



## Using Case Studies in Urban Forestry Education



Case studies are used by instructors in a variety of professional disciplines to demonstrate to students how theoretical or conceptual principles can be applied in real world situations. Academic programs in business, medicine, education, law, and political science use a variety of case study approaches. These practical examples help students understand and anticipate the complexities of

situations they may encounter in their future careers. Some professional programs in other disciplines have developed or collected many instructional cases, providing a program-wide resource for teaching. Fewer urban forestry programs make use of case studies. This paper introduces the case teaching method and offers examples of cases that can be used in undergraduate urban forestry teaching and curricula.

### Learning and Instructional Theory

The case method of learning is premised on a mutual exploration process in the classroom. In conventional teaching an instructor provides technical and scientific information in a lecture format to build a student's knowledge base. A case offers opportunities for faculty and students to co-explore the meaning of that information in the complex social conditions that often surround urban forestry planning and management. Students develop reasoning and analytic skills as they integrate evidence and diverse perspectives. They also learn how to articulate concepts as they develop persuasive ideas. Perhaps the most valuable outcome is that students examine their own thinking processes and values, arriving at a learning state of "bringing more than I contain."

#### REFERENCES AND RESOURCES

- Leonard, J.A., K. L. Mitchell, S.A. Meyers & J. D. Love. 2002. Using Case Studies in Introductory Psychology. *Teaching of Psychology*, 29 (2), 142-144.
- Mcdonell, Maureen. 2002. Making a case for the Case Study Method. *Social Education*, 66 (11), 68-69.
- Saunders, Peter M. 1997. Experiential Learning, Cases and Simulations in Business Communication. *Business Communication Quarterly*, 60 (1), 97-114.
- Velenchik, Ann D. 1995. The Case Method as a Strategy for Teaching Policy Analysis to Undergraduates. *Journal of Economic Education*, 26 (1), 29-38.
- Wasserman, Selma. 1993. *Getting Down to Cases: Learning to Teach with Case Studies*. New York: Teachers College Press.

## Methods and Urban Forestry Examples

An upper level undergraduate survey course on urban forestry planning and management has been taught for three years at the University of Washington. Basic principles (e.g. management plans, tree inventories, and benefit/cost analysis) are presented in lecture format. Several case studies are interwoven through the technical content to help students understand the realities of how technical practices are conducted in settings beyond the campus. Students come to understand how stakeholder activities can interact with best available tree or forest science as decisions are made in the urban context. Students also compare their personal values about urban natural resources with those of interest groups.

Cases have included:

- analysis of a selected municipal urban forestry program using an urban forestry sustainability model
- review of primary documents and a policy analysis associated with historic tree removal in Vancouver (WA)
- reading and discussion of several articles pertaining to public controversy surrounding forest restoration projects in Chicago
- consideration of urban forest issues that are reported in local newspaper articles

Each of the cases involves discussion and analysis of the sequence of events that contribute to a situation or controversy. Students are introduced to an analysis framework that focuses on stakeholder motivations and resources, as well as the legal background of the situation. These interpretations, combined with review of the pertinent biological science are the springboard for exploration of alternative "what if" scenarios. As a group the class considers professional practices that can mitigate tree-based conflict.

### REFERENCES AND RESOURCES

- Clark, J. R., N. P. Matheny, G. Cross & V. Wake. 1997. A Model of Urban Forest Sustainability. *Journal of Arboriculture*, 23 (1), 17-30
- We Can Work it Out: The Heritage Oak Dilemma. *Project Learning Tree - Pre-K-8 Environmental Education Activity Guide - Systems*, 193-196.
- Ross, L. M. 1997. I. The Chicago Wilderness: A Coalition for Urban Conservation. *Restoration and Management Notes*, 15 (1), 17-24.
- Shore, D. 1997. II. Controversy Erupts Over Restoration in Chicago Area. *Restoration and Management Notes*, 15 (1), 25-31.
- Gobster, P. H. 1997. III. The Other Side: A Survey of the Arguments. *Restoration and Management Notes*, 15 (1), 32-37.
- Siewers, Alf. 1998. Making the Quantum-Culture Leap: Reflections on the Chicago Controversy. *Restoration and Management Notes*, 16 (1), 9-15.

## Student Benefits

Student response to case-based teaching is positive, despite initial frustrations with the uncertain structure of the approach. Learners come to understand that one can (and should) give as much attention to the analysis of human interactions surrounding urban forestry as to tree or forest science. In addition, learners are motivated to pursue additional information about the tools of public communications and the theory of public affairs. One student observed in a course evaluation, regarding a heritage tree controversy: " . . . *the most valuable insight I gained from the case study was that social science has as much to [contribute to] urban forestry as does silviculture . . . By understanding the nature of human emotions, and the desire to be a part of the decision-making process, some of the conflicts may have been minimized.*"



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