ED592 School and Workplace Cultures
Capstone
John Maklary

As we enter the 21st Century, one of the biggest challenges facing educators will be to prepare their students, the future workforce, for a highly technical workplace. Education experts agree that "as technology rapidly advances, it is the educator's obligation to properly prepare students for the new working world." (Bombelli) The use of new technology and an increasingly global economy "have dramatically changed the skills needed to make U.S. businesses competitive and productive." (Critical issues) Educational institutions and business partners are now working together to define the ultimate workforce for the 21st Century. Effective workers of the future will need to be proficient in these areas:

- Resources: how to allocate time, money, materials, space and staff.
- Interpersonal Skills: how to work as part of a team, teach others and work with people from culturally diverse backgrounds.
- Information: how to acquire and evaluate data, organize and maintain files, interpret and communicate, and use computers to process information.
- Systems: understand social, organizational, and technological systems; monitor and correct performance and design and improve systems.
- Technology: select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment. (Workforce Skills)

As a small, rural community, the Oakridge School District needs to make sure that opportunities are available to our students so they can be competitive in the New World economy. By integrating the above workplace competencies into everyday life, not just school and home, we can be confident that America's potential for an educated 21st Century workforce will be realized.

REINFORCING THE TRAINING OF THE ULTIMATE WORKFORCE

The biggest challenge for training this future workforce is providing the necessary resources with decreasing funding sources. Schools are relying more and more on outside agencies such as grants, foundations, business donations of money and equipment, and community donations to create vocational learning opportunities for students. Furthermore, purchasing technology can be very expensive and the rate at which it is continuously changing is phenomenal. Attempting to "keep up" puts educational institutions at a hardship.

Fortunately, education is not alone in the quest for training a new workforce. At all levels, Government is getting involved in assisting schools. "The Federal School-to-Work Opportunities Act of 1994 authorizes grants to state education agencies, local education-

business partnerships, as well as national research and demonstration programs, that create and implement school-to-work programs." (Tress) By using federal funds to underwrite the costs of planning and implementing a School-to-Work program, this act will help "utilize workplaces as active learning environments in the educational process by making employers joint partners with educators in providing opportunities for all students to participate in high-quality, work-based learning experiences." (H.R. 2884)

"Effective school-to-work programs are based on strong partnerships between local schools and businesses." (Paris) In the Oakridge School District, School-to-Work helps many high school students who may not necessarily be college bound. By partnering with the local community businesses, students are able to get hands-on experience in retail, service, and technology-related fields. "These partnerships create programs that improve the way students are prepared for college, careers and citizenship." (Tress) This is an exciting opportunity for students in Oakridge because not so long ago, most graduating seniors would go work in the lumber mills just like their family members had done because logging represented most of the employment in the area. As the timber industry shrinks, students now have the need and desire to seek alternative ways to start an upwardly mobile career.

One of the most notable partnerships in our community is with CISCO Systems. In conjunction with Lane Community College, a grant opportunity was realized when CISCO agreed to subsidize the training of local students and residents who were interested in receiving training in a high-tech career. The response was overwhelming. Only 16 students could take the two-year course and over 40 applied. I spoke with several students in the class about why they felt they needed a class like CISCO. In every case, the students realized and understood that this could be their ticket to success after high school. Most of the students are not college bound but are highly motivated to succeed in an ever-changing world. They feel lucky and fortunate to have this learning opportunity in our rural area and it shows with their performance. In addition, a night CISCO class has opened up for community members who wish to take advantage of new career opportunities. My neighbor, who has been a logger for 15 years, is enrolled in the class. His response when asked why he was taking the class was "I want to get out of the woods and try to find a career that has stability to support my family." With his high level of motivation, it is not surprising how well he is doing in the class. I think self-motivation is the key factor for the success of all people taking the class.

Job Shadowing is another successful program that our district believes will help prepare students for work in the 21st Century. Two years ago, I was working for a retail company in the MIS department as a Y2K programmer. A student from Oakridge High School asked if he could shadow me for a day because he was interested in "doing something high-tech." I think it was a positive but humbling experience that gave him insight on how a business actually runs. I was surprised by his very intuitive and accurate impression of the skills necessary to be successful in the workplace. He said that he

realized that although high-tech skills are necessary, other skills such as solving problems, thinking critically, and working as part of a team were just as important. Job shadowing, as well as School-to-work programs can enlighten students and future members of the workforce community to a diverse set of skills that are crucial to professional success.

Oakridge Elementary School is also providing opportunities for the community to become involved in training the 21st Century workforce at an early age:

- SMART reading program – Business leaders, local officials, and the community volunteer in a book and reading program for children in kindergarten through second grade. (SMART)
- Family Resource Center – Community building and outreach, technology, reading and math literacy, family support programs.
- 21st Century Learning Grant – Homework Club, after-school art and learning activities.
- Community Information Fair – Community organizations set up booths to share information.
- Family Math and Science Nights – children and their parents are invited to participate in math and science projects led by community volunteers.

The principal of the elementary school is the lead proponent of all these programs and strongly believes that students are never too young to start preparing for the 21st Century.

PITFALLS AND CAVEATS

Although providing alternative methods of education can assist students to be career-ready, some feel that it comes at a cost to basic skills. Our district's overall math and reading test scores give credence to those educators who feel that we should be concentrating more on those deficient subject areas. In my 7th grade classes, I have students who can barely read attempting to understand the menu items in Microsoft Word. Should we be forcing technology down their throats if they are not academically ready? Or will technology be the seed that helps students grow into well-educated and productive citizens? I certainly hope for the latter.

Financially, bankrolling highly technical learning centers can drain resources for other, perhaps more urgently needed subjects such as reading and math remediation. Furthermore, as technology changes at a furious pace, the need to continuously upgrade can become a budgetary problem…do we upgrade our computer lab or do we keep a teacher? The brand new technology lab that I teach in would not have been possible without the generous $40,000 donation from a retired teacher. If that contribution had not happened, I feel that the technology program at Westridge Middle School would not be a reality.

CONCLUSION

Schools are in a difficult situation. How do schools prepare students for the 21st Century while making sure they are meeting their required benchmarks in areas such as reading and math? How are schools expected to fund all of these potentially expensive programs? By starting basic reading and math skills programs at an early age, students will be better prepared in higher grade levels to capitalize on career opportunities provided by the school, community and business. Finding outside funding sources is critical to make this happen. Perhaps we are in an era of "Educational Funding Darwinism." Those that rely solely on state funding may not be able to provide the proper training and resources for their students. Those that aggressively pursue grant opportunities stand a much better chance by providing programs that directly address basic skills at the elementary level as well as technology resources throughout the district.

Business and the general community play a significant role in this equation as well. School-to-Work, mentoring, Job Shadowing and volunteering are programs that schools cannot do by themselves. It is essential for schools to foster good working relationships with these groups and to provide support for students who take advantage of vocational programs. Businesses also benefit from these programs. "By working closely with schools, businesses can ensure that future members of the workforce are well prepared to function in high-performance workplaces." (Paris) The key is community and partnerships. These are concepts that will prepare our students to be successful and productive citizens in order to meet the challenges of the 21st Century.

REFERENCES

Bombelli, Joseph. Pathways to a new way of learning and a new way of teaching. The Journal Magazine. October 1999.

Paris, Kathleen. Critical Issues: Working in Partnership with Business, Labor, and the Community. http://www.ncrel.org/sdrs/areas/issues/envrnmnt/stw/sw600.htm

Tress, Marcia H. Tech-Ed for the 21st Century. Curriculum Administrator Magazine. December 1999.

Skills for a New Century: A Blueprint for Lifelong Learning. SCANS, http://www.scans.jhu.edu/

Workforce Skills. SCANS, http://www.scans.jhu.edu/workplace.html

H.R. 2884 (1994): School-to-Work Opportunities Act of 1994. U.S. Congress. http://www.stw.ed.gov/factsht/act.htm

SMART (Start Making a Reader Today). Brochure. Springfield, OR. 541-726-3302.