PONDER AND PROVE

“As I pondered over these things... the eyes of my understanding were opened” (D&C 138:11).
“He will give unto the faithful line upon line... and I will try you and prove you herewith” (D&C 98:12).

PURPOSE
In the Learning Model Process, Ponder and Prove is the time for a student to deepen, consolidate, and gain confidence in what has been learned and to prepare for additional instruction. After establishing a foundation for learning through Prepare and Teach one Another activities, both you and your students will take time to ponder. By internalizing the learning through pondering, and then externalizing it in a Prove context, lasting insights are gained.

DESCRIPTION
Prove activities are an attempt, either formal or informal, to assess learning against stated learning outcomes. Ponder activities are also designed around outcomes, as a way to guide, initially at least, the learning derived from the reflection activities. While Ponder and Prove can seamlessly extend and crystallize understanding, this overview will consider their unique purposes separately.

Internalization Process
Ponder

Externalization Process
Prove

Pondering involves such activities as individual and group reflection, recording learning, noting questions, seeking follow-up learning, and considering additional issues. The word ponder simply refers to reflection, internalization and personalization of knowledge. Consider the educational benefits to reviewing information, articulating key ideas, questions, answers, personal feelings, and examples relating to the course material. Whatever the particular Ponder activity may be, it should help students:

• Learn by the Spirit. While those not accustomed to doing so may feel it is odd to try to learn about secular subjects with the aid of the Holy Ghost, the Prophet Moroni taught that “by the power of the Holy Ghost ye may know the truth of all things” (Moroni 10:5). Yet as Oliver Cowdery learned, one must do more than simply ask, but must “study it out” first (D&C 9:8). Assuming adequate preparation, however, quiet pondering and reflection can invite the ministrations of the Holy Ghost, to quicken the mind and enlighten the understanding (Alma 32:34, D&C 88:11).

• Promote retention. Instructional research suggests that students enhance their understanding and are most motivated when they consider their learning in light of personal experience, related knowledge, and potential application. In gospel terms, students need to liken their learning unto themselves (1Nephi. 19:23). This process of reviewing, organizing, and applying knowledge to new contexts moves the knowledge from the processing memory into long-term memory.

• Improve Thinking. Pondering also encompasses reflection on the processes involved in learning. Students who regularly engage in pondering become better, more self-aware students, because they develop a better understanding of how they best think and learn. Such students are then in a position to better help their peers understand and learn as well.

Prove
Proving, or the externalization of learning, involves trying out ideas, teaching others what has just been learned, providing and requesting feedback, verifying that new knowledge fits with pre-existing understanding, demonstrating competence, and standing accountable for what has been learned and taught. Prove activities serve at least three purposes:

• Assess competence. In the absence of assessment and feedback, students don’t know if they are approaching the learning outcomes or drifting from them. Prove invites individualized feedback that helps them make course corrections as needed and gives reassurance when they are doing well.
EXAMPLE
An instructor kicks off the semester with a discussion of the Learning Model. A few days into the course, the instructor takes a few minutes at the beginning of class to demonstrate a note-taking method that facilitates pondering. As students prepare and teach one another in class, they note subject details on the right side of the page and reserve the left margin for personal insights. Each day after class, students take some time to review their notes and summarize key ideas and follow-up questions in the left margin. Study groups spend their time comparing and discussing left-margin comments and questions. This moves them from memorizing their notes to discussing their understanding of the subject of their notes.

Teaching one another in class regularly involves opportunities for students to apply what they are learning to solve real or simulated problems. Students participate in reviewing each others’ insights and questions using a rubric (see Rubrics). Periodic exams and projects require diligent and consistent effort, but seem a natural extension of regular learning activities. Several students comment in their blogs that their left-margin notes have helped them prepare for exams and improve how they study.

TIPS
- **Make it authentic.** Pondering and proving happen best in contexts of authenticity and import in the students’ lives. Because of this, Prove activities are natural companions to experiential learning, problem-based learning, discovery learning, collaborative learning and any other type of actively engaged learning promoted here at BYU-Idaho.
- **Show them.** Don’t assume students know how and why to ponder. Give them opportunities and show a few examples from time to time. Help students become self-aware learners by developing study skills. Free help in this is available through Academic Learning.
- **Make time.** It’s easy to over-plan activities or underestimate the time required for them. Carefully reserve time in the lesson plan for pondering and proving. Make time.

PITFALLS
- **Insufficient preparation.** Ensuring enough preparation time both before and after class is difficult to gauge.
- **Over-structuring.** “Busywork” Prove assignments can limit or crowd out more genuine pondering.

KEY ARTICLES


OTHER RESOURCES
- Assessments
- Giving Student Feedback
- Helping Students Ponder and Reflect
- Assessing Transfer and Application

http://www.byui.edu/learning-and-teaching/instructional-tools