Conclusion. Since 1992, Project Kaleidoscope has sponsored eight workshops and colloquia on undergraduate facilities for science and mathematics, in which over one hundred and fifty institutional teams have participated. Based on the experience of these meetings and the experience of institutional teams whose planning has been informed by these meetings, we suggest facilities that work are those that:

- clearly reflect the educational goals for the sciences and mathematics within an overall institutional framework, for the immediate and the long-term
- support learning that is experiential, hands-on
- recognize the increasingly social character of scientific research and teaching by facilitating productive interaction between and among students and faculty
- acknowledge the role of serendipity in the doing of science, by including spaces for exploiting the unplanned, teachable moment
- are so inviting, safe, and well equipped that they are used by students and faculty most hours of the day, seven days a week
- anticipate the future by providing flexibility in space and infrastructure
- respect and reflect the community that brought them into being
- contribute to the humanity of the campus.