



Peter Fensham—the Great Synthesizer and Facilitator: a Few Thoughts from a Personal Perspective

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Science for All probably features in any overview of Peter Fensham’s contributions ever since his seminal reflective essay bearing this label was published in 1985. Three decades after the emergence of *Science for All*, Peter reflected retrospectively: “the issue of an appropriate Science for All is still largely unresolved” (Fensham, 2016, p. 175). The lasting challenge set by Peter encompasses the entire scope of science education and goes beyond it. The fact that *Science for All* was first published in the *Journal of Curriculum Studies* attests to the importance Peter gave to thinking in terms of broad curriculum issues. This is clearly reflected in his 1992 curriculum chapter “Science and Technology” in the *Handbook of Research on Curriculum*—a quality project of the American Educational Research Association (AERA) edited by Philip Jackson. For me, this curriculum chapter has been Peter’s most influential paper. It illustrates his contributions as a great *synthesizer* of ideas and *facilitator* for further thinking, to which I return after anecdotal words on my first encounters with Peter.

I saw Peter for the first time in 1978 during my first overseas conference that took place in Nijmegen, Netherlands (conference on integrated science education, organized by the International Council of Associations for Science Education, ICASE). I had just started my doctoral studies and an award for my then recently completed curriculum project enabled me to travel to present my work. Later I realized that once a science educator started traveling professionally s/he was likely to bump into Peter who was a globetrotter—constantly learning, sharing, and disseminating ideas across the world. This was fondly described by Richard Gunstone as the Fenshemian Law of Motion: “If you stand in any airport long enough Peter Fensham will be passing by”. I do not remember talking with Peter during the conference in the Netherlands, but the next two encounters that occurred in Israel were significant for me: a literature encounter and a personal meeting. The literature encounter happened in the late 1970s when I was exploring Ausubel’s theory as a basis for my study and was glad to find in the first issue of *Studies in Science Education* the helpful review that Peter co-authored with Leo West (West & Fensham, 1974). The personal meeting took place in the early 1980s (cannot recall the exact year) when Peter attended a conference in Israel and visited the Weizmann Institute of Science. This was the first opportunity for a conversation with Peter, and as a graduate student it was gratifying to meet a “big name” who seemed to me to be curious and genuinely interested in my work.

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The next meeting was in Melbourne in 1985¹. Peter waited at the airport upon my arrival to begin a post-doctoral fellowship at Monash University. He welcomed me as if we were old friends or even family. It was Saturday, and on the way to my accommodation we stopped at his daughter's to see the grandchildren and then had lunch at home with his wife, Christine. So informal, so casual, even though he is "The Dean" and I am a foreign junior academic. Three days later I was already at the ASERA conference in Rockhampton, from where—at Peter's order—I continued to the Great Barrier Reef. In my first Saturday as a Melbourne resident, Peter continued the processes of enculturation in Australia and getting used to "Fenshemian unexpectedness" by taking me to the "footy" (Australian Rules Football): Richmond versus North Melbourne at the MCG—Melbourne's major stadium. Peter also invited Lawrence Chia—a chemistry professor from Singapore who was then in Melbourne. It was quite something to see the three of us at the football: a Singaporean professor with a suit and tie (as should be when you are invited by a dean in a major university), an Israeli in a trendy outfit, and Peter wearing shabby clothes, carrying a bag with food and drinks, and shouting "Tigers – don't let me down!" But Richmond (the "Tigers") lost.

Why have I just talked about my early experiences down under? Probably because it is fun to reminisce about good old days, but no less than that because I believe that these experiences reflect something of "typical Peter": always on the move, mixing cultures, doing things his own way, unexpected. This is also reflected in his academic work on which I will make a few non-systematic comments, starting with Peter the Dean during my time at Monash University, 1985–1987.

The Monash Faculty of Education in the 1980s was a most stimulating place with the science education group being the cherry on top of a rich cream cake. The group included internationally recognized scholars to whom Peter provided leadership, initially by being directly or indirectly responsible for their coming to Monash, and then, by facilitating their work and by delineating an overarching vision. I remember his little pale-green memos where the "TO" line was followed by a hand-written list of several addressees—both students and faculty—and then a reference to a paper or book that might be of interest. In a personal conversation Peter admitted that he was aware that not all took serious notice of these memos, but even so, he felt that it was important to continue steering people. When I became the establishing executive director of an innovative centre for science education in Tel Aviv, I used a similar strategy of memos and weekly faculty notes, and the limited success became less frustrating when I reminded myself of Peter's words about just steering people as a worthy goal.

As I have already said above, for me, Peter's most influential paper was the chapter in AERA's *Handbook of Research on Curriculum* (Fensham, 1992). This curriculum chapter illustrates Peter's ability to synthesize ideas from across the world and from across disciplines—history, sociology, political science, psychology, and more. Never before had I seen such a broad perspective on the science curriculum and generally on science education. My latter statement may be evidence of my lack of sufficient knowledge of the preceding literature, but the case may also be that nobody before had thought about it and dared to take up the challenge. In subsequent years, reviews on the science curriculum have, of course, provided updated examples and trends, but in my opinion, none reached the originality and breadth of Peter's curriculum chapter in the 1992 handbook. And thus, this chapter has

¹ This paragraph was originally part of a personal note that I sent to Richard Gunstone in 2008. He quoted the paragraph in his article on Peter Fensham in the special issue of *Cultural Studies in Science Education* about ASERA (Gunstone, 2009, p. 307).

remained my ultimate curriculum review and has become a required reading in my graduate course on change in science education—goals, obstacles, and possibilities (taught at the Weizmann Institute of Science). Due to the chapter’s page length and conceptual scope, it is not an easy read (particularly so when English is a second language), but students who are “broad conceptualizers” appreciate the challenge and feel fulfilled.

Talking about curriculum, I also wish to highlight Peter’s typology of STS curricular materials (Fensham, 1988) in which he synthesized curricular approaches from old days “applied science” to the multiple STS orientations of the 1980s. As often happens, Peter’s ideas which might have been rather raw at the beginning were later adopted and reworked by others into more orderly and accessible versions (Aikenhead, 1994, 2003). Here, again, Peter was a synthesizer and facilitator.

The next example of a synthesis, which—so I believe—only Peter could have thought of and accomplished, emerged from his globetrotting: the grand interview study of science educators across the world in search for the identity of science education. I became aware of this enterprise at the 1998 meeting of the National Association for Research in Science Teaching (NARST) in San Diego, while attending Peter’s keynote address titled *Dreams fulfilled and lost: An evolutionary view of science education as a research field*. This lecture was then difficult to grasp and left me quite bewildered (apparently not just me, as some of the audience reactions and questions suggested). I suspect that in 1998, Peter himself had not yet been sufficiently confident in teasing out the themes and patterns that cut across the many interviews and in finding how to present them. Six years later, the book based on this study (Fensham, 2004) was a pleasant surprise for me, providing new insights and things to ponder over (putting aside methodological questions on the underlying free-style study).

My concluding example for Peter the great synthesizer-facilitator is the publication of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in which he identified emerging issues for policy making in science education (Fensham, 2008). In a related keynote address at the 2008 NARST meeting in Baltimore, Peter examined the role of research in the problematic interplay between policy and practice. While I was attending this address and later reading its extended written version (Fensham, 2009), it came to mind that once again Peter was pushing us forward.

Declarations

Conflict of Interest The author declares no competing interests.

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