

## CHAPTER 19

# CONCLUSION

Well, how did it go? It takes a bit of letting go, doesn't it? We teachers are notorious control freaks, if we are willing to admit it to ourselves, and turning some power of control of the curriculum over to the kids is tough. After all, we are ultimately responsible for what they learn and in today's world where high stakes testing is the ultimate form of accountability it puts a lot of pressure on us—and them. And sure, I know, it takes a lot more time to teach for inquiry. The pressure to “cover” a certain amount of material is always lurking in the back of our minds. But if we think of teaching for inquiry as “uncovering” material it makes a bit more sense. By using the formative assessment strategies suggested in this book and in books that help you probe for students' understanding (Keeley, Eberle, and Farrin 2005; Keeley, Eberle, and Tugel 2007), we begin to realize that uncovering material and teaching for understanding in reality is ethically what we must do. Since students come to us with ideas already firmly entrenched and since we need to make science relevant to their lives, it makes sense to teach fewer topics and shoot for deeper understanding. Our science and math curricula have been criticized for being a mile wide and an inch deep. It has been criticized for trying to cover too many topics in too little time. If this criticism is valid, then we need to work with our students, finding out where they are and then proceeding from there. Our role then becomes one of helping them to

look, without telling them what they must see. Only then can they continue to keep looking for explanations to the everyday science mysteries that spice their lives and do so without our holding their hands forever. Our role then becomes one of helping them to become less dependent upon us and more secure in using the skills we have helped them to hone. They will have to probe, through authentic inquiry, into questions that are important to the future of society.

It is our heartfelt wish that this book has helped you, in some way, to see science teaching in a different way. If it has, then we have taken another small step toward developing a scientifically literate society. The road is long and the future will look frightfully strange and new to us. But to our students who will live in that future world, it will be exciting and challenging and will require at least one common skill for those who will cope with the lightning-fast changes in their lives—the ability to maintain and use an inquiring mind.

## REFERENCES

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- Keeley, P., F. Eberle, and L. Farrin. 2005. *Uncovering student ideas in science: 25 formative assessment probes* (vol. 1). Arlington, VA: NSTA Press.
- Keeley, P., F. Eberle, and J. Tugel. 2007. *Uncovering student ideas in science: 25 more formative assessment probes* (vol. 2). Arlington, VA: NSTA Press.