

Challenges of Case-Based Teaching

Mark P. Mostert

Over the past 20 years, teacher educators have increasingly turned to case-based instruction with Pre-service, novice, and even experienced teachers. However, advocates of case-based teaching rarely point out the many challenges that might detract from effective case-based instruction. I briefly outline some of the more obvious challenges facing case instructors as they attempt to use the method for improved teacher education.

Keywords, case-based teaching, case-method, teacher education, pre-service teachers, novice Teachers

For decades, teacher educators have emphasized the importance of devising more effective ways of preparing preservice teachers for the classroom. Generally, these efforts encompass more effective preparation in content area knowledge, teaching methods, interprofessional skills, and classroom management (Wilson, Floden, & Ferrini-Mundy, 2002). The need for teaching higher levels of professional performance has been exacerbated by numerous calls for teacher education reform and students' academic performance, most recently enshrined in *No Child Left Behind (NCLB)*. These calls for reform imply the need for (a) collaborative team approaches for more effective service delivery, (b) consolidation of organizational configurations requiring increased professional collaboration as school districts strive to become more cost efficient and effective, (c) the move towards including students with special needs in general education classes, (d) an increased understanding that the complex needs of most students require an array of professionals who are able to work together more closely than previously, and (e) that novice teachers, by virtue of these factors, need effective instruction in these areas *prior* to graduating to their new profession (Cohen & Ball, 1999).

Case-Based Instruction

Generally, in research and teaching, case studies have been seen as a precursor to legitimate scientific research or as a way of studying extremely rare, "one shot" phenomena (Campbell & Stanley, 1963). An alternative view, however, suggests that cases can describe real-world contextual problems that are probably too complex and unique to approach experimentally (e.g., Cohen & Ball, 1999; Yin, 1984). The current popularity of the approach began after Shulman's 1985 call for a pedagogy of cases (Floyd & Bodur, 2005)

Rationales for incorporating real-world situations in preservice and novice teacher education vary, but generally incorporate the following: First, teacher education research has consistently acknowledged that classroom events are contingent on a host of interrelated contributory factors that are mutually influential, to a greater or lesser extent, in producing teacher and student performance (Wilson, Floden, & Ferrini-Mundy, 2002). Teaching via the case method appears to be an ideal way of communicating the detailed, interrelated, and often densely interrelations necessary to explore the multidimensional nature of what students and teachers do in classrooms.

Second, there is a pivotal need to ensure that preservice and novice teachers are able to apply what they have learned from research on teaching and learning to complex classroom situations, thereby narrowing the research-to-practice gap (Floyd & Bodur, 2005). In this regard, cases allow for infusing of research knowledge in a comprehensive and comprehensible form to almost any intended audience.

Third, the characteristically complex nature of the case study reflects situations and vectors of influence likely to be found in the real-world setting of the classroom (Hammerness, Darling-Hammond, & Shulman, 2002). Cases, therefore, investigate phenomena in a real-life context;

Fourth, the complexity of classroom interactions quickly, in many instances, erodes firm boundaries of all-or-nothing thinking, and teachers are compelled to use highly developed skills and behaviors for effective teaching and classroom management (Wasserman, 1994). Teaching these skills using cases appears to be beneficial seeing that in complex case simulations, the boundaries between participants and the setting are often not clearly evident.

Fifth, teachers are compelled to use many available sources of information and skill sets to judge any given teaching and learning situation, all contextually nested in the common teaching and learning relationships of the classroom (Laframboise & Griffith, 1997). Cases use multiple sources of evidence to describe the phenomenon under investigation and to unpack complex activities into more manageable subsets.

The use of cases, therefore, might be summarized as follows. Characteristically:

1. The non-linear, complex realities of professional classroom practice are quite different from the cause-effect linear relationships of experimental research. Case-based instruction emphasizes context-dependent practical problem solving;
2. In the classroom, teachers make multiple, complicated decisions and observations set in unpredictable circumstances. Cases communicate a strong sense of complex teacher-pupil interactions, perceptions, and decision making;
3. The unique situational circumstances of teaching reflect the rich, contextual qualities of teaching, as do cases;
4. To survive the contextual unpredictability of the classroom, teachers use practical knowledge to cue professional decisions and actions for appropriate problem-solving; and
5. Case teaching emphasizes the centrality of professional decisions and actions and their variance according to distinctive case situations.

For students, case based teaching may:

1. foster higher levels critical thinking for more effective teaching behaviors;
2. provide vicarious learning and practice in professional decision-making;
3. increase practical knowledge through discussion, simulation, and reflection;
4. reinforce and encapsulate the learner's prior professional preparation;
5. provide a versatile teaching medium;
6. provide analyses of problematic situations at various levels of abstraction and from multiple points of view;
7. attract commentary and views from all or most learners much more easily than most other teaching approaches;
8. help learners develop analytical and problem solving skills;
9. encourage reflection and decision-making for action and familiarity with this process; and
10. involve learners in their own learning.

Case teaching, therefore, emphasizes the centrality of professional decisions or actions and their variance according to distinctive, real-world case situations (Mostert & Kauffman, 1992). Thus, the juxtaposition of research on practical knowledge and case-based teaching presents a perspective well recognized by philosophy--that knowledge is time-bound and situation specific, personally compelling, and oriented toward action (Carter, 1990). Further, case-based instruction argues for an increased

emphasis on the study of teachers' perspectives and knowledge rather than theory, thereby allowing for the emergence of the voice of the teacher as central to what happens in classrooms, rather than the views imposed by researchers because teachers are inextricably linked to the actions and decisions of teaching.

How Cases are Taught

Given the versatility of case-based instruction, there are many teaching configurations that instructors might employ. However, the sequence of preparation and analysis usually occurs as follows:

Preparatory phase: Initially, students are required to prepare the cases prior to class time. They must spend enough time studying the case that they (a) are completely familiar with the facts and content of the case, (b) have reflected on and identified obvious or potential problems within the case, (c) have studied ways of matching the course content to each obvious or potential problem case problem, and (d) have reflected on potential solutions or plans of action. If the course instructor has provided reflective rubrics or guiding questions for the case, these must be studied, and responded to before the case discussion begins. This phase might be modified somewhat when using video, on-line, or otherwise less traditionally presented cases (e.g., Camill, 2006; Maloch & Kinzer, 2006)

Discussion phase: The case is discussed in class in a format chosen by the instructor (large group, small group, etc.). The discussion is framed in terms of the instructor's teaching objectives as matched to the problems and solutions generated by the case.

Analytical phase: Subsequent to the case discussions, either in or after class time, students construct written analyses (individual or group) of insights, observations, and solution they have gleaned from their initial preparation as modified (or not modified) by the class discussion.

Unsurprisingly, the literature on the advantages of case based teaching is fairly large, especially as touted by its advocates (e.g. Shulman, 1991; Shulman & Colbert, 1987; Spencer, Freund, & Browne, 2006; Sudzina, 1997; Wasserman, 1994). However, the many challenges faced by both instructors and students in the cased-based medium are less often noted. I briefly examine some of the more obvious shortfalls of case-based teaching below.

Challenges of Case Teaching

Given the number of potential, instructors should address as many of these pedagogical difficulties as possible to maximize the impact of using the approach.

Pedagogical Challenges

Unfamiliarity with case teaching. For many students, discussing and analyzing a case is an unfamiliar experience. Students are often socialized into the standard college-lecture large group format where the instructor lectures, students take notes, and interaction between instructor and student is otherwise confined to question and answer events. In the traditional format, preparation for these types of classes usually consists of preparing the material for an upcoming class by understanding and being familiar with the subject content. Analysis of the content, if any, tends toward the superficial and aspects of analysis which are directly and obviously tied to the content.

Given these generalizations of much of higher education class work (especially at the undergraduate and, perhaps, to a lesser extent, at the graduate level), students may have difficulty

adjusting their expectations of knowledge acquisition and their response modes to the relatively unfamiliar instructional setting when cases are used. Case-based instruction places a far greater emphasis on contextually-driven knowledge generation with all its accompanying uncertainties and opportunity for misunderstanding. It also demands a higher level of active participation and reflection than many others instructional arrangements.

Students' reactions to such an unfamiliar setting vary. For example, the flow and depth of the discussion may be disrupted by students being uncertain of how to respond to prompts from the case leader or other students; Students might perceive that the instructor is relinquishing his or her role as instructional leader by not giving them the correct answer to a case problem; or class members might fail to assimilate the highly nuanced discussion and debate that case analysis often engenders, resulting in frustration or a growing disinterest with the topic and discussion at hand.

Such sources of frustration, especially those related to their inability to trust their own judgments and those of their peers to arrive at workable solutions, either due to inexperience or lack of knowledge about relevant theories and research findings, can be lowered, for example, by supplying a conceptual framework used as an advanced organizer. However, until students are thoroughly familiar with case-based instruction, and, for some, even thereafter, the relevance of the method is difficult to grasp.

Relating cases to a theoretical base. Even if students are able to respond to case dilemmas with insight and articulated argument, they may still find it difficult to relate their opinions to the theoretical content of the course. The notoriety of the research-to-practice gap might be at its most acute in the case setting for a number of reasons. For example, undergraduates might not have the theoretical or even practical experiential background to be able to relate case problems and solutions to relevant knowledge and theory bases. Among graduates, especially practitioners, there is often a bias against applying theory or empirical research to any classroom problem except in rudimentary and often unresponsive ways. For many others, the problem lies in evaluating and selecting relevant theories from among those they have learned. Further, some students may tend to view the practical nature of the cases as separate from the theoretical bases of the course.

Case preparation. Preparing cases for instruction is a labor intensive activity which constantly evolves depending on the purpose for which the case is used and the course content to which it is linked. Rarely can instructors hope to use the same preparation from one use of the case to the next across different course and teaching objectives. In addition, repeated use of most cases either for the same or different teaching objectives will lead to greater and more fine-grained insights which change the nature of the approach to teaching the case over time. Generally, properly preparing a teaching case involves much more time than an elementary review of course content, the most likely preparation used by course instructors who are qualified to teach the content of their syllabi.

Preparation for students can also be time consuming. Preferably, students should read the case ahead of time and prepare notes that document their insights based on reflection, connections to the course content, and their own experiences. Some students may therefore find preparing cases quite difficult if they have not had previous experience with case method teaching and its approaches to problem solving and analysis.

Case emphases. Novice case instructors often encounter difficulty in deciding what to emphasize when teaching the case. Especially seductive is the tendency to spend too much class time recounting the actual events or situations of the case at the expense of discussion eliciting insight to given dilemmas and for generating solutions. Given that most cases can be adapted to any number of important and relevant insights related to course objectives, instructors must select which analytical aspects will best serve their

purposes. Clearly, this implies that the case instructor is skilled at evaluating the nuances of the case and in selecting appropriate emphases and how best to present them.

Speculation. A primary characteristic of case-based instruction involves the levels of interpretive complexity which quickly arise and multiply during case analysis. A common problem related to this complexity is what might be reasonably extrapolated versus almost endless speculation about what “might have been.” This challenge may be alleviated by the use of carefully written cases and clear teaching objectives. This solution notwithstanding, many novice instructors and students are tempted to expand case discussion and analysis beyond the details and facts presented in the case, leading to unnecessary distraction and derailing of the teaching objectives of the case.

Case complexity. Case complexity varies from case to case. However, most cases embody several layers of meaning beneficial to students as they apply the case to the course content or their educational knowledge base. Such complexity, while providing obvious advantages, can also be a drawback. For example, deeper levels of complexity are not immediately obvious and may take an inordinate amount of time to uncover; students who lack classroom experience may be unable to recognize the finer issues presented in the case, and without adequate preparation and reflection, deeper case issues might remain hidden. Generally, preservice teachers, absent knowledge of the real world of teaching, often become confused or distracted by this case characteristic. Such confusion can potentially derail even the best case teaching and also increases the possibility that students will see case analysis as aversive. One way of avoiding this problem is for the case leader to maintain a focus on a single or a very few fairly obvious case issues.

Strategies for introducing cases. Student interest and willingness to engage in energetic case discussions can be significantly affected by how the case is introduced. Traditional introductions, role playing, surprises, the use of videotape or audiotape, etc., all have potential benefits and drawbacks. How effectively cases are introduced will depend, for example, on the case experience and motivation of the students and the instructor, a careful assessment of each set of class response characteristics, and a close match between the course and case content and how it is introduced.

Teaching style of the case leader. Teaching cases seems to be closely linked to the teaching style of the case leader. The interactive nature required in discussing cases necessitates a level of energy and concentration which may not be necessary for other forms of instruction. Effective case instructors must be articulate, somewhat entertaining, energetic, and able to guide discussion but not dominate it, shape the case discussion toward connecting with the course objectives, and so on. Obviously, for many instructors, these and other demands might not be a good match for their teaching personalities, pedagogical preferences, or willingness to explore case-based instruction.

Participation in case discussion. Case-based teaching is based, in part, on vigorous discussion and debate of the case issues and the array of potential solutions. Ideally, every student participates in these discussions, skillfully guided by the instructor. However, it is rare that all students in a case discussion will be eager to participate and state their views without hesitation. This is especially problematic in undergraduate case instruction where many students seem to defer to the instructor. For example, there may be several students who, for a variety of reasons, appear reluctant to participate. Some of these students may participate after a few sessions of listening to their peers or when encouraged to do so by the case instructor. However, case instructors often encounter a few students who, despite their best efforts, remain silent or participate at minimal levels. Minimal or nonparticipation is most problematic because it prevents fellow students and the instructor from benefiting from these students’ insights and from evaluating their progress towards insight into the case problems and solutions.

Communication in case discussions. Because case method teaching relies heavily on discussion, in-class reflection, and the participants’ ability to convey their views, good communication is essential.

However, communication problems often arise. For example, it is sometimes difficult to get students to talk to each other rather than to the instructor. Students might not be able to articulate their reflections and insights, or vigorous debate can be misinterpreted as animus. Case instructors must also be prepared to control students who seek to dominate the discussion to the detriment of both the case discussion generally and the participation of other students.

Questioning techniques. Some case instructors seem to have difficulty asking questions that will elicit responses to fuel the momentum of case discussion. Questions which elicit "yes/no" responses or do not challenge students to explain their views and insights will not provide sufficient stimulus for other participants and can quickly lead to "discussion inertia." It is important that instructors (and students) phrase questions which are likely to elicit responses defending or critiquing previous comments or observations.

Focused case discussion. Given the complexity of most cases and the diverse views likely to be held by the participants, keeping the discussion focused according to the objectives of the course and the course content can be difficult. For example, extraneous comments, distracting side-issues, and a lack of preparation related to the content of the case can all be detrimental. Even more positive asides, such as unanticipated, unique but interesting issues that arise, might tempt the instructor to change the course of the discussion. While this may prove useful in some instances, it can often mean that the original intent and teaching objectives of the case may be lost.

Directive teaching. Given that most students are typically socialized to seeing course instructors as holders and imparters of content knowledge and truth, they are often nonplussed when asked for their perceptions, judgments, or opinions. If students are indeed novice case analysts, it may be more practical to be more directive and less subtle than when teaching cases to graduate students or experienced teachers. As students become more comfortable with their own abilities in analyzing cases, course instructors can resume a more facilitative role.

Practical Challenges

Class size. Case method teaching works best with small groups of students. A class of 12-15 people seems to provide enough diverse opinions and opportunities for active participation in case discussion. Given the enrollment patterns of most undergraduate courses, however, these numbers are idealistic. Commonly, undergraduate education classes contain many more. As the number of students increases, the less likely it will be that everyone will have an equal opportunity to participate. Also, the greater the class size, the more likely it will be that other distracters will multiply.

While case teaching can be adversely affected by a great number of students in a class, it can also be affected by too few students. For example, in a graduate class with only three or four students, the critical mass of diverse opinions, insights, and perceptions might not be reached, especially if one or more of the students tend to be unreflective, unresponsive, or both.

Time. The analytical levels within cases take time to uncover. How long this is likely to take depends of the complexity of the individual case, students' willingness to engage in focused discussion, time allocated for the discussion, and the skill of the case leader. As the complexity of a case emerges, novice instructors often run out of time to achieve their teaching objectives. Limiting the depth of case analysis according to both teaching objectives and time constraints is therefore important.

Problems in written expression. Initially, students find writing responses to cases difficult. In spite of explicit instructions that they are to respond to the cases out of their personal and professional knowledge (which may or may not have been modified by class discussion), students are often confused as to what they are expected to do. They seem to be accustomed to providing written responses which are

strictly factual or at least discoverable from their textbook and course content. Not only do students encounter technical difficulties, but also in how to articulate their reflective observations and how these are connected to course content and teaching objectives.

Physical setting for the discussion. The physical setting in which the case discussion takes place can add to or detract from the case analysis in that case discussions tend to be intense and often generate high levels of emotion. The setting becomes pivotal when case discussions occur over extended periods of time. Ideally, a seated circle or horseshoe allows improved eye contact and positioning for effective verbal and nonverbal communication. Also, movable chairs allow for team discussions in large groups. It may be important for each student to have a writing surface available rather than an open seat. Lighting and ventilation are also important. The physical setting is also important to allow mobility of the case leader.

Students' names. Knowing the names of students is important because it facilitates communication and encourages cross-talk and direct communication with other members of the class. Name cards or photos matched to the students' names can help instructors alleviate any impersonal aspects of case discussion. However, in teaching large classes it is often difficult to learn all the students' names by the end of the course, let alone in time to conduct a case discussion.

Inexperience. Case analysis, because it relies heavily on personal, practical, professional, and content knowledge, assumes that students bring to the analysis a wealth of experience that will allow them to extract optimum instruction from the professional issues cases present. Again, undergraduate preservice teachers are less likely to possess high levels of professional experience that will allow them to engage in deeper analysis. Case instructors should carefully gauge the knowledge needed for analyzing any particular case and match it to the students, or teach necessary content ahead of time.

Modeling. Because case-based teaching, at least initially, is so foreign to many students, it is important that the instructor be highly skilled in modeling case discussion and interpersonal communication skills. However, as noted earlier, not every instructor possesses or is willing to learn these key attributes, which, in turn, may lead to poor case teaching.

Explicit teaching of access to resources. A common problem once students understand the rudiments of case analysis, they often have difficulty matching case problems to course content, often because they lack classroom experience in their own discipline and related, but important disciplines. Even if they are able to do so, they often have difficulty accessing various information sources other than the course text. Instructors should explicitly teach and model where such resource information may be found. Such a lack of knowledge constrains the choice of cases, issues within cases, and levels of case complexity. Generally, experienced practitioners tend to be more astute at bridging complex case situations and overarching educational theory than their inexperienced or novice counterparts.

Case-based teaching continues to garner widespread attention as a viable tool in preservice and in-service teacher education. Despite its increasing popularity, however, those considering using the method should consider that while this approach has many advantages, especially given the heavily contextualized nature of teaching, a wide array of challenges must be thought through and attended to in order to give the method the best chance of success.

References

- Cohen, D. K., Ball, D. L. (1999). Making change: Instruction and its improvement. *Phi Delta Kappan* 83(1), 73-7.

- Camill, P. (2006). Case studies add value to a diverse teaching portfolio in science courses. *Journal of College Science Teaching*, 36(2), 10-59.
- Campbell, D. T. & Stanley J. C. (1963). Experimental and quasi-experimental designs for research on teaching. In N. L. Gage (Ed.), *Handbook of research on teaching*, (2nd ed.,) (pp. 171-246). Chicago: Rand McNally.
- Merseth, K. (1991). The case for cases in teacher education. Washington, DC: American Association of Colleges of Teacher Education and American Association of Higher Education.
- Floyd, D. M., & Bodur, Y. (2005). Using case study analysis and case writing to structure clinical experiences in a teacher education program. *The Educational Forum*, (70)1, 48-60.
- Griffith, P. L., & Laframboise, K. L. (1998). Literature case studies: Case method and reader response come together in teacher education. *Journal of Adolescent and Adult Literacy* 41, 364-75.
- Laframboise, K. L., & Griffith, P. L. (1997). Using literature cases to examine diversity issues with preservice teachers. *Teaching and Teacher Education*, 13, 369-82.
- Maloch, B., & Kinzer, C. (2006). The impact of multimedia cases on preservice teachers' learning about literacy teaching: A follow-up study. *The Teacher Educator* 41(3), 158-71.
- Moreno, R. & Valdez, A. (2007). Immediate and delayed effects of using a classroom case exemplar in teacher education: The role of presentation format. *Journal of Educational Psychology*, 99(1), 194-206.
- Mostert, M. P., & Kauffman, J. M. (1993). Preparing teachers for special and general education through case-based instruction: An analysis of their perceptions, learning, and written cases. *Australasian Journal of Special Education*, 16(2), 40-47.
- Shulman, J. H. (1990). Now you see them, now you don't: Anonymity versus visibility in case studies of teachers. *Educational Researcher*, 19(5), 11-15.
- Shulman, J. H. (1991). Revealing the mysteries of teacher-written cases: Opening the black box. *Journal of Teacher Education*, 42, 250-262.
- Shulman, J. H., & Colbert, J. A. (1987). *The mentor teacher casebook*. San Francisco: Far West Laboratory.
- Spencer, K., Freund, M., & Browne, B. (2006). Using case writing to meet diverse agendas in special education. *Teacher Education and Special Education*, 29(3), 202-7.
- Sudzina, M. R. (1997). Case study as a constructivist pedagogy for teaching educational psychology. *Educational Psychology Review*, 9(2), 199-218.
- Wasserman, S. (1993). *Getting down to cases: Learning to teach with case studies*. New York: Teachers College Press.
- Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research*, 68(2), 130-178.

Wilson, S. M., Floden, R. E., & Ferrini-Mundy, J. (2002). Teacher preparation research: an insider's view from the outside. *Journal of Teacher Education*, 53(3), 190-204.

Yin, R. K. (1984). *Case study research: Design and methods*. Beverly Hills: Sage.

Author Contact Information:

Mark P. Mostert, PhD
Professor, Special Education
School of Education
Regent University
1000 University Drive
Virginia Beach, VA 23464
Tel.: 757.226.4489
Email: markmos@regent.edu

Advertisement

~~Behavior Analyst Online~~

~~www.Behavior-Analyst-Online.org~~

~~The Behavior Analyst Online organization (BAO) develops and deploys new resources for behavior analysts and makes them available on the Internet free of charge to the public. These resources are dedicated to educating the public about behavior analysis as well as serving as a resource for professionals involved in the field of behavior analysis.~~

~~The BAO organization is responsible to its membership to develop resources that the membership will find useful in everyday research, education, and application of the science of behavior analysis.~~

~~The BAO organization offers many perks to its members, including a Web Forum and the ABA PRO Mailing List. In addition, the organization publishes several major free e-journals of interest to the behavior analysis community:~~

~~The Behavior Analyst Today~~

~~The Journal of Early and Intensive Behavior Intervention~~

~~The International Journal of Behavioral Consultation and Therapy~~

~~The Journal of Speech and Language Pathology - Applied Behavior Analysis~~

~~Membership in the BAO organization is free. For details, visit our website at~~

~~www.behavior-analyst-today.org~~