Limit responses.)*

Change to **slide 4**. For just a minute and without talking to peers, have participants preview the questions on the screen or on their "Instructional Strategy Note Sheet." Then, allow 3 minutes (or more for a longer session) for participants to divide into small groups, with no more than six people per group.

Provide each small group with a Critical Thinking Cube. (Refer to the attached "Cube Template for Activity on Slide 4" for a cube you can use, or you can construct your own.)

Have individuals within each group take turns rolling the cube and answering the corresponding question on the cube's face-up side. *(NOTE: As an alternative to using labeled cubes, number the questions and use a die.)*

### Suggestion for Critical Thinking Cube Activity

Encourage participants to get up and move around the room to form a group instead of staying seated, as groups of six might be a larger number than the number of people seated at each table. Moving about also supports what brain research says about kinesthetic activities and learning (Ford, K., 2016; Jensen, E., 2000 & 2005).

After small groups have had at least 3 minutes to answer the questions, instruct all the participants who are speaking to quickly wrap up their last thought or sentence and return to their seats if they moved around the room.

Then, using **slides 5–8**, allow participants to share one or two answers from each question with the whole group. Take notes, or ask one of the participants to take notes and record the answers from the other participants. *(NOTE: This is not a time for discussion or debate. It is strictly a time to hear what others have said and recognize that some group discussions might have been similar or different.)*

**Presenter's Note: Slide 9**

**Slide 9** should be used only if you have a longer session and have time to allow participants to briefly share out what was discussed within their small groups. DO NOT use slide 9 if there is not adequate time. Remind participants this is not a debate, just a share-out from their small groups. It is okay to disagree, but don't let it go too far.

Change to **slide 10** and summarize the session objectives: *"Today, we will build our teacher toolbox by engaging in authentic comprehension strategies that can be used across content areas and identifying comprehension skills that support college and career readiness."*

# Explore

Change to **slide 11** and click through the slide to provide directions before the activity begins. Have participants move and organize into groups of four by content area (ELA, science, math, and social studies).

1. Participants move and organize into groups of four by content area (ELA, science, math, social studies).
2. All group members select a Role Card and facilitate their tasks when their Role Cards are identified on the upcoming slides.
3. When it is a group's time to read, we suggest using the Why-Lighting comprehension strategy.

**Presenter's Note: Role Cards**

Be sure to provide the appropriate reading and appropriate role cards for each content area. ELA and social studies receive the Reciprocal Teaching Role Cards (purple cards on the slides) and science and math receive the Alternative Role Cards (pink cards on the slides).

After all activity materials (content readings and role cards) have been passed out and groups understand the activity, change to **slide 12** to begin the activity. Click through the slide, drawing careful attention to the differences between the roles of the Predictor and the Connector. Predictors should not allow their group members to read until predictions have been made, whereas Connectors' groups should read first and then go through the tasks on their cards.

Use **slides 12–15** to manage the order, timing, and instruction of each role card throughout the activity.

After the activity time has ended, bring all participants back together as a whole group. Change to **slide 16** and share that each of these readings was selected from the following published lessons on the K20 Center LEARN site: **ELA,** "Freedom and Restraint;" **Social Studies,** "Reporting on the Nuremberg Trials;" **Math,** "ADA Accessibility;" and **Science,** "Cystic Fibrosis: A DNA Case Study."

If participants would like to learn more about the lessons or aligned standards, they can view the full lessons on the LEARN site. The Role Cards are not used within these lessons, but they could possibly be an added feature to build students' comprehension skills.

# Explain

Change to **slide 17**. Ask participants to silently reflect on the Role Card activity they just completed. After allowing a minute for reflection, identify the "Authentic Learning and Teaching Rubric" and instruct participants to independently circle or underline the skills fostered during that activity within their group.

**Presenter's Note: Skills**

If participants think all skills were fostered, ask them to look for one or two skills that were the most noticeable or most important for comprehension within their subject areas.

Change to **slide 18** and identify the "Mind Map Template" on the table. *"We would like to give you an opportunity to explain the connections between the comprehension activity and strategies that support college and career readiness. Remember the connections you already mentioned during the Critical Thinking Cube activity."*

Have participants use the provided template and the "Authenticity Learning and Teaching Rubric" to create a Mind Map that directly links comprehension skills to college or career readiness.

Participants should identify comprehension skills, link each skill to either college or career, and then name a role card that helps support the development of each skill. Suggest that participants begin with the skills they already identified on the "Authentic Learning and Teaching Rubric."

**Slide 18 Example**

"For example, a comprehension skill that supports college readiness is 'Sharing of Ideas.' This came directly from the 'Authenticity Learning and Teaching Rubric.' Two cards that help develop this skill are QuickDraw and Clarifier."

After providing a few minutes for participants to create Mind Maps, have a few share out the connections they made between comprehension skills and college- and career-readiness skills.

**Possible Responses**

- "Generalizing with higher order thinking was fostered by the VIP card, and this is an important skill for college."
- "In a career, sharing of ideas is important and the Connector card allowed this to be practiced within the group."
- "College students should be able to develop complex understanding using reasoning and support, and this was fostered through the role of the Predictor."
- "Making connections to actual situations is important for skills in a career, and the Summarizer card allows students to practice this skill."

# Extend

**Presenter's Note: Slide 19**

This next slide is short but important because it provides participants with the opportunity for protected time to critically think and select how comprehension will be addressed within their classroom and with their students. DO NOT skip or rush this slide. Items to consider with participants during this slide include discussion or articulation of next steps, as well as collaboration and planning for use.

Change to **slide 19** and instruct participants to select at least one concept that necessitates comprehension. Then, ask them to commit to a comprehension strategy they will use to authentically support college- and career-readiness skills.

Ask participants to record the selected concept and comprehension strategy on the "Instructional Strategy Note Sheet." This selection also will be shared at the Reflection Session to be held at a later date after participants have had time to implement their comprehension strategies.

# Evaluate

Depending on the evaluation tool available, change to **slide 20** or **slide 21**.

**Presenter's Note: Slide 20**

TREK evaluations will be used in place of the evaluation activity when available. If you don't have access to a TREK evaluation, continue with the activity on slides 21–22 that is detailed below.

If using **slides 21–22**, have participants divide into small groups again (about six in each group). Each group should roll the Critical Thinking Cube again and evaluate their own understanding regarding Comprehension Role Cards by answering the following questions (change to slide 22):

- **Describe:** How can role cards be used as an authentic strategy to build comprehension?
- **Compare:** How are these role cards similar to or different from strategies you have used before to teach comprehension?
- **Associate:** What skills are developed?
- **Analyze:** How do role cards support comprehension skill development that are necessary for college and career (life-long learning)?
- **Apply:** How will you use role cards in your classroom? What steps are necessary for implementation to be successful?
- **Argue:** Argue for or against the use of role cards to teach comprehension across content areas. How do you think students would engage in readings if the roles cards were used instead of traditional strategies?

Wrap up the session by having participants return to their seats. Ask a few to share out some of their answers from any of the six questions explored.

# Follow-up Activities

**Presenter's Note: Follow-up Session**

Anywhere from a week to a month after the session, host a scheduled informal reflection with small groups of participants who attended the formal professional development session. (This can be one session with all participants or multiple sessions with different participants each time.)

Because they are to be short and informal, these follow-up sessions can be held during a PLC or teacher-planning period. Use **slides 23–24** and the attached "SCORE Reflection Note Sheet" for the follow-up sessions.

Begin the follow-up session with slide 23 displayed. When the session begins, display slide 24 and ask participants to use the "SCORE Reflection Note Sheet" to jot down notes from their experience using one of the strategies in a lesson. The questions on slide 24 will help guide discussion. Ask each question and allow all attendees a moment to share about their strategies and experiences.

Encourage attendees to use another strategy and continue to follow up with each participant if you are able, which will help create a safe environment of accountability.

# Research Rationale

## Resources


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- Young, J. H. (1882). Chapter XVIII. Our deportment, or the manners, conduct and dress of the most refined society: Including forms for letters, invitations, etc., etc. Also, valuable suggestions on home culture and training. FB Dickerson & Company. pp. 208, 212-215.