# Using Cases for Professional Development
# Q & A

*The following is a brief introduction to casework in education, based on some of the resources cited below. Consider delving deeper to explore your own questions about cases.*

**What are cases for teacher professional development?**

Cases have a long history in professional development. They have held a critical role in the professional fields of law and medicine since the 1800s. More recently, other professions have started using cases as important learning tools. Business cases, for example, are constructed to encourage and reflect on decision-making in complex arenas where multiple factors influence what occurs. Not unlike business, education occurs in complex environments that require teachers and other professionals to problem-solve, making the case approach a good opportunity for development.

Cases used for teacher professional development are generally representations of the real experiences that teachers (and often also students, parents and administrators) have in the contexts of classrooms and schools. Cases are not "reports" of events, but are told in narrative form to catch the richness and complexity of these experiences – including the thoughts, feelings, actions, and interactions involved. The details of these experiences make it possible for professionals to relate to the events. Because cases are designed to provoke discussion and reflection, they highlight teaching strategies in action, student thinking, and dilemmas of leadership, that may be encountered in many schools.

**Why might PLC's or other teacher groups want to use cases?**

Fundamentally, case-based professional development is constructivist in nature, focusing on personal sense-making and social interaction. Cases have a variety of benefits that professional learning communities may find help them move forward in their work together. These benefits include, but are not limited, to the following:

- Developing an environment for critical reflection on teaching and learning
- Supporting the acquisition of decision-making and problem-solving skills
- Encouraging the development of a community of learners
- Helping discussants consider the consequences of potential actions
- Facilitating the bridging of theory and practice

The richness of cases allows for a variety of uses, and they can be put to different purposes, depending on the needs or desires of the group. Cases can be used to talk about teaching approaches, science inquiry, student conceptions and misconceptions, social issues that arise in promoting constructivist pedagogy, teacher learning, and challenges of leadership and reform.

Cases have been described as providing both "windows" and "mirrors" into practice. As "windows" they allow us to look in on practice and use it as a way of considering a variety of elements in teaching and learning. As "mirrors" they allow us to reflect on our own experiences, whether they are similar or different from what is presented in a case. An important element of cases is that they allow groups to talk about important (and sometimes sensitive) issues that arise in school without starting in the personal. They provide a window before presenting a mirror.

**What should we think about in finding and choosing a case?**

One challenge of case-based learning is finding the right cases for discussion. A common misconception is that the cases have to be "just like us." On the surface, very few cases will resemble your particular situation. However, because cases usually represent real teaching and learning dilemmas, you will find that the problem(s) at the heart of them will speak to the challenges faced in your classrooms and schools.

As you begin using cases it helps to think in very general terms about the issues that you and your colleagues grapple with. Are you focused on developing personal understanding of science concepts? Wondering about the misconceptions your students may be having? Trying to manage curriculum? Struggling to support a diverse array of students? Working with reluctant colleagues? Facing budget-based cuts to the program? Having an idea about what some of the larger issues are will help you discover cases that will support your thinking and planning. It may be that although you are in an elementary school, a case about a group of middle school teachers will help you consider issues of leadership. It may be that although you teach science, a case of a mathematics teachers working through a curriculum change can support useful talk about changes in your own department.

Some activities that may help in case choices are:

- Listing some of the dilemmas, challenges, or goals faced by your group
- Extrapolating the "big idea" of each of those challenges or goals
- Getting familiar with some of the case resources
- Reading a few "potential cases" and thinking about how they might reflect your group's issues
- Consider how potential cases might uncover unspoken, but problematic issues

**Discussing a case usually entails a protocol? How is a protocol developed?**

Fortunately most cases have some professionally prepared prompts or activity suggestions. Your job will be to determine, based on your situation and purpose for using the case, which of these you will use in your discussions. Having a framework for putting together cases is useful, so consider the following stages of interacting with a case:

1. Familiarization: Provide focused time in the session for participants to read the case closely, highlighting or underlining key ideas, jotting down questions and connections. You can also have participants take on parts and read aloud sections with dialogue to make the case "come alive."
2. Working Within: The first set of discussion questions or activities should stick to understanding the details of the case so that everyone has a shared understanding of who is involved, what happened, where the issues are, and which characters hold which perspectives. The intent is *not* to solve the problem, but to do the preliminary work. Examples might include: creating a list of alternative titles to a case in order to surface all the issues, examining the perspectives of each character along with the evidence from the text for those perspectives, and discussing where the characters hold common interests and where their interests diverge.
3. Expanding Upon: In this set of discussion questions or activities, participants begin to make interpretations and inferences related to the case. Examples might include: using a particular theory or framework to consider events in the case, determining what knowledge or strategies might be involved, or designing an investigation or an assessment that would inform the issue. This section provides an opportunity to think about theory or research as well as participants' past experiences that might inform

the case. Again, holding off on quick problem-solving is a key to getting the most out of the discussion.

4. Moving Beyond: Finally, an important stage in case discussion is considering issues relevant to the group's own situation(s). The discussion may focus on what aspects of the case can inform their questions or dilemmas. Examples include: developing a full range of possible recommendations that could be made to a character in the case, developing a list of individuals who could provide support for the work the group is doing in relation to the issue raised by the case, developing an assessment that would inform the group about how their own students' understand the topic.

**What about facilitating a case discussion?**

The facilitator is the group member who prepares the case and help guide the discussion. It's the facilitator who helps to ensure that participants take an inquiry stance and work toward deeper understandings rather than making surface level assumptions. One or more group members can be involved in the facilitation. While it can be very helpful for facilitators to have training, it is not required. A committed group of teachers/administrators can support one another in making the most out of each case discussion. Being reflective about which aspects of the discussion helped the most and thinking about activities and prompts that work best with the group can, over time, support growth in facilitation skills.

**What are some resources for finding and using cases at our school?**

Many of these resources informed the creation of this Q&A. They are also excellent resources to get you started:


Barcenal, T. L., Bilbao, P. P., Morano, L. N., Nichols, S. B., & Tippins, D. J. (2002). *Just in case: Encounters in science and mathematics teaching and learning.* Iloilo City, Philippines: West Visayes State University Press.

DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work.* Bloomington, IN: Solution Tree.

Koballa, Jr., T. R. (2004). *Cases in middle and secondary science education: The promises and dilemmas (*2nd ed.). Upper Saddle River, NJ: Pearson.

Loucks-Horsley, S., Love, N., Stiles, K., Mundry, S., & Hewson, P. (2003). *Designing professional development for teachers of science and mathematics.* Thousand Oaks, CA: Corwin Press. Case discussions section (168-177).

Miller, B., & Kantrov, I. (1998). *A guide to facilitating cases in education.* Portsmouth, NH: Heinemann.

Miller, B., Moon, J., & Elko, S. (2000). *Teacher leadership in mathematics and science: Casebook and facilitator's guide.* Portsmouth, NH: Heinemann.

National Center for Case Study Teaching in Science. (2008). http://ublib.buffalo.edu/libraries/projects/cases/ubcase.htm
Note – These are cases designed for teaching science process and content primarily at the college level. You might, however, find them interesting.

Science Cases Methods Project, WestEd, San Francisco (www.wested.org).

Tippins, D. J., Koballa, Jr., T. R., & Payne, B. D., (2002). *Learning from cases: Unraveling the complexities of elementary science teaching.* Boston: Allyn and Bacon.


As more professions discover the utility in cases for developing their members, more resources are coming available, so continue to look for new sources.