

## The Teacher as Facilitator of Learning

With the Activity-, Project-, Problem-based (APB) instructional approach comes a shift in the paradigm of traditional classroom instruction. The role of the teacher changes from being a “presenter of information to a facilitator of a problem-solving process” (Lambros, 2002, p. 23). The APB approach also calls for students to be actively engaged in the learning process as they use their own curiosity and creativity and apply knowledge and skills to solve ill-structured problems. So what does it look like for the teacher to be a facilitator of learning? How is this different from a more traditional approach to classroom instruction? This resource is designed to develop understanding of this approach and to provide ideas for how to incorporate the approach within your classroom.

### How Is This Approach Different?

Traditional teaching approaches rely heavily on the teacher presenting information through lectures and content reading and students responding to questions or completing practice related to the content. The teacher is viewed as the expert who imparts knowledge to students. Discussions may center primarily on knowledge and comprehension of the content with application often limited to examples identified in the presentation of information. Assessment of learning is largely evaluated in terms of correct and incorrect responses, leaving limited opportunities for students to truly apply, synthesize, and evaluate.

*Too often, and in many traditional teaching styles, the teacher is doing a disproportionate amount of the work. The learners are often passive, waiting for direction or waiting for the opportunity to respond to the teacher.*

Lambros, 2002, p. vii

The idea of the teacher as facilitator shifts the focus to building on the knowledge base of students in ways that allow students to take ownership of learning. Rather than teacher-centered, the classroom becomes learner-centered. Students are actively engaged in developing understanding that can be applied in diverse settings. This does not mean that the teacher moves aside and expects students to “get it on their own.” McWilliam (2008) urged teachers to take on the role of *meddler-in-the-middle* rather than that of a *sage-on-the-stage* or even a *guide-on-the-side*.

What does this mean? According to McWilliam (2008, p. 263), as a meddler-in-the-middle, teachers shift their practices to include:

1. Less time giving instructions and more time being a usefully ignorant coworker in the thick of the action.
2. Less time being a custodial risk minimizer and more time being an experimenter and risk-taker.
3. Less time being a forensic classroom auditor and more time being a designer, editor, and assembler.

4. Less time being a counselor and “best buddy” and more time being a collaborative critic and authentic evaluator.

This shift in practice does not mean that teachers abandon direct instruction. Direct instruction is still important, but it is purposefully placed at appropriate points and for short periods. The facilitator provides opportunities for students to dive into active learning, which may be guided or self-directed. Facilitation requires thoughtful navigation of the tension between being the expert and guiding the learner to discover meaning through engagement.

## What Does Facilitation Look Like in an APB Approach?

In the APB instructional approach, learning sequences are designed to develop knowledge and skills that provide a scaffold for students to apply as they solve real-world, relevant problems. This model calls for teachers to build a classroom culture that allows them to be facilitators of learning rather than dispensers of knowledge. The environment cultivates collaboration among students as they engage in learning with and from each other. Facilitation is an active process that requires the teacher to be keenly aware of the learning environment.

As an effective facilitator, the teacher must actively:

- Access and activate prior knowledge of students.
- Uncover and address student misconceptions.
- Guide students to identify knowledge or skills they need as they navigate problem-solving.
- Monitor student progress in developing knowledge and skills.
- Collect multiple means of authentically assessing student understanding, including oral, written, and constructed models.
- Establish practices for group learning through the activities, projects, and problems.
- Build a classroom culture that calls for students to explore ways to develop knowledge and skills.
- Cultivate a classroom environment where students take risks and learn from their failed attempts.
- Serve at times as an “expert resource.”

## The Art of Questioning

As you may notice, many of these facilitator strategies require teachers to develop the art of questioning. Yang (2006) noted that “teachers’ questions can be considered as the most powerful device to lead, extend, and control communication in the classroom” (p. 196). While we know from research that teachers ask as many as 300–400 questions per day, as much as 75% of those require factual answers that don’t encourage deeper thought or investigation or a point for a jumping-off into deeper study (Richetti & Tregoe, 2001; Wilen, 1991; and Cecil, 1995).

# PLTW Professional Development

Asking questions can help students clarify or frame ill-structured problems and identify and gather missing information that helps them arrive at conclusions (Richetti and Tregoe). According to Fusco (2009), effective questions add value to learning because they:

- Encourage the discovery of new interests.
- Increase students' awareness of the potential of ideas.
- Promote deeper thinking about ideas, concepts, beliefs, and opinions.
- Create a safe climate for diverse perspectives in engaging classroom discussions. (Fusco, 2009).

Developing the art of questioning does not happen quickly. It takes time and deliberate effort to uncover and then address your own practices. As you seek to ask better questions, consider writing down open-ended, probing questions and be willing to carry them around the classroom as you build your questioning skills. When you ask questions that promote deeper thinking and allow students to express their own ideas, students will need time to grow in this type of learning environment. As you facilitate discussions—whether with the whole group or with a few students—you'll not only uncover their ideas and understanding, but you will cultivate a classroom in which asking and answering open-ended questions is the norm.

## Facilitator Tips

As you prepare to facilitate student learning in your classroom, consider the following suggestions based on the work of Lambros (2002).

Find ways to...	Avoid the temptation to...
<ul style="list-style-type: none"><li>• Ask open-ended questions and prompts, such as:<ul style="list-style-type: none"><li>• What do you already know about this?</li><li>• What would be helpful to know?</li><li>• Where can you find that type of information?</li><li>• Where are you stuck?</li><li>• Summarize where you are right now.</li><li>• Why does this work/not work?</li><li>• How do you know that?</li></ul></li><li>• Write down questions to ask as you observe students at work.</li><li>• Help students discover mistakes and avoid the same ones in the future.</li></ul>	<ul style="list-style-type: none"><li>• Offer too much information because you're afraid they won't find what they need.</li><li>• Take the problem-solving away from students by being too directive.</li><li>• Rush them as they work through a problem.</li><li>• Intervene the moment you see a mistake or find a student off track.</li></ul>

## Questions for Reflection

Consider the following questions to guide your own reflection.

1. When you reflect on your own practice, what are your strengths related to the role of the teacher as a facilitator of learning? What are your challenges, and how can you address these challenges?
2. How do you think the APB instructional approach impacts the role of students? How is this like (or different from) what students in your school are used to learning? What changes or shifts do you foresee to be necessary for students as they work through a PLTW course? How can you as the teacher facilitate the change necessary?

## References

- Fusco, E. (2009). What was the question? Rethinking questioning. *ACSD Express*, 4(18). Retrieved from <http://www.ascd.org/ascd-express/vol4/418-newvoices.aspx>
- Hall, P., & Simeral, A. (2015). *Teach, reflect, learn: Building your capacity in the classroom*. Alexandria, VA: ASCD.
- Lambros, A. (2002). *Problem-based learning in K-8 classrooms*. Thousand Oaks, CA: Corwin.
- Marzano, R. J., & Simms, J. A. (2014). *Questioning sequences in the classroom*. Bloomington, NY: Marzano Research.
- McWilliam, E. (2008). Unlearning how to teach. *Innovations in Educational and Teaching International*, 45(3), 263–269.
- Richetti, C. T., & Tregoe, B. B. (2001). *Analytic process for school leaders*. Alexandria, VA: ASCD.
- Yang, M. (2006). A critical review of research in education: Limitations of its positivistic basis. *Asia Pacific Education Review*, 7(2), 105–204.