Is "voluntary technological growth" a contradiction in terms? When I first read those three words in the accompanying article by Joyce Killian, something about the concept seemed unusual. Now I realize what surprised me. The idea runs counter to the widespread perception that educators don't take easily to learning about new technologies. "Voluntary," indeed. Everyone "knows" that teachers don't like change.

Yet Killian's research and others' experience suggest that something different is happening today, and this difference has challenging implications for staff development. A major difference is that the motivation to learn about computers is being driven by both external and internal forces. The extrinsic motivations derive from the unprecedented pace with which computers have been accepted into our culture. This context puts pressures on education organizations to "do something," not only to stay current with the rest of society but also to equip students with the skills to live and work in that society. This context puts pressures on education organizations to "do something," not only to stay current with the rest of society but also to equip students with the skills to live and work in that society. But there are intrinsic motivators, too, as suggested by the frequent comment of adults taking computer courses that they "don't want to be left behind."

This dual motivation helps explain the "voluntary" aspects of Killian's concept and why the nontraditional approaches to staff development that she suggests are necessary. Voluntary growth requires an appropriate environment and opportunity for it to occur. It places an increased staff development responsibility on those who structure and influence those environments—building and central office administrators.

What Killian indicates is the need for a *simultaneous top down*/*bottom up* approach. Start inservice at the top so that administrators can understand their staff's support needs based on their *own* experience with similar learning situations. This sensitivity to what one must go through to master a new tool and apply it to other needs is quickly reflected in the environment of expectations and support that is created.

Start inservice at the bottom by providing opportunities for staff to develop understanding of and skills in using new tools in relation to their *own* needs and problems. This tool and applications approach to learning contributes an additional motivator—relevance.

Killian also suggests the nature of the process needed to connect the "top" and "bottom." Administrators and teachers who are learning how to meet their own needs require structures that support and use the learning of both groups. Two traditional structures—planning and training—become inexorably entwined in a continuous process that uses the school system's own experience as a major information base for its planning and decision making. Networks among and within schools serve to generate this data and provide the opportunities for peer exchange and training.

The administrative challenge that Killian suggests is a personal one. Don't deny yourself the opportunity to learn how to use a computer. But learn before someone tries to "teach" you. That is, find ways to learn through processes over which you have some control; and most important, stay in touch with the most valuable "course" data—your own experience. What you learn from your struggles can be applied most readily to your support of other staff members. Comments from both administrators and teachers also suggest that in the long run there may be another significant consequence: "I forgot what it feels like to not know." "... not to know enough to ask a question..." "The satisfaction from little accomplishments kept me going."

Hopefully, these reawakened sensitivities to what it feels like to be a student will influence the "involuntary growth" environments of classrooms and schools.