



"IDK" Now Means Increasing Domain Knowledge



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Time Frame 60 - 90 minutes

Essential Question(s)

- How does Authenticity align with Marzano's design questions 2 and 3?
- How can authentic instructional strategies deepen new content knowledge for students?

Summary

This professional development session is designed to help teachers employ effective instructional strategies to help students interact with and deepen new content knowledge. These strategies provide in-class opportunities where students can reflect on critical content through cognitively complex tasks. In the session, teachers will explore these strategies in detail and link them to the Authenticity framework and the work of Marzano. Marzano's Domain 1 design questions 2 and 3 are key for teachers to keep in mind when addressing content during a lesson. This session's presenter must be knowledgeable in Marzano's Teacher and Leader Effectiveness and the Authenticity framework.

Learning Goals

- Teachers will be able to identify effective strategies to use with students when interacting with new content knowledge.
- Teachers will be able to identify how Authenticity aligns with Marzano's design questions 2 and 3.

Attachments

- [Authentic-Learning-and-Teaching-Chart-IDK.pdf](#)
- [Instructional-Strategy-Note-Sheet-IDK.docx](#)
- [Instructional-Strategy-Note-Sheet-IDK.pdf](#)
- [Inverted-Pyramid-IDK.docx](#)
- [Inverted-Pyramid-IDK.pdf](#)
- [Marzano-Design-Questions-2-and-3-IDK.docx](#)
- [Marzano-Design-Questions-2-and-3-IDK.pdf](#)
- [Paired-Texts-H-Chart-IDK.docx](#)
- [Paired-Texts-H-Chart-IDK.pdf](#)
- [Presenter-Slides-IDK.pptx](#)
- [Triangle-Square-Circle-IDK.docx](#)
- [Triangle-Square-Circle-IDK.pdf](#)

Materials

- Presentation Slides (attached)
- Sticky notes (one pad per table)
- Pens
- Instructional Strategy Note Sheet (attached, one per participant)
- Paired Texts H-Chart (attached, one per participant)
- Authentic Learning and Teaching Chart (attached, one per participant)
- Marzano Design Questions 2 and 3 handout (attached, one per participant)
- Inverted Pyramid template (attached, one per participant)
- Triangle-Square-Circle handout (attached, one per participant)

Engage

Facilitator's Note: Preparing for the Session

Have handouts and additional resources available on participants' tables as they arrive. Each table should get a pad of sticky notes, and each participant should receive a copy of each of the six handouts. This session requires participants to work in groups and move around the room. As the facilitator, make sure space is available for appropriate movement and group work.

This professional development session uses Marzano's framework that was published in 2014. If this is not the same framework your site uses, make the appropriate adjustments to match your framework of choice.

Display **slide 2** and play music as participants enter the room. Instruct participants to fill out a sticky note with a celebrity or character that they can impersonate or would like to see impersonated. As the session begins, pick up the sticky notes from the tables and get a pulse for which content areas are represented by participants in the session.

Display **slide 3**. Introduce yourself. Briefly mention the agenda and the **Instructional Strategy Note Sheet**. Inform participants that new instructional strategies will be introduced to them throughout the session. These strategies are tools to support higher-order thinking in authentic ways. Encourage participants to use their note sheet to jot down ideas for how they would personalize the strategies for their specific classes. Within the presentation, time is allotted to allow participants to reflect on the strategies.

Display **slide 4**. Introduce the [Fold the Line](#) instructional strategy. Ask participants to create a straight line in order by birth date (month and day only, no need to consider the year). January birthdays should be on the far left and December on the far right as you look at the line. Before they begin forming the line, explain to participants the caveat that they may not talk or mouth any words silently. They may, however, hold up fingers to help them distinguish where they might stand. After everyone is lined up, start on the left and ask each person to say their birth date aloud. This will confirm whether they were able to order themselves correctly. If any participants are out of place have them "fix" the order as you move down the line.

Ask, "What made this task difficult?" and allow participants the opportunity to share out. Then, explain that the next task is going to be similar, but this time they will be able to talk to one another to see where they belong in the line.

Click to bring up the next few lines of text on the slide. Say, "Now, on a scale from 1-5, order yourselves using your knowledge about Marzano's Design Questions two and three. Think about how knowledgeable you are when helping students interact, practice, and deepen new knowledge." A participant who identifies as a 1 has minimal experience helping students interact, practice, and deepen new knowledge. Maybe they are so new to teaching that they don't feel like they have enough tools yet to do this at all. A participant who identifies as a 5 feels extremely confident in helping students interact, practice, and deepen new knowledge. In fact, they could help novice teachers with strategies and support.

Once participants have thought for a moment, allow them to move to their new place in the line, with 1's on the left and 5's on the right. As they organize themselves, encourage participants to discuss the topic with the participants standing near them in order to gather support for their stance.

Once everyone is lined up, go ahead and Fold the Line. Have the participant at one end of the line come over to the other end. Participants will follow the leader so that when they stop, each is across from a partner with a different number than their own. For example, the participant standing at the very end of the line as a 5 will walk down to the opposite end of the line and face the person at the beginning of the line as a 1. (Participants who chose 3 might be paired with another 3, which is fine in this scenario.)

Once participants have identified their partners, ask them to find a seat together. Partners will work together for the exploration activity.

Allow a moment for participants to write on their Instructional Strategy Notes Sheet how they could use the Fold the Line strategy in their own classrooms. Provide an opportunity for a few people to share out about what they wrote down.

Possible Responses

"Fold the Line could allow students to self-assess, evaluate, or reflect where they fall in the line based on their prior knowledge (think about how knowledgeable or comfortable they are with the content)."

"This strategy organizes students so that one with more expert experience and knowledge is validated and allowed the opportunity to share with another who is less familiar with the content."

Display **slide 5** and briefly highlight the objectives for the session. Doing so will provide a roadmap of where you will go together during the session and will let participants know what to expect.

Explore

Display **slide 6** and introduce the [Paired Texts H-Chart](#) strategy. Explain that this is a great strategy to help students analyze and synthesize multiple texts. It allows them to move beyond comparison and contrast to construct their own understanding of the source material.

Display **slide 7**. Explain that the H-Chart is a graphic organizer that helps students analyze and gather information from two separate forms of texts and synthesize the two texts' content into one brief statement.

First, address how participants would fill in the right "leg" of the chart using the text provided. Click the slide and explain, "For example, if I gave you a text about the musical group Pentatonix and Todrick Hall, you might write that they are an acapella group, current performers, cover artists, and 21st Century artists." Then address how they would fill in the left "leg" of the chart using the text provided. Click the slide and explain, "Using the movie *The Wizard of Oz*, you might write that it is a classic musical with Dorothy, the Cowardly Lion, the Scarecrow, and the Tin Man. It was made in 1939." Conclude by telling participants that after filling in both "legs of the H-Chart they should synthesize the two texts (groups of information) into one or two sentences.

Presenter's Note: Synthesis

The synthesized portion should be brief but still express key ideas to correctly combine the information from the two texts. A good example to present to participants would be the idea of giving an "Elevator Speech." Matt Parr and Big M Fishery, students at the University of California describe an elevator speech as a clear, brief message or "commercial" about you or a specific topic. It communicates your ideas shortly and concisely. It's typically about 30 seconds, the average time it takes people to ride an elevator from the bottom to the top of a building.

Show the [Wizard of Ahhhs video clip](#) linked on slide 7. For purposes of staying on your time schedule for the session, consider showing only part (approximately 3:00) of the clip. After the clip plays, click to show the synthesized statement on the slide that describes The Wizard of Ahhhs as an updated 21st Century version of *The Wizard of Oz* with a current blend of songs to tell the same storyline as the original.

Display **slide 8** and direct participants to the **Paired Text H-Chart** template. Instruct participants to work with their partners to fill in the "legs" of the Paired Text H-Chart using the two texts, **Authentic Learning and Teaching Chart** and **Marzano Design Questions 2 and 3**. The template provides a helpful guide for partners to identify five words phrases or sentences that stick out to them as important or relevant. After they have filled in the two "legs," participants will create an elevator speech to merge or synthesize the two frameworks. When they begin to synthesize, you may want to pose the question, "What do these two frameworks look like when working together?"

Presenter's Note: Marzano and Authenticity

While the two frameworks, Marzano and Authenticity, are similar, one of the major differences is that Marzano evaluates what the teacher should be doing and Authenticity evaluates and supports what the student should be doing during a lesson. Authenticity is all about the students' experience and how they are interacting with content and learning.

Explain

After groups have had ample time to synthesize the information from the two texts, display **slide 9**. Introduce the [Inverted Pyramid](#) instructional strategy and tell participants that this strategy helps support analyzed discussions that can build confidence and expand perspectives. It also affords groups the opportunity to discuss and eliminate non-essential information. The pyramid is upside down because the task goal is to downsize the amount of information to one main idea, concept, or statement.

Explain to participants that now that they have gained knowledge about Authenticity and the two design questions, they will use the **Inverted Pyramid** template to help deepen and reinforce that knowledge and understanding. They are going to help each other eliminate less important information from each of the crossbars of their H-Charts.

Explain that each pair will go and find another pair to form a group of four. Within this group, participants will share their own synthesized statements. Then, the group will flesh out what is significant and what is less important, eliminating the non-essential information. When the group has reached an agreement about what best represents the two frameworks, it will go and find another group of four and begin the same process again. This process will continue until the whole group is divided in half.

Allow a representative from each group to share out their agreed-upon statement representing the two frameworks. This statement should still be short and concise, like an elevator speech.

Possible Response

"Students are actively engaged in small groups to explore new knowledge while activating prior knowledge, which makes connections to the world outside the classroom."

Presenter's Note: Refining

This repetition of ideas allows students to reflect and dig into what is essential and what needs to be removed. It also allows them to expand their perspective to include other perspectives that might have included more detailed and key information. The more students discuss, the more they are vetting their own thoughts. The repeated defense of their ideas builds confidence and they are also encouraged to learn from others and share one another's thoughts. This type of expansion of partners can be done until the whole class has formed one large group, two groups, or three groups. It can be altered to fit any size of the whole group.

Display **slide 10** and pose the following question:

How can graphic organizers like these two we just used help engage students when working with new content knowledge?

Allow participants to share out a few of their responses.

Possible Responses

"Graphic organizers allow students to process new information in pieces and then make connections to the big idea or concept." "These two graphic organizers help students work independently and in groups to organize thoughts and ideas about new topics. It also helps them make connections to prior knowledge."

Ask participants to take a few minutes to add to their Instructional Strategy Note Sheet. They should explain how they will use this strategy in their own classrooms and name the authentic components.

Extend

Display **slide 11** and introduce the [Triangle-Square-Circle](#) instructional strategy. Direct participants to the **Triangle, Square, Circle** handout and ask them to reflect on and respond to the first prompt: "Pick one strategy from today and reflect on three points how it aligns with authenticity and Marzano's Design Questions 2 and 3." Allow a minute for participants to record their responses, and then have a few participants share what they wrote.

Possible Responses

"The Inverted Pyramid permits students to work in groups and ask questions about what information is most critical. It helps students organize their thoughts when interacting with new knowledge."

"Fold the Line is student-centered and allows for students to reflect on learning or knowledge by evaluating where they fall on a spectrum of how well they know something."

"Providing the Paired Text H-Chart allows an opportunity for students to examine similarities and differences between two things. Then it allows the opportunity to deepen a student's knowledge by synthesizing the two texts."

Evaluate

Presenter's Note: TREK Evaluations

TREK evaluations can be used in place of the evaluation activity if available. If you don't have access to a TREK evaluation, continue with the activity below.

After some participants have shared, ask all participants to answer the next two questions on the same handout.

"What is something that squared with your thinking during today's session?"

Align Participants' Thinking

This question is important to celebrate thinking that is aligned with today's session. You want participants to agree with the ideas presented today. If they don't agree or their thinking doesn't align with the process of using strategies to engage students while working with new knowledge then they aren't going to follow through with using it in their classroom.

"What is something still circling in your mind?"

Give Participants a Voice

This question allows participants a chance to voice concerns or confusion about strategies or ideas that were presented. It will also allow you time to clear up any misconceptions that might be floating in their minds. It allows them to make further connections as to how to apply these strategies in their classrooms.

After a few moments, and if time allows, ask participants to share out their answers to these two questions. Remind participants to finish reflecting on the Instructional Strategy Note Sheet before they leave the session.

Follow-up Activities

Research Rationale

The Teacher Leader Effectiveness (TLE) evaluation was adopted in 2011 through the Oklahoma State Department of Education (OSDE) as a teacher evaluation tool. It was implemented in stages, and in the 2013-2014 school year it was implemented fully to assess teachers in the classroom. The Qualitative portion of the TLE is 50% of the total teacher measure (McGee, 2013). According to OSDE, 35% of this calculation is to measure the "Added Value of Student Growth." Added Value refers to the contributions of the teacher made to the student's academic growth (Walsh, Liu, and Dotter, 2014). Student Growth does not focus on one student individually for one assessment, but on continued growth throughout the progression of the year. Two models may be used for the TLE evaluation, the Marzano Teacher Evaluation Model and the Authenticity framework. Marzano's model focuses on what the teacher does, while Authentic teaching places the focus on what the student does during a lesson. However, the two frameworks overlap, and Marzano can fit directly within the higher-order thinking (HOT) of Authenticity. In teaching and designing authentic lessons, even homework can stimulate high-order thinking skills for practicing basic skills of a lesson when designed with Authenticity in mind. Authentic lessons are typically student-focused, engaging students in active learning. Learning by doing has been considered the most effective way to learn, (Lombardi, 2007). Marzano's framework has Design Questions 1-9 that address different aspects of the teaching process. Design Questions 2-4 align with authentic teaching, and authentic teaching aligns with research into the way the human mind turns information into useful, transferable knowledge (Lombardi, 2007).

Resources

- K20 Center. (n.d.). Fold the line. Strategies.
<https://learn.k20center.ou.edu/strategy/d9908066f654727934df7bf4f5079658>
- K20 Center. (n.d.). Inverted pyramid. Strategies.
<https://learn.k20center.ou.edu/strategy/d9908066f654727934df7bf4f507a918>
- K20 Center. (n.d.). Paired texts h-chart. Strategies.
<https://learn.k20center.ou.edu/strategy/d9908066f654727934df7bf4f5060ba6>
- Lombardi, M. M. (2007). Authentic learning for the 21st century: An overview. Educause Learning Initiative, 1(2007), 1-12.
- Marzano, R. (2013). Art and science of teaching/ask yourself: Are students engaged. ASCD: Technology-Rich Learning.
- Marzano, R. (2014). Marzano teacher evaluation model. Learning Map. <http://www.marzanocenter.com/>
- McGee, L. (2013, June 27). TLE report to the Oklahoma State Board of Education [Report]. Implementation Update. Oklahoma State Department of Education.
https://sde.ok.gov/sites/default/files/documents/files/TLE_Report_Oklahoma_State_Board_Education7_15_2013.pdf
- Parr, M., & Fishery, B. (2012-2013). Elevator speech. University of California.
http://sfp.ucdavis.edu/events/Agritourism_Intensive_2012-2013/
- Region 13. (n.d.). Triangle-square-circle. <http://www.theteachertoolkit.com/>
- Walsh, E., Liu, A.Y., and Dotter, D. (2014). Measuring teacher and school value added in Oklahoma, 2012-2013 school year [Report]. Mathematica Policy Research.
<https://sde.ok.gov/sites/ok.gov.sde/files/documents/files/Measuring%20Value%20Added%20in%20OK%202012-2013.pdf>