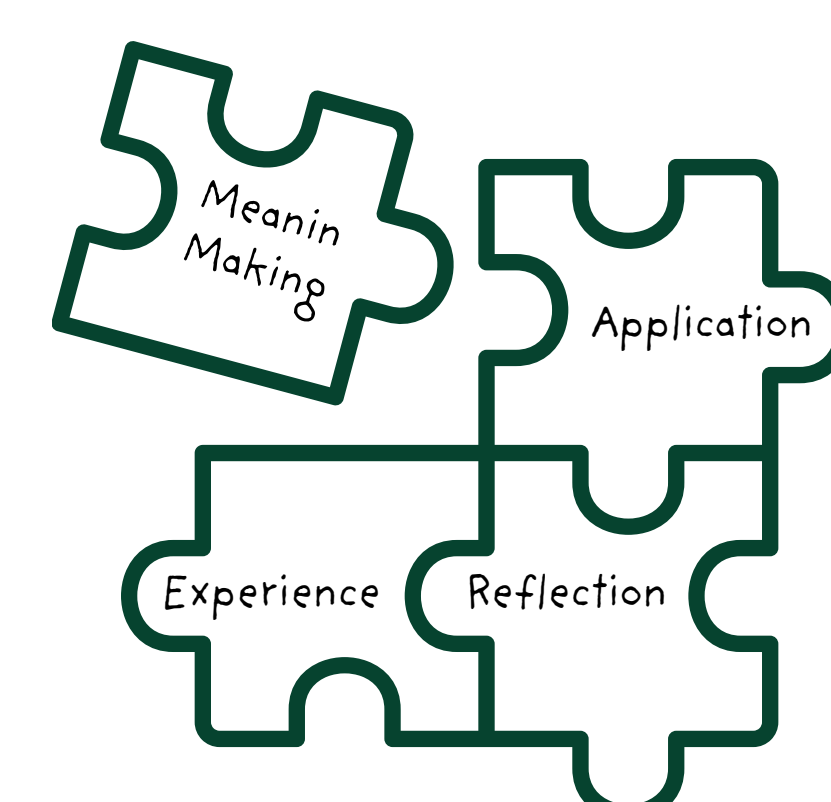


Prepared to Reflect: Using Notebooking to Support Pre-Class Learning and Application

Introduction



Experience & Reflection

Learning from experience requires learners to reflect on experiences, make meaning, and apply ideas across future contexts (Dewey, 1938; Schön, 1983).

Reflection is especially important in applied learning environments because learners are required to connect concepts, experiences, and decision-making across classroom and applied contexts (Kolb, 1984; Coleman et al., 2024).

Adult Learners: When paired with a focus on relevance, reflection can also support motivation by helping learners value course concepts and consider how those concepts may be applied in current and future contexts (Ambrose et al., 2010).



Need & Contribution

This innovation combines **critical reflection** with **structured notebooking** to support preparation, engagement, and application of course concepts.

Assigned readings, videos, podcasts, and other preparatory course materials may not be fully internalized or applied prior to class without a structured process for identifying, organizing, and connecting key ideas (Ambrose et al., 2010; Fiorella & Mayer, 2015).



Notebooking can support generative learning by prompting learners to **select key ideas**, **organize text and images**, and **integrate** new learning with prior knowledge and experiences (Fiorella & Mayer, 2015).

Reflection: When paired with the What, So What, and Now What protocol, notebooking aligns with the experiential learning cycle by helping learners move from **engagement** with course content toward **reflection**, **meaning-making**, and **future application** (Baker et al., 2012).

Contribution: Operationalizing the combination of notebooking and critical reflection related to course materials to prepare for a future course meeting.

Critical Reflection Notebooking Goals



- Provide a consistent **routine** for learners to practice engaging with the course's big ideas.
- Encourage learners to consider the importance of those ideas as standalone **concepts** and within the **context** of their existing schema.
- Provide structured opportunities for students to **apply** what they have learned to a current or future context.

Abstract &
References



How it Works



Instructor Preparation: provide a driving question, and one or more artifacts to explore: readings, videos, podcasts, and other resource and reference materials or other media.



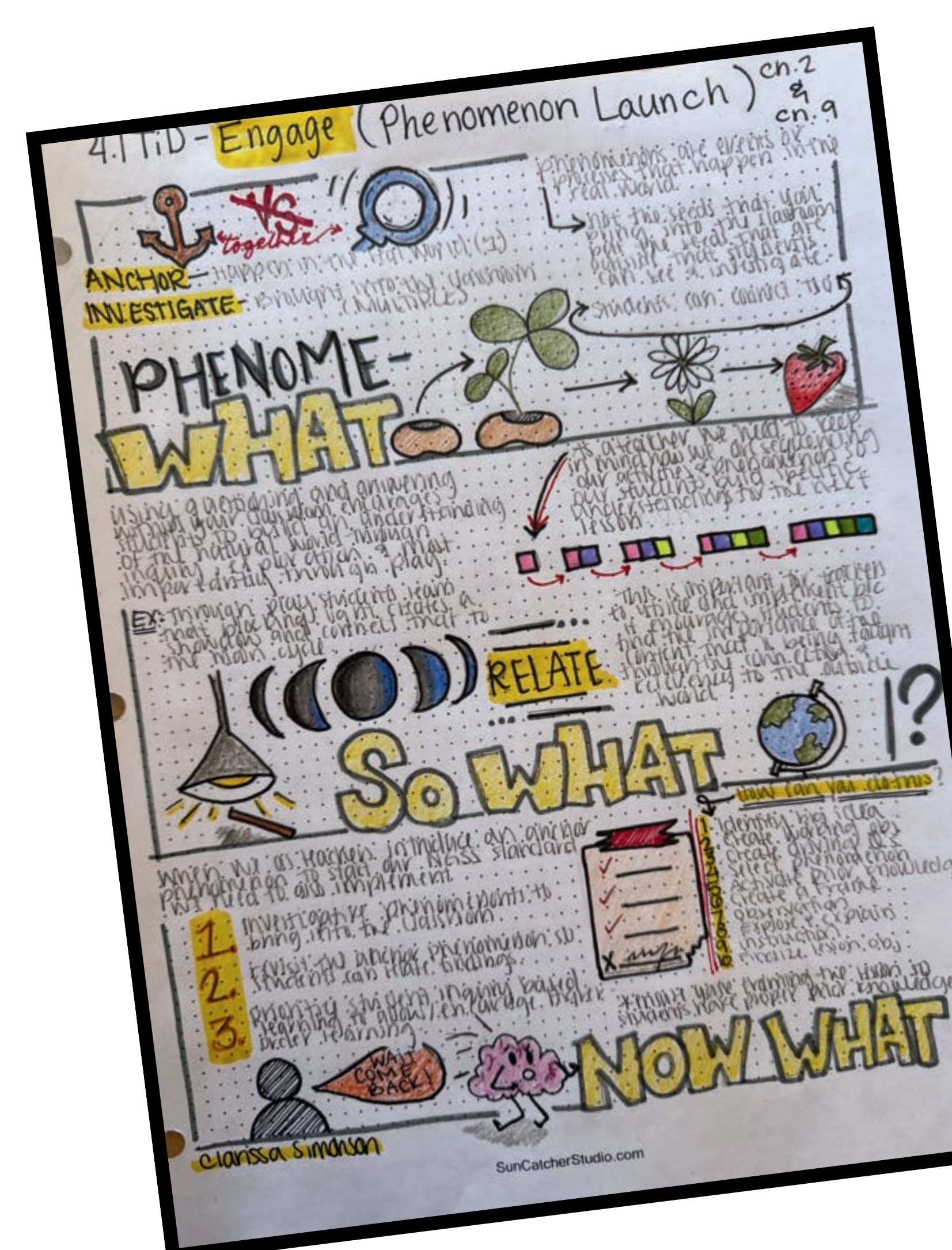
Student Engagement: Learners review course materials before class and create a notebook page using the:

- three-part **critical reflection** protocol: What, So What, and Now What (Rolfe et al., 2001).
- thoughtful use of color, text, and imagery.



Instructor Feedback and Assessment:

- **Assessment:** rubric aligned with the What, So What, and Now What protocol
- **"Not Yet" grading:** Submissions that do not meet expectations receive feedback and are eligible for resubmission.



Content Success Criteria



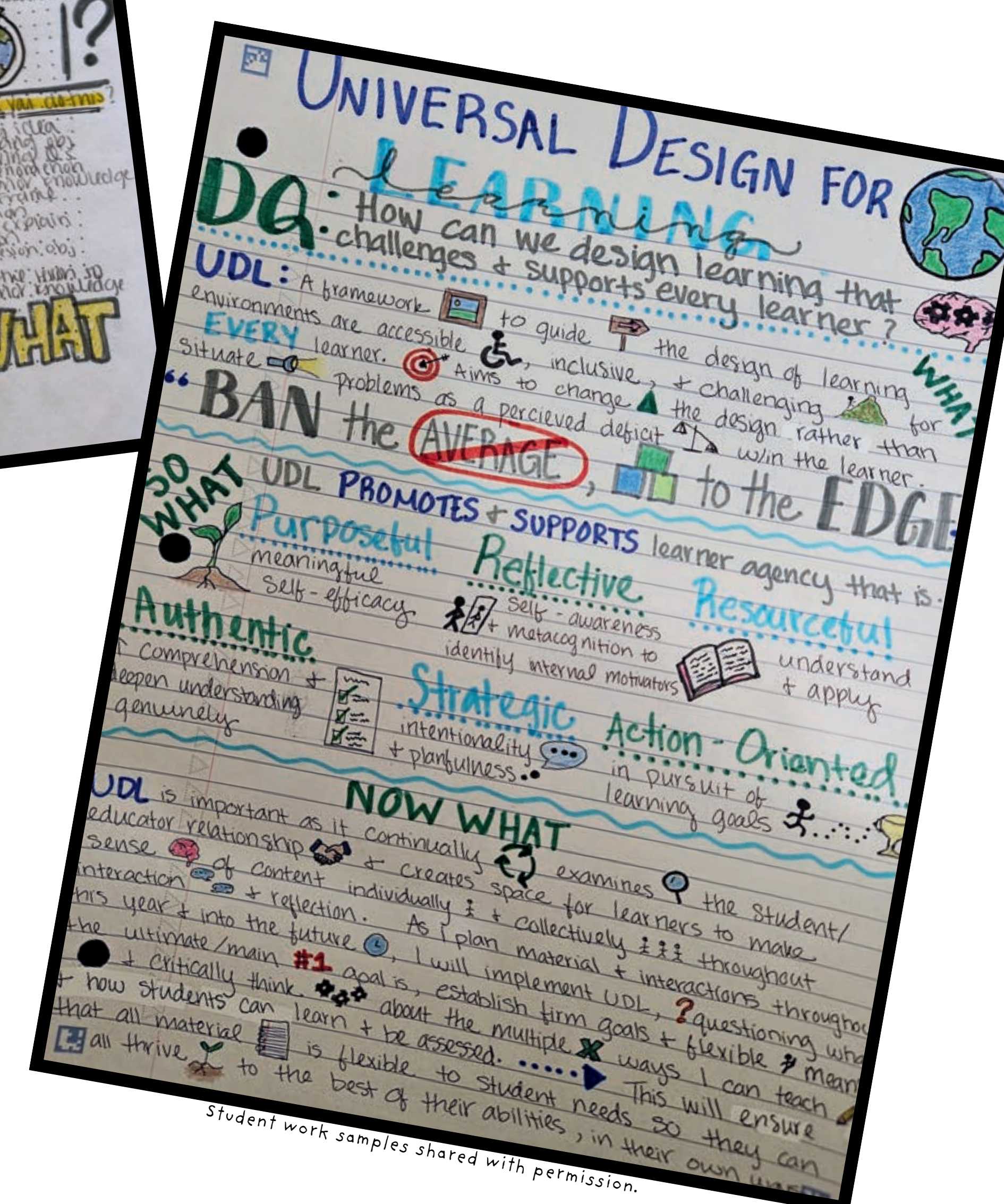
What: identify **key ideas** and summarize key points.



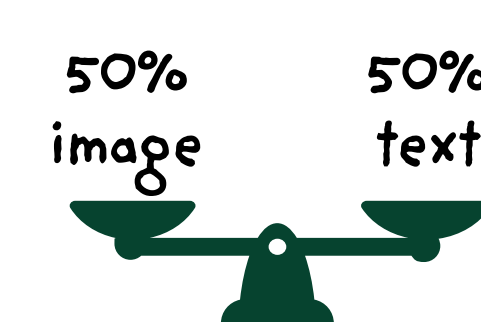
So What: explain **why ideas matter** by connecting them to prior knowledge, experiences, theory, literature, or practice.



Now What: learners **apply** ideas forward by considering how the ideas impact their current context, shape their decisions, actions, attitudes or future practice.



Formatting Success Criteria



50%
image
50%
text



Connectors to show
relationships



Use Color to
Enhance Meaning

Outcomes

AGED 5524 Instructional Process in Ag Ed
 AGED 580 Planning Agri-Phenomenon



High Content Engagement
 Learners dedicated substantial time and energy to notebook pages that reflected careful thinking, meaningful connections, and application of course concepts.



High Readiness for Discuss
 Learners were able to use their notebook page to support their engagement in classroom discussion.

Implications



Interest
 Learners expressed interest in using notebooking in their own classrooms.

Advice



Mindset Messaging
 Frame sketching as a skill developed through practice rather than an artistic requirement.



Skill Development
 Provide resources to build sketching skills.



Feedback
 Emphasize the quality of thinking, connections, and application rather than the quality of the sketches.

Costs

- **Direct costs** are limited to instructor labor for revising syllabi, developing assignment instructions and rubrics (estimated at 0.5-2 hours), and curating pre-work materials (.5-2 hours per).
- **Indirect costs:** class time for explaining the protocol and instructor time for feedback/grading.