Research on the effectiveness of career exploration as viewed by 1100 senior high school students involved in Experience-Based Career Education (EBCE) projects in 16 states is reviewed. Results suggest that the learning potential of community experience can be improved in the following six ways: (1) offering challenging work; (2) selecting activities that foster student responsibility; (3) giving clear directions combined with freedom to explore; (4) offering hands-on learning; (5) providing opportunities to develop relationships with one or more individuals at worksites; and (6) counseling students about reactions to boring and repetitive tasks. A brief description of EBCE, identification of factors in the workplace detracting from quality learning, implications of the research findings as seen by employers and program staff, highlights from related studies, and ideas for new research are given. (JW)
Improving Learning in the Workplace: How Youth See Their Career Explorations

Ideas for Action in Education and Work, Issue 2

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Improving Learning in the Workplace

How Youth See Their Career Explorations

A common strategy for many youth employability programs has been to place the youth in several different worksites for short periods of time. How well does this job sampling work? NWREL Education and Work Program designed and conducted research aimed at answering the following specific concerns:

- Do young people feel that they learn from their career explorations at worksites?
- What specific learning occurs?
- What happens at these sites that contributes to or detracts from such learning?
- What job site characteristics do youth associate with excellent or with poor community learning experiences?
- How do various youth differ in their perceptions?
- What can be done to improve the quality of learning at worksites?
- How can the study benefit youth in career explorations, study placements or community internships?

Some Answers We Found

The results of this study suggest to the researchers, Tom Owens and Sharon Owen, six ways experiential education staff can improve the learning potential of community experiences.

- Individualized tasks that are planned for and with young people should be sufficiently difficult to challenge them. Tasks perceived as too easy seem to "turn off" many students.

Editor's Note

Ideas for Action in Education and Work is the beginning, for us, of a new way to provide service. The steady growth of interest in education/work programs has generated a wealth of new information, but the sheer mass of this knowledge has hindered practitioners and policymakers from using it to make decisions. We hope this document and the ones to follow will provide information in its most usable form.

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Editor's Note (continued)

The research findings presented in this issue, Improving Learning in the Workplace, make a strong case for structuring work experiences in certain ways to provide maximum learning benefit. Some differing and enlightening views of this research come from the employers, staff and administrators with whom we shared the study results.*

Our first issue, Removing Barriers to CETA/Education Collaboration, was well received by the readers. As with any first effort, we learned a few things from our audience. The issue sometimes got stalled in administrators' inboxes and failed to get into the hands of a number of people who could profit from it. Several readers suggested we include articles or comments from practitioners.

We have therefore changed our distribution strategy and broadened our selection of contributors. The present issue, prepared by Tom Owens, includes related research findings by others and the discussion of the NWREL findings by employers, by Experience-Based Career Education program staff and by the Executive Committee of the National EBCE Association.

Future issues in this series will describe what we are learning about:

- Community-based experiential approaches with delinquent youth
- New strategies used in career redirection for adults
- How documented volunteer experiences can lead to paid employment

Let us hear from you to exchange ideas, to report what you are doing and the implications of your efforts, and to suggest topics for future issues.

*For a more detailed description of these findings, presented in April at the annual meeting of the American Educational Research Association, write to Tom Owens, Education and Work Program, Northwest Regional Educational Laboratory, 300 S.W. Sixth Avenue, Portland, Oregon 97204, or call 503/248-6800 x 431. Outside Oregon, call (toll free) 1-800-547-6339.

How Youth See Their Career Explorations (continued from page 1)

- Young people are generally ready and eager for mature adult responsibilities. They need to be aware of the consequences of their actions and to accept both positive and negative outcomes. Activities at both the community site and at school need to be designed to foster student responsibility.

- Although students want clear directions, they also need freedom to explore areas not planned in advance.

- Students rate hands-on learning as a very important factor in an excellent learning opportunity. Program staff need to remind themselves and community representatives of the importance of this feature and to build it into as many facets of the curriculum as possible.

- Opportunities should be provided for students to work closely with and form a good relationship with one or more individuals at each worksite.

- Program staff may want to do some systematic group counseling with students about their reactions to boring and repetitious tasks. Even the most exciting jobs involve some boring tasks and young people need to recognize this and learn to cope with such aspects of a job.

Background to the Study

NWREL's research, conducted over the past two years, involved more than 1100 senior high school students in Experience-Based Career Education (EBCE) projects in 16 states throughout the country. (A brief description of EBCE appears on page 5 for those not familiar with the program).

For this study EBCE programs were selected because (1) they would ensure a good cross-section of American youth, (2) EBCE student...
activities at worksites were known and documented and (3) EBCE students attend from four to eight career exploration worksites each. Thus, each student had a comparative perspective and could be asked to describe characteristics of sites where either excellent or poor learning had occurred.

Regardless of sex, race, grade level, grade point average or occupational preference, students in Experience-Based Career Education considered two-thirds of their worksite experiences as having produced excellent learning opportunities. This outcome suggests that community-based experiential learning is judged equally effective by all types of students—although the experiences encountered and the meaning attached to these experiences is never identical for any two students.

The things most often learned (in order of frequency) are job-specific skills, use of tools and equipment, how jobs work, understanding of others, responsibility, and an understanding of themselves and their own interests.

Youth Describe Best Learning Sites

Youth named the following worksite characteristics as contributing most to excellent learning experiences:

- "trying out the work myself"
- "applying learning to new things"
- "being given adult responsibility"
- "listening and talking with adults at the site"
- "clear directions to follow"
- "adult encouragement for doing tasks well"

Each of these characteristics was also rated in the top eight out of 19 reasons in an earlier study conducted by Owens and Owen with 218 EBCE students in different sites in 1978.

Mangum and Walsh, in a 1978 review of employment and training programs for youth, also noted the importance of good adult supervision and well-defined tasks that youth see as having a purpose. Their advice for improving job quality included "do not place enrollees in ill-defined jobs which require little supervision, make few demands on the enrollee and which have little relationship to the real world of work".

Poor Learning Sites

In this study the main reasons selected by students for little or no learning were

- "boring tasks"
- "no opportunity to apply learning to new things"
- "no opportunity to explore other areas of interest"
- "no opportunity for hands-on learning"
- "too much repetition of the activity"

In the earlier study of 218 students at other EBCE sites in 1978, the same five reasons were the top five out of 20 reasons selected by students.

This current study helps confirm findings that can be generalized to other EBCE programs. These findings are consistent with those reported in Work in America, where oppressive features of work were found to be "constant supervision and coercion," "lack of variety," "meaningless tasks" and "isolation".

When asked what they actually did at low learning sites, 14 percent of the students in the NWREL study wrote that they did not have a chance to do anything. Only 52 percent (as compared with 72 percent at excellent learning sites) named job-related tasks.
Responsibility

In a related aspect of the current study, NWREL staff took the list of job tasks cited by students and rated them according to the low, moderate or high level of responsibility attached to them. It was discovered that students at excellent learning sites were involved in more tasks of moderate and high responsibility, while students at poor learning sites engaged in greater numbers of low responsibility tasks. It is also notable that the relatively passive activities of observing, studying and listening were more frequently reported for the poor learning site experiences.

Career Goals Affect Values

Not all students value the same conditions at worksites. For example, students who aspire to jobs having a higher socio-economic status and those aspiring to scientific (investigative) or artistic careers placed a significantly higher value on "challenging tasks."

In looking at the personality characteristics associated with investigative careers, John Holland found such people describing themselves as curious, intellectual and analytical. Similarly, people interested in artistic careers were more likely to be imaginative, independent and intuitive. Seymour Lipset points out that an occupation is accorded high status not only for earnings and social usefulness, but because it is challenging; such occupations involve risk and difficulty in qualifying for the work and in carrying out the work successfully.

Length of Enrollment

The length of time a person is enrolled in an experiential program also influences what he or she considers to be an excellent learning experience. The earlier study of EBCE found that students who were enrolled for a greater length of time in EBCE attached increased importance to discussing their experiences with others. In the present study, students in EBCE for more than one semester rated the lack of "opportunity to discuss experiences with others" significantly more important in contributing to a lack of learning than did students enrolled for a shorter time.

Relationship with Employer

EBCE students responded on scaled items to five statements about their relationship with their supervisor at a site where they felt they had an excellent learning opportunity, and to the same statements for a site where they felt they learned little or nothing. At sites where they felt they had an excellent learning opportunity, students who had been in EBCE for more than one semester were more likely to have discussed their future plans with their supervisor than was true for students in EBCE for their first semester.

Hispanic and white students were more likely than black students to have talked with their supervisor about what was happening at the site and about sports, hobbies and personal matters. This outcome may be influenced by the fact that part of our Hispanic population was in an EBCE program in Puerto Rico. With these Hispanic youth and with white youth, the ethnic background of the student and the employer was more likely to be the same, whereas black students were often engaged in learning experiences with white employers.

In cases where the student and employer are of different ethnic backgrounds, there may be a greater need for program staff to encourage employers to spend time talking with students both about things happening at the work site and about personal interests. These kinds of conversations can give students a better idea of the personalities and life styles that go with a job.

Conclusion

Various national panels of experts in the 1970s criticized traditional secondary education for failing to provide youth with opportunities that develop a sense of responsibility and put them in meaningful relationships with adults. Their somewhat simplistic answer was to get young people out of the classrooms and into the com-
munity for their learning. It is apparent, however, that students can waste as much
time at a worksite as they can by sleeping
in the back of the history class. There-
fore, a challenge of the 80s is to identify
what factors of the workplace lead to
quality learning and which ones detract
from it. This present study was intended
to be a step in that direction.

Other articles in this Ideas for Action
describe implications of the findings as
seen by employers and program staff. High-
lights of findings from related studies and
ideas for new research are also discussed.

What is EBCE?

Experience-Based Career Education (EBCE)
was initially designed as an alternative
program for a full range of high school
students. The program integrates
individual direct learning experiences in
the school and in the community. EBCE
learning opportunities are geared to help-
ing students in three key areas: career
skills, life skills and basic skills.

Begun in 1971 and sponsored by the National
Institute of Education, EBCE has been
developed and implemented through four
regional educational laboratories--
Appalachia Educational Laboratory, Far
West Laboratory for Educational Research
and Development, Northwest Regional
Educational Laboratory and Research for
Better Schools. A demonstration site was
established by each laboratory between
1971 and 1975. These four demonstration
sites received substantial federal funding,
operated under common guidelines and were
carefully supervised to assure compliance
with each laboratory's EBCE model. The
program and student outcomes at these
demonstration sites were carefully evaluat-
ed by the four laboratories; a third-party
evaluation was performed by Educational
Testing Service (ETS).

Although each of the four models had dis-
tinctive features, all four shared certain
goals relating to helping students develop
the knowledge and skills necessary for
choosing, entering, advancing in and find-
ing satisfaction in adult roles.

Since the initial development of EBCE,
the program has been successfully adapted
to many special populations, including
economically disadvantaged, gifted and
talented, junior high school youth,
juvenile delinquents, migrants, the hand-
capped, and adults seeking career redirec-
tion. The 1979 national directory of EBCE
programs, sponsored by the National EBCE
Association, describes 190 programs in 48
states, the District of Columbia and Puerto
Rico. In 1981 EBCE served over 25,000
students.

Employer Reactions

This study of student perceptions of their
workplace was conducted to provide useful
information not only to educators but also
to employers. Therefore, we sought
employer reactions to the findings and
their suggestions for other employers who
might wish to participate in such pro-
grams. A meeting was held in Tigard,
Oregon with local employers who have worked
with the EBCE program from one to nine
years.

The employers found the results consistent
with their experiences and observations.
They were also able to shed light on some
aspects of the report.

Beyond Boredom

"Boring tasks" was the most strongly held
reason given by students when they said
that a workplace experience resulted in
little or no learning. Our employer group
felt that "boring tasks" is often a cliche
that can mean a variety of things to youth,
including "I don't understand what is ex-
pected of me," "I'm afraid to ask ques-
tions," "I don't know what's involved in
the task" or "I don't like doing that kind
of work." The group felt it is important
for employers to ask young people some
questions to clarify what they mean.

Some perceptive employers realized that a
brief observation of, for example, a person
keypunching can make the job appear bor-
ing. However, if there is a diversity of
keypunching operations, the task may not be
boring. Similarly, the owner of an auto-
motive repair shop pointed out that
although some repairs are routine, others
could take up to five years of on-the-job training to learn how to solve.

Several employers felt it is important to show youth the variety within a business because they may take an interest in areas you wouldn't expect.

All agreed that it is important to let young people actually do things while at their site and to encourage them to ask questions of other employees. Some students were thought to relate better to the other young employees at a site than to an older supervisor.

Employers felt EBCE students at their site should be treated as regular employees, given responsibilities such as handling money or working with customers, and invited to parties with the staff.

One employer stated that "it is important to help kids learn proper dress for the job" and to recognize that "the world doesn't owe them a living." Another added that he gets students to think about what it would be like for them to own their own business.

Employers agreed that for them to work effectively with youth it is important to know what the program expects of the students. In addition, the employers need help in recognizing potential projects or activities their site can provide.

Staff Reactions

Staff reactions to this study were obtained at a meeting with the EBCE staff in Tigard, Oregon and at a Denver meeting of the Executive Committee of the National Experience-Based Career Education Association (NEBCEA) in May 1981. Both groups felt the findings were consistent with their observations.

A major complaint of students about sites is having "nothing to do." Staff pointed out the need for students to take initiative in getting "hands-on" experience. Differences in student initiative in this area were observed by staff to be due to differences in students' personalities rather than differences by sex. Staff felt it is important to fit the student's personality with that of the employer. A technique the staff use is to send a more assertive student to a new site to open up "hands-on" possibilities and later send a more timid student to that site after the employer has had a chance to see what a youngster can actually do.

Staff at the learning center help shy students build up their self-confidence and prepare for encounters with adults in the community. In one such exercise, students use a telephone hook-up to role play making an appointment with an employer to visit a job site for the first time.

Know the Employer

Staff felt it is important to learn about the personality of the employers participating in the program. Some employers are willing to give close supervision to students who need it. Others are especially good at letting youth discuss their experiences with them. In special cases the staff will call employers in advance to fill them in on the personality and background of the student who will be visiting their site.

Some students arrange to explore their parent's careers, and staff have observed cases where this has strengthened family ties.

The NEBCEA Executive Committee, which includes EBCE project directors, staff and community people, discussed the research study and drew the following conclusions:

- Students need exposure to poor sites as well as to good sites. This is how the world is! What a "good" site means is highly subjective and often varies from one youth to another.
- "Good" sites are developed rather than selected and recruited. Staff in-depth interviews with employers are important for firming up commitment, discussing what an employer can do with or for students, and trouble-shooting any problems that arise.
- The findings from this study about good sites could be used by staff in initial interviewing of
Employers to decide whether or not to use a site.

- Employer orientation should emphasize students "doing" and growing in responsibility. Employers should be urged to give students positive feedback. At the same time, employers are not doing young people a favor by reinforcing unacceptable behavior.

**Related Research**

Diane Hedin and Dan Conrad of the Center for Youth Development and Research at the University of Minnesota recently completed a "National Assessment of Experiential Education" involving 4,000 students in 30 high school experiential education programs. Some of their instruments were based on items used in the NWREL study. The programs were classified as adventure education, community service, career internships and community study/political action. Vocational, EBCE and work-related programs were excluded by these researchers because such programs had already been extensively evaluated. On one of their post-program questionnaires, students were asked to select the specific characteristics best describing their field experience.

The factors that contributed most to pre-post gains were, in rank order: "discussed experiences with teachers," "did things myself instead of observing," "adults did not criticize me or my work," "had adult responsibilities," "developed personal relations with someone on site," "had freedom to explore my own interests," "discussed experiences with family and friends," "felt I made a contribution," "had a variety of tasks," "was free to develop and use my own ideas," "got help when I needed it," "made important decisions," and "had challenging tasks."

Hedin and Conrad concluded from their comprehensive research that "students in experiential programs increased significantly in social and personal responsibility, gained more positive attitudes toward adults and others with whom they worked, and felt more positively toward being active in the community."

Harry Silberman at UCLA has conducted various studies of youth in the workplace. He expresses the opinion that "the most potent variables to consider in designing an educational work experience curriculum are the same variables that determine the effectiveness in any instructional situation: clear verbal instruction, availability of effective role models, meaningfulness of the task, availability of feedback and adaptation of the work experience to accommodate differences in individual abilities."

**"Naturally Occurring" Jobs**

Ellen Greenberger and Laurence Steinberg at the University of California, Irvine, recently completed a study entitled *Early Adolescents at Work: Costs and Benefits to Learning and Development*. Based on data from 531 tenth and eleventh grade students from four high schools in Orange County, California, they compared 212 students employed in their first part-time job with 319 students who had never worked. Youth employed through school- or government-sponsored programs were excluded.

The researchers found that in these "naturally occurring" jobs "adolescents have little opportunity to cooperate with others on job tasks. They tend to feel that the work they perform does not contribute importantly to the overall functioning of their organization. Young workers perform tasks that make only minimal demands on cognitive skills acquired through schooling, and they perform tasks that do not require substantial new learning. Adolescents who work interact primarily with other young workers; they have little contact with adults who might serve as effective mentors or role models."

In short, the research of Greenberger and Steinberg indicates that youth who hold jobs independently of school- or government-sponsored programs are failing to receive benefits often claimed to result from work experience. These findings reinforce the need for well-planned and carefully monitored work experience if students are to obtain quality learning.
Implications for Further Research

A number of research studies are suggested by the EBCE results and by the insights of staff and employers. The following three research directions would contribute to improved learning in the community. The findings from these studies could be used profitably by employers, educators and policymakers.

A policy study of techniques and incentives for employers to develop their sites as quality work experience placements.

What motivates employers to participate in educational/training programs?

What are the barriers or disincentives to such participation?

To what extent are incentives such as the Targeted Jobs Tax Credits utilized by employers? By what types of employers?

A comparative study of experiences encountered and outcomes resulting from guided vs. unguided work experiences.

Do the outcomes of guided work experiences differ from the outcomes of unguided work experiences described in Greenberger and Steinberg's study? If so, in what ways?

What factors contribute to these differences?

What are the cost-benefit outcomes for guided vs. unguided work experience?

The contribution of multiple worksite placements to learning in the community.

What are the advantages and disadvantages to youth who spend a short time exploring a career at several worksites?

How do these advantages and disadvantages compare with longer term single site placements?

Does a variety of worksite placements increase a young person's skill in career decision making? Do such multiple site placements increase youths' understanding of themselves and of the realities of the workplace?