

adolescentes est bien loin de celle qui peut révéler la vraie structure de l'univers scientifique qui mène à leur hostilité envers toute la question du rationalisme en général. Bien au contraire, car, à partir des propos présentés, rien ne justifie que les jeunes ne soient pas sensibilisé/e/s aux jeux et enjeux de la science comme le pensent les spécialistes en science (p.156). De plus, les auteurs précisent l'idée selon laquelle la juxtaposition de la pensée philosophique la plus élevée et de l'anachronisme de l'éducation à la science actuelle peut en effet susciter une révision des outils d'enseignement et de la prise de conscience de ces spécialistes à la réflexion épistémologique. Enfin, la réflexion critique provenant des jeunes, et longuement soulignée par les auteurs dans le texte, est un des aspects le plus important des programmes d'enseignement des sciences, dont il importe de prendre en compte, puisque leur principale raison d'être n'est-elle pas la construction des connaissances?

De façon assez générale, l'ouvrage se présente comme une vaste synthèse critique et sélective des publications portant sur la nature de la connaissance scientifique. Il soumet aux lecteurs et aux lectrices d'utiles données empiriques sur le savoir scientifique, sa production et le point de vue des adolescentes et des adolescentes à ce sujet. Il s'agit aussi d'un survol rapide des questions épistémologiques, mais les données et éléments de base sont bien rapportés pour ainsi diriger une réflexion éclairée. L'ensemble de la lecture est agréable, intense et instructive, quoique que l'organisation des chapitres nous semble quelque peu faible. Cependant, on retrouve dans cette recherche un outil important de sensibilisation et de soutien théorique. Parce que les propos spontanés des jeunes évoquent la plupart du temps les réflexions retrouvées au sein des membres dans les diverses communautés scientifiques et parce qu'une telle analyse descriptive et synthétique est fondamentale pour comprendre en profondeur la réalité des sciences en éducation, nous recommandons la lecture de cet ouvrage à tous ceux et toutes celles qui ont besoin d'une réflexion dite éclairée.

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Berman, L.M., Hultgren, F.H., Lee, D., Rinkin, M.S., & Roderick, J.A. (1991). *Toward a curriculum for being: Voices of educators*. Albany: SUNY Press, 189 pp., \$12.95 (softcover).

Perhaps the best measure of the success of *Toward a Curriculum for Being: Voices of Educators* is that I was drawn into the conversation these authors were sharing with me.

As is fitting for a book about voices, it is divided by voice. The first section is

the collective voice of the five women whose conversation we are privileged to share. Each remaining section is one woman speaking with two voices: an autobiographical voice and a more academic one, in the papers they presented at American Education Research Association Annual Meetings. Each section concludes with comments by Ted Aoki, their discussant at AERA sessions.

These papers came from an extended conversation about alternatives to what seemed the too restrictive epistemology that dominates educational discourse. Their project is focused around the search for voice and the search for meaning. These themes are united as they came to the realization that, while it is possible to analyze epistemology apart from voice, when lived, these become blended.

In effect, this book is a record of their struggle to integrate knowledge and life — how to live what we know and know what we live. Their protest is voiced against the constraints they feel in their academic communities where conventions of knowledge distance the knower from the known. Each has been trained in a basically positivist tradition but comes to view this tradition as inadequate for a reasonable description of the world as lived. What is missing is meaning, interpretation.

As we read their struggles to reconcile more traditional epistemology with the interpretive moves of Gadamer and the implications of Heidegger's view that we are "thrown" into being, we confront them with our own answers to these questions. How do we educators relate our being to our knowledge and by what standards do we "judge" "evidence" of pedagogical effectiveness and/or purpose?

More to the point, if education is the "knowledge transmission" business it often seems to be, how do we construct knowledge; how do we know? And what knowledge do we transmit? But if that is an inadequate definition of education, as these educators insist, then how do we seek new definitions in our current institutions? Perhaps the greatest indictment of educational institutions is that these educators felt forced to consider these questions outside of their formal institutional frameworks. And we are left to wonder: What sort of education can we be giving to future teachers if their schools of education are places where serious consideration of the relation between knowledge and the self is difficult? What will be the practice of teachers who believe that knowledge is external to and apart from their "real" knowledge?

So these women came together to seek ways to integrate their lives and their different ways of knowing and they discovered something unanticipated: Their caring for each other is part of their education. They learn about each other as they read their papers and carry on their conversation. But more than that happens: They also learn about themselves as they write and re-read their own papers. The safety of the caring group allows for this self-discovery through self-revelation.

The question of gender is raised by the fact that these are women and their project is an attempt to validate (for themselves, initially) their ways of knowing. Their attempts to make sense of education are reflected in homey metaphors of cooking, weaving, and sewing, as well as special metaphors of journey or pilgrimage and, in a complementary image, education as dwelling place. (Francine suggests that we live "inside" our questions.) And when questions have this sort of significance we learn not just from the answers we get, but the questions themselves and the unanticipated paths these lead the pilgrim to discover. As Jessie asks: "What are the questions (from the group) that help me listen to my story?" (p. 168).

My first reaction was that this is a consequence of the fact that these are women and that sewing, cooking, music, and weaving are women's metaphors for making sense of their experience. But how sad that this relationship between gender and metaphor exists. For what and how we know is central to our humanity and the metaphors that these women discover are those that are at the heart of social life, also central to our humanity. If these ways of conceptualizing knowledge and learning are "women's ways," then men do not come as easily to see knowing in ways that place it in its proper perspective to living. This too is part of their message.

The difference between the way schools are and the way they might be is suggested by the tone of the papers. There are few answers given here, but the outlines and importance of our uncertainty and ignorance are explored in a tentative and seriously questioning voice. If education is the search for meaning, then the voice of these women needs to be heard more insistently in our schools. From the perspective of schools of education, this question is two-edged: How can the discourse of schools of education be more closely tied to the practice of real teachers with real children and how can the practice of real teachers with real children become more cognizant of the important foundational questions being asked at some schools of education? For teachers and administrators trying to get real children to perform on the tests by which they are measured, tests which for the most part do not take the epistemological questions raised in *Voices of Educators* seriously, these questions may be seen as interesting, but they are not obviously helpful to practitioners in their professional lives.

Despite the occasional rough transition from one voice to another, this is an engaging conversation among interesting people asking honest questions of themselves, each other, and by extension, us. The book succeeds; I find myself wishing I could somehow earn an invitation to a place at their table.

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