Book Reviews / Comptes Rendus

Winkelmes, Mary-Ann, & Wilkinson, James (Eds.). (2001). *Voices of Experience: Reflections from a Harvard Teaching Seminar*. New York, NY: Peter Lang. Pages: 131. Price: \$24.95 USD (paper).

Reviewed by Ana Jofré, University of Toronto.

Voices of Experience is a collection of short essays written by award-winning teaching assistants, adjuncts, and lecturers who had developed their pedagogical ideas in a seminar program developed by Mary-Ann Winkelmes at Harvard University. The title Voices of Experience may seem paradoxical given these essays were written by people who are at the beginning of their careers. However, in the academic environment teaching unfortunately often takes a lower priority for senior researchers, and it is usually the teacher assistants and the junior faculty who are on the front line in dealing with the students. Lab demonstrators and tutorial leaders, for example, routinely deal with students in intimate and interactive small group settings, as opposed to seeing masses of faces in a lecture hall. Voices of Experience gives us an insider's view of these interactions, and serves as a very instructional cross-disciplinary guide for all of those involved in teaching. Written in an anecdotal manner, it is pleasant to read and filled with useful tips.

Learning is an active process of questioning and discovery. It is unfortunate that due to time and space constraints, the university institution relies on formula teaching methods. This puts the student into a very passive role and limits their questioning process. *Voices of Experience*

offers a clear guide on how to change this pattern, and the most important lesson the book leaves with the reader is how to encourage active learning and student participation. Active learning occurs more effectively when the teacher takes the role of the facilitator in a class discussion, rather than as the deliverer of a dry lecture. The methods elucidated in the book cross all disciplines, although each of the writers share their experience from their own perspective in a given field.

The chapters by Rebecca J. Jackman and Erick Towne, respectively entitled "Mastery vs. memory: Conceptual thinking in quantitative science classes" and "Lectures without lecturing: An interactive discovery of key ideas in math and science," offer excellent examples of how to promote independent learning in the sciences. These notably remarkable teachers show that allowing students to discover things on their own and leading them through intuitive arguments, is the most effective way to solidify science knowledge. Unfortunately, as Jackman asserts, the standard method of teaching undergraduate science is by prescribing a series of algorithms and the importance of understanding concepts is often neglected. To pass the final exam, the students memorize the relevant formulas and follow the algorithm according to the prescription without much thought. Jackman shows the reader through examples of her methods in teaching chemistry, how to teach students science through reasoning and intuition rather than by algorithms. There is no need to memorize any formulas when one understands the physical process that they describe. It is these reasoning skills that some of the students will eventually require as researchers when they realize that there are no right answers in science, only well-constructed arguments backed up with empirical evidence. When students are taught to reason and question, they should be able to arrive at the concepts being taught in the classroom by their own means. In his chapter, Towne offers an excerpt from one of his own classes to demonstrate how he leads students through questions and discussion to arrive at the concept to be taught at the lecture.

Student participation through questions and discussions is an essential part of the learning process. Therefore, creating a comfortable environment where open questioning is encouraged and being able to direct classroom discussion in a productive manner, is an imperative teaching skill. To this end, "Losing it and getting it back: A teacher's basics for leading seminars" by James R. Dawes, gives tips and exercises on how to create this comfortable environment and maintain the students' interest. Students are more active in classroom participation when their ideas are valued, and instead of being made to feel ignorant, they are treated as less-experienced colleagues. "Four techniques that bridge barriers to knowledge: Sharing in the classroom" by Leigh M. Weiss explains in detail four specific workshop techniques that promote the exchange of ideas among students. In fact, in several essays in the book, it is emphasized that students actually have much to learn from each other, and thus they should be encouraged to share their own knowledge within the classroom setting. In particular, "Not in my village: Reflections on bringing musical culture to the diverse classroom" by Jennifer B. Kotilaine presents anecdotal evidence of when this knowledge sharing has not only been fruitful, but necessary, in conveying cross-cultural ideas.

Openness of discussion is also essential for effective teaching because the teacher has much to learn about teaching through student feedback. Teaching is a dynamic process — no two groups of students are the same or will respond to an explanation the same way. In one essay entitled, "When good teaching techniques stop working," by Jeffrey Marinacci, the teacher shares his experience of having a teaching method that had been very successful in the past and fail miserably one year. He found that the solution to this problem was to simply talk openly and honestly with the students about his teaching methodology. He subsequently used the students' feedback to construct the lessons and responded to their questions in his explanation of the material. In another essay, "Overlooked essentials for classroom discussions," written by Winkelmes, the idea that students should participate actively in setting the goals for the material to be covered in the lecture is explored. This leads to very fruitful class discussions where each student shares the responsibility for the learning process.

In addition to lectures and class discussions, *Voices of Experience* also covers issues teachers face outside the classroom. "Creating the environment for better student-teacher conferences" by Anne E. Fernald is on how to make office consultation time most helpful for the student. Help

outside the classroom setting is not necessarily restricted to office consultation time only. The book includes an essay entitled, "How to improve student's writing without reading any," by Kerry Walk on the effectiveness of out-of-class writing workshops, which serves as an instructional guide with examples and case studies. Work outside the classroom also includes the question of how to use marking as part of one's teaching. There are three chapters which deal with this issue: "Getting the most out of weekly assignments" by Sujay Rao; "Making grades mean more and less with your students" by Judith Richardson; and "Lessons from Michelangelo and Freud on teaching quantitative courses" by Todd Bodner. These give useful tips and guidelines on how to make the best use of assignments, how to give effective feedback when marking, and how to balance criticism with encouragement in one's marking.

Voices of Experience shares with other teachers valuable insights passed on by those who have derived these skills through their own experience. It serves as an informative reference and the informal character of the book gives the reader the feeling of a connection with these fellow teachers.



Huisman, J., Maassen P., & Neave, G. (Eds.). (2001). Higher Education and the Nation State: The International Dimension of Higher Education. London: Pergamon for the International Association of Universities. Pages: 256. Price \$89.50 USD (hardcover).

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This slim volume, jointly edited by three prominent members of the Centre for Higher Education Studies at the University of Twente in the Netherlands, is a recent installment (pre-9/11) in the Issues in Higher Education series published by UNESCO's International Association of Universities (IAU). The book is almost entirely about European Union (E.U.) member states. While dull in outward appearance and badly in want of a book jacket, the title is accurate. Inside I discovered six chapters written by academics of professional distinction and all but the last