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ABSTRACT

Far West Laboratory conducted a series of interviews with employers to identify the characteristics of a successful applicant for entry-level professional employment. The job opportunities investigated were possible avenues of employment for college graduates in general studies fields, and did not include those requiring specialized degrees or courses of study. The employer sample of 48 persons represented the six largest employment areas in the San Francisco Bay Area (service, transportation, communication and utilities, finance and insurance, government, retail, and manufacturing) and included large and small companies and private and nonprofit organizations. The employers recommended that students get a "practical" minor such as business or computing, develop transferable skills, develop job-search skills, and get experience, possibly through internships, cooperative work programs, or volunteer work. Employers stressed that students need both functional and adaptive skills for entry-level employment. In the area of functional skills, they stressed communication and persuasion, organizational management, research and investigation, human service, information management, and design and planning. Adaptive skills cited as important by employers were in the areas of aptitude, attitude, self-management, and work habits. Good verbal and written communication skills were often cited by employers as important qualities that many job applicants lack. College faculty who were shown the survey results responded that many of the skills desired by employers are already being taught in liberal arts courses, but that perhaps they could be made more specific and employment related. The professors saw no need to change the curriculum but thought that necessary skills could be incorporated with a change of attitude. (KC)

RESEARCH BRIEF

November 1982

GETTING A JOB—WHAT SKILLS ARE NEEDED?

by Carol Murphy and Lynn Jenks

What does it take for a college graduate to get a job in today's competitive professional job market? What skills and attitudes are most valued by employers?

Far West Laboratory has completed a series of interviews with employers to identify the characteristics of a successful applicant for entry-level professional employment. The job opportunities investigated were possible avenues of employment for general studies graduates, and therefore did not include those requiring specialized degrees or courses of study.*

The term "entry-level professional employment" was used in the study to designate jobs at the beginning salary level which are filled by college graduates with no prior paid experience in the field.

*The general studies curriculum includes offerings in the natural sciences, social sciences, humanities and fine arts. The jobs described can be categorized as (1)apprenticeships where the job holder is at an "assistant" or "associate" level with a clear promotional track into a senior level position; (2)management trainee positions where the job holder is hired and placed in a 6-18 month training program for a junior management slot and the career track to a senior management position is clearly outlined; (3)professional positions which are entry-level positions with potential advancement within that category; they are either management or non-management positions.

The employer sample of forty-eight persons represented the six largest employment areas in the San Francisco Bay Area:(1)service;(2)transportation, communication & utilities;(3)finance and insurance;(4)government;(5)retail; (6)manufacturing. The sample included both large and small companies and private and nonprofit organizations. The employers' responses and recommendations to students and educators regarding qualifications and employment preparation form an important data base for counselors and educators interested in increasing the employability of college graduates, especially those graduates with a degree in a general studies area.

While the number of employers we interviewed was small, only forty eight, there was a notable consistency in their responses which makes the data reliable for use by prospective job seekers, counselors, and instructors as an indicator of employers' preferred skills and traits. These findings, which are limited to nontechnical job categories, may not be uniformly applicable across all jobs. It is also important to keep in mind that there could be biases in the data, and it is possible that different responses might have been encountered with a different set of repondents.

This research brief will present a general overview of the findings related to preparing for professional employment and making a successful college-to-work transition. The specific skills and attitudes identified by

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employers as important factors in obtaining professional employment will be identified.*

EMPLOYERS' ADVICE TO STUDENTS

The bulk of the suggestions, or advice, offered to students by employers can be summarized in the following four points:

1. Get a "practical" minor such as business or computing or take a summer workshop or specialized courses that focus on acquiring some task-specific skills.

2. Develop certain skills which will be "transferable" to many job situations. These will enhance the applicant's overall appeal or "marketability" at the outset and will also help in the long run as job-specific tasks change or a person undergoes a change in career.

3. Develop good job search skills. Some of those mentioned were resume writing, interviewing, and researching the current job market opportunities and employment trends.

4. Get experience. Internships, coop ed programs, field-study courses, volunteer work and extra-curricular activities were mentioned as helpful transitions to the demands of the world of work.

The attitude of employers when offering this advice was one of support and encouragement for obtaining a degree in general studies. Many suggested supplementing a general studies background with specialized courses, but they did not advise students to avoid the general studies program. In fact, many employers saw value in these courses both in terms of immediate and long-term benefits because this type of program helps students develop non-technical or transferable functional skills. These skills, although they are sometimes more difficult to identify or assess, are important not only for getting a job but also for on-the-job training, advancement and later career change.

In addition to characterizing successful applicants in terms of specific skills and attitudes, the employers were also asked about the quality of the preparation for the world of work that students were receiving in college. On the whole, they gave favorable replies regarding the preparation in content areas. They were, however, greatly disappointed in the applicants' writing skills.

Negative comments referred to grammatical deficiencies as well as a lack of "practical" or business writing skills. The point was made that writing a term paper or an essay exam is not the same as writing advertising copy or a business letter.

The other skill deficiencies cited were in verbal communication and problem-solving. Many employers reported they were prepared to offer on-the-job training for specific job-related skills, but they expected applicants to have already developed good verbal and written communication skills. The practical side of these general skills was repeatedly emphasized as being very important, and students were advised to get experience in applying their skills in a real work environment.

Along the same lines, employers reported another deficiency in college applicants--the lack of understanding of the "processes and demands of the workplace." They complained that students do not know how to act in a business environment, they're often unrealistic and have poor work attitudes. They disagreed with the idea that any college graduate can be a manager because many don't have good business heads.

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*Details of methodology and additional results are described in the final report of the project which is available from Far West Laboratory, 1855 Folsom Street, San Francisco, CA 94103. It is also available through ERIC.

"A college education is not enough. You have to be willing to work."

Their view was that too much "theory becomes a liability if students don't know how to put it into practice

> "Students don't realize that publishing isn't academic; it is really a profit-making business."

The employers used their strongest language in describing this lack of preparation for the world of work. They called it "horrible", "poor", "distressing", and "disappointing."

> "Academe doesn't teach what real life is about. They should teach getting to work on time."

> "Colleges need to teach them to come to work on time, dress appropriately and put in a good day's work."

Employers also stressed the importance of preparing for the job interview and "selling yourself" during that interview.

"Liberal arts majors make poor sales pitches for themselves. They expect the interviewer to guess how wonderful they are."

Part of that "selling yourself" includes good personal appearance, knowing what you want to do, demonstrating an interest in the company as well as a willingness to work.

> "Some people have blown a lot of money on a college education. A college education is not enough. You have to be willing to work. You have to walk in, sit down and say 'I want to work.'"

EMPLOYERS' NON-TECHNICAL SKILL PRIORITIES

Although several lists of "non-technical", "transferable", or "liberal" skills have been devised by educators, by researchers, or cooperatively by educators and employers, they were not used as a part of the interview instrument. The purpose of the inquiry was to obtain the employers' priorities. The result was a list of non-technical skill requirements that is unique in that it represents employability characteristics named by the employers without their being prompted or influenced by any skill list or group discussion. The skills noted in the tables that follow are the verbatim responses of the employers. Their choice of words has been retained even though the description is sometimes rather specific to a certain job or workplace.

Not surprisingly, most of the employer-mentioned skills are found on the other lists. The summary of the responses presented here includes an indication of the number of times the skills were mentioned by employers. In order to minimize the possibility of the responses being incomplete or being biased by recent events on the job, several questions were asked during each interview that would require the respondents to re-state the skill requirements.

Three types of skills are needed for successful job performance---adaptive, functional and specific content skills. And since the focus of this inquiry was on the non-technical skill requirements, data will be presented on the two types of non-technical skills, functional and adaptive.

Functional skills are task-related competences that are not limited to any particular setting. They include informational and interpersonal skills which are transferable across specific job classifications.* Sample functional

*Breen, Paul; Donlon, Thomas F.; Whitaker, Urban, Teaching and Assessing Interpersonal Competence--A CAEL Handbook, Council for the Advancement of Experientia Learning, 1977.

skills are questioning, organizing, analyzing, listening, forecasting, and decision-making. For the purposes of data organization and display of the employer-identified functional skills, the skill cluster format devised by Munce and similar to that of Breen was adopted.* This classification schema is compatible with the employers' terminology, accommodates all the task-oriented functions described, and provides a useful context for discussing the implications of the data in terms of both job categories and learning outcomes. (see TABLE I)

Adaptive skills describe the manner in which the employees interact with their environment, including relations to people, to organizations, to time and space, and to physical conditions. They are closely related to personality traits and when used in the appropriate environment, help the worker adapt to that environment. Sample adaptive skills are tactfulness, flexibility, creativity and assertiveness. Again, for the purposes of data display and also to facilitate subsequent discussion of these skills in terms of type as well as each individual trait, the employer responses were organized according to the categories and descriptors outlined in TABLE II.

It is clear from the employers' responses that both types of skills, functional and adaptive, are needed. There is also a definite indication of employers' preference for certain types of these skills. Almost 40% of the functional skill responses are in the "communication and persuasion" category. This is over twice the number of responses for the next category. The adaptive skills named by employers cover a wide range of attitudes, personality traits and work habits. Without a job-oriented context, many of them seem abstract or subjective, but in fact most of these skills were described in terms of job performance, not personality. For example, a "non-perfectionist" and "quick learner" was needed to meet heavy production deadlines, and only a "self-motivated, aggressive and determined person would qualify to be a sales representative.

If job seekers were to take employers at their word and orient themselves accordingly, which skills and traits should they acquire? The "top ten" functional and adaptive skills preferred by the employers are summarized in TABLE III.

Which Skills Are Most Important?

It is a relatively straightforward task to list the types of preferred skills, but it is more difficult to determine the relationship between the two kinds of skills. While the interview instrument was not designed to provide data on the comparative value of the skills, the responses to two of the questions offer some clues as to the relative merits of the skills:

1. What is the critical difference between those who get hired for this position and those who do not?

2. If the job market gets tighter, which of the skills you have named will be most valued?

Although self-presentation in the interview and experience were both important factors, the majority of the respondents said the critical difference in hiring was the applicant's non-technical skills (TABLE IV). Most mentioned at least one non-technical skill, and many cited more than one. Only five of the forty-eight employers cited task-specific skills as the critical factor in hiring. Some employers commented that coursework was not as important as certain abilities, attitudes or experiences. Many accepted job experience or extracurricular activities as evidence of the qualities

*Munce, John W. "Toward a Comprehensive Model of Clustering Skills," NSIEE Occasional Paper, 1981. Breen, Paul, "76 Career-Related Liberal Arts Skills," AAHE Bulletin, October, 1981.

TABLE I
FUNCTIONAL SKILLS REQUIRED FOR ENTRY-LEVEL PROFESSIONAL EMPLOYMENT*

COMMUNICATION & PERSUASION (116)
exchange, transmission and expression of knowledge and ideas

communication (28)
writing (28)
verbal communication (23)
listening (10)
training (4)
selling ability (4)
language (4)
interviewing (3)
asking questions (2)
making presentations (2)
negotiating (2)
thinking on one's feet (2)
conversational ability
dealing with public
public speaking
teaching

ORGANIZATION MANAGEMENT (57)
direct and guide a group in completing tasks and attaining goals

problem solving (15)
time management (8)
decisionmaking (7)
leadership (5)
meet deadlines (4)
supervision (3)
ability to motivate (2)
organization (2)
coordination (2)
administration
ability to put theory into practice
ability to delegate
apply policies
give directions
assume responsibility
task discrimination
interpret policies
set priorities

RESEARCH & INVESTIGATION (38)
the search for specific knowledge

analyze (13)
research (9)
reading (5)
data gathering (4)
critical thinking (2)
data analysis (2)
observing
outline assumptions
theoretical skills

HUMAN SERVICE (37)
attend to physical, mental or social needs of people

interpersonal skills (24)
group process (4)
sensitivity to needs (4)
empathize (2)
counseling (2)
involvement in public activities

INFORMATION MANAGEMENT (31)
arrange and retrieve data, knowledge, ideas

math skills (10)
organize information (10)
information management (4)
recordkeeping (4)
attention to detail (2)
logical ability

DESIGN & PLANNING (13)
imagine the future and describe a process for creating it

anticipate problems (3)
plan (3)
conceptualize (2)
design programs (2)
anticipate consequences of action
recruit new ideas
visual thinking

*Number of multiple responses indicated in parentheses

TABLE II
ADAPTIVE SKILLS REQUIRED FOR ENTRY-LEVEL PROFESSIONAL EMPLOYMENT*

APTITUDE (19)
capacity for learning

learns fast (9)
intelligent (4)
informed (3)
academic orientation
intuitive
sharp

ATTITUDE (62)
toward self
characteristics of general outlook, personal values, goals, motivation

positive (8)
mature (4)
open minded (2)
realistic (2)
idealistic
objective
professional
willing to learn
proper attitude

toward others
indicators of social values

altruistic
tolerant of cultural differences
social commitment
social concern
sensitive to lifestyle differences
values self-motivated people

toward work
indicators of work orientation, work values

interest in work (8)
commitment to job (7)
willing to work overtime (6)
desire to work in field (5)
willing to be trained (3)
belief in agency (2)
dedicated (2)
belief that work is meaningful
sensitivity to job
willing to hold low status job

SELF MANAGEMENT (218)
personal style & appearance

assertive (11)
good appearance (8)
motivated (8)
self-promoting (8)
self-presentation (8)
aggressive (7)
energetic (7)
flexible (7)
adaptable (6)
articulate (6)
confident (6)
creative (6)
dependable (5)
enthusiastic (5)
patient (5)
responsible (5)
ambitious (4)
independent (4)
persevering (4)
cheerful (3)
inquisitive (3)
sincere (3)
determined (2)
efficient (2)
alert
clearheaded
disciplined
neat
non-perfectionist
sense of humor
stable
thick-skinned
versatile

interpersonal style

tactful (21)
outgoing (9)
ability to get along with others (7)
friendly (7)
cooperative (6)
compatible (4)
responsive (3)
hospitable (3)
public relations (2)
put people at ease (2)
charismatic
even-tempered
handles difficult social situations
handles self well
helpful
inspires participation
inspires confidence
makes a good impression
people-oriented
presence
sensitive to authenticity
understands people

WORK HABITS (57)
characteristics of work performance, work orientation

understands teamwork (7)
precise (6)
handles pressure (5)
handles stress (4)
handles conflict (3)
self-directed (3)
understands work environment (3)
accepts criticism (2)
adheres to schedule (2)
follows through (2)
good work habits (2)
handles setbacks well (2)
hardworking (2)
makes extra effort (2)
takes risks (2)
task-oriented (2)
good judgment
generates ideas
gives others credit
goal-oriented
productive
punctual
results-oriented
takes initiative

*Number of multiple responses indicated in parentheses

TABLE III

TOP TEN NON-TECHNICAL SKILLS NAMED BY EMPLOYERS
(n = 48)

FUNCTIONAL		ADAPTIVE	
Communication	28	Tactful	21
Writing	28	Assertive	11
Verbal skills	23	Outgoing	9
Interpersonal skills	24	Fast learner	9
Problem solving	15	Positive attitude	8
Analysis	13	Interested in work	8
Listening	10	Good appearance	8
Math skills	10	Motivated	8
Organize information	10	Self-promoting	8
Research	9	Good self-presentation	8

TABLE IV

WHAT IS THE CRITICAL DIFFERENCE BETWEEN THOSE WHO GET HIRED AND THOSE WHO DO NOT?
(n = 48)

SKILLS		63
Adaptive*	34	
Functional**	24	
Task-specific	5	
INTERVIEW PRESENTATION		15
EXPERIENCE		14

*Adaptive skills mentioned more than once: commitment, interest, initiative, fitting in, assertiveness, enthusiasm, and intelligence.

**Functional skills mentioned more than once: communication, interpersonal skills, meeting deadlines, ability to answer questions.

they were seeking, i.e. leadership, problem-solving, positive attitude about work.

Some of the respondents noted that the desired combination of skills and characteristics could be demonstrated by the applicant during the job interview through good verbal presentation, a positive and professional attitude and a sincere interest in the job and the company.

Toward the end of the interview, question 2 was asked in order to determine which skill(s) employers considered most valuable for an applicant to have in view of the current overall job market situation. This question, although more general in nature than the first one, elicited a similar response in that both types of non-technical skills were listed as being important. (TABLE V) The number of functional skills named for the second question, however, was almost twice that of the first. But in each case, the two most frequently mentioned were communication and interpersonal skills.

TABLE V

IF THE JOB MARKET GETS TIGHTER, WHICH OF THE SKILLS YOU HAVE NAMED WILL BE MOST VALUED?
(n=48)

FUNCTIONAL	43	Skills mentioned more than once: communication, interpersonal skills, analysis, writing, verbal ability, research and ability to sell.
ADAPTIVE	31	Skills mentioned more than once: good self-presentation, aggressive, energetic, sensitive, assertive, quick learner, articulate, and desire to work.
TASK-SPECIFIC	6	None mentioned more than once.

Which Skills Are Developed On-the-Job?

The relationship between the two types of skills can be further explored by considering employers' responses to the question of which skills are developed on-the-job.

Twenty-eight (28) employers offered training in job-specific or technical skills which for the most part involved knowledge about the policies or procedures of their company. Thirty-two (32) employers trained for specific functional skills. It is interesting that of the fifteen different functional skills mentioned in TABLE VI, seven are in the category of organization management. This is not surprising since some of the jobs described were management trainee positions. But it also may be an indication of an implied hierarchy in the functional skills with the more basic skills of writing, verbal communication, and simple problem-solving as entry-level skills and with administration, management and supervision as the more advanced skills developed through training or experience.

Not one adaptive skill was cited as part of a training program. As several employers put it, "we can't teach personality," and "they have to have the appropriate personality ahead of time." So the adaptive skills are not a formal part of any training program, although some of those relating to interpersonal style and work habits may be informally acquired on the job.

TABLE VI

WHICH SKILLS ARE DEVELOPED ON THE JOB?
(n=48)

FUNCTIONAL	
Management	8
Supervision	5
Writing	4
Organization	3
Communication	2
Selling	1
Research	1
Conflict management	1
Listening	1
Administration	1
Budget	1
Group dynamics	1
Counseling	1
Interviewing	1
Time management	1
	32

TECHNICAL/TASK SPECIFIC	
Technical skills (unspecified)	9
Information about the company	9
Use of equipment	2
Retail procedures	2
Computer skills	2
Knowledge of the product	2
Labor laws	1
Public safety	1
	28

What Skill-Related Problems Do Employees Have?

Adaptive skills are, however, a crucial part of the review and promotion process. When employers were asked about the types of problems they encountered with entry-level employees, they cited 41 adaptive skill deficiencies as opposed to only 21 functional skill deficiencies. (TABLE VII)

The employers' responses to these questions indicate that adaptive skills are a critical factor both in getting a job and in on-the-job performance. They also show that although some may be informally acquired on-the-job, they are not a part of any formal training program. Students as prospective job applicants should be aware of the importance of these skills before they begin their job search efforts. They should also be encouraged by faculty or advisors to seek opportunities either on-campus or off-campus that will help them acquire or practice these skills.

TABLE VII
WHAT KINDS OF PROBLEMS DO YOU HAVE WITH NEW, ENTRY-LEVEL EMPLOYEES?
(n = 48)

FUNCTIONAL SKILL PROBLEMS*	ADAPTIVE SKILL PROBLEMS*
21 responses	41 responses
Lack of interpersonal skills (6)	Unwilling to do extra work (4)
Unable to meet deadlines (5)	Negative attitude (3)
Unable to set priorities	Tardiness (3)
Unable to delegate	Does not understand the demands of business environment (3)
Inconsistent leadership style	Laziness (2)
Inattentive to detail	Interpersonal conflict (2)
Unable to write letters	Unprofessional (2)
Lack of organization skills	Unable to learn quickly enough
Poor problem-solving ability	Doing personal work on company time
Failure to acquire needed information	Does not know what is expected
Poor writing	Does not anticipate enough
Lack of research and analysis skills	Does not have personal goals
	Gets discouraged
	Gets bored
	Violates company policy
	Works too slowly
	Self-centered
	Morale problem
	Poor concentration
	Irresponsible
	Job burnout
	Personal problems
	Inflexible
	Lacks follow through
	Unable to fit in
	Unwilling to do drudge work
	Unable to work without structure
	Unable to correct deficiencies
	Lacks precision

*Number of multiple responses indicated in parentheses.

EMPLOYERS' ADVICE TO EDUCATORS

Colleges have many purposes and students have many different reasons for attending them, including intellectual development, a broad understanding of various fields of study, personal fulfillment, and learning for its own sake. But if making a successful transition into a satisfying and productive career is also a desirable outcome, then planning a course of postsecondary study should take into account the perceptions and expectations of employers and business people.

In addition to offering advice to students on how to prepare for a successful transition to the environment of the workplace, the employers also made some suggestions to educators involved in program planning and implementation. Their recommendations, which cover a wide range of the postsecondary preparation process included:

1. Help students develop or improve their non-technical skills.
2. Help students develop job search and self-presentation skills.
3. Help students define their career goals in terms of current and projected job market trends.
4. Help students develop an awareness of the demands of the workplace.
5. Offer students opportunities to apply their skills through internships or work experience.
6. Provide certain business-oriented courses in the general studies curriculum.
7. Work cooperatively with representatives of business and industry on employment-related issues.

A selected group of postsecondary faculty was asked to respond to these suggestions as well as to the list of employers' skill priorities. Their comments and recommendations for action are the subject of the second part of this research brief.

EDUCATORS RESPOND TO THE DATA

A group of six postsecondary faculty and administrators were asked to respond to the employers' skill priorities.* Their views were sought regarding the importance of the issue of non-technical skill development as well as the usefulness of the data from the employer interviews. They also made some recommendations as to how these non-technical skills could be developed within existing curriculum guidelines. At the same time, they noted some of the conditions or obstacles which might influence an instructional strategy aimed at non-technical skill development.

Each of the respondents felt the study data offered information that could stimulate stronger interest in employability development for students in the general studies curriculum.

"The results support the importance of the general studies curriculum for success in almost any job area."

According to one respondent, "the trick is to tie employability concerns to academic concerns"-- a "trick" that is not difficult since the functional skills sought by employers are close to the standard goals of universities. Each of the educators felt that at least some of the employers' skill priorities, such as verbal and written communication, problem solving, critical thinking, analysis and organization of materials, "seem to correspond quite closely to the general features of a liberal education." And this correspondence would seem to indicate there are "extensive

*The six respondents are faculty members or program administrators in the general studies divisions of four-year colleges.

grounds for discussion between academics and employers about the conduct of higher education."

These postsecondary educators felt the results were valid and consistent with their own "impressions of necessary job skills" or with findings from studies conducted at their own institutions. One respondent said that the results reported here seemed "accurate and realistic" but business has failed to convey these needs to prospective employees by overstressing the need for specialized technical experts. And "if businesses were actively recruiting general studies graduates, seniors would have a less defeatist attitude about what they have to offer the business world."

"The results suggest that educational goals and the interests of prospective employers are in many ways consonant."

Although the data were favorably responded to as being "excellent, balanced, sensible, and encouraging," certain qualifying comments were also made: (1) faculty would need more specific information to help them focus on the issue; (2)employers' definitions of certain skills may not be the same as faculty's; (3)there is probably a "gap between the board room where liberal skills are appreciated and the personnel office where recruiters are more narrow-minded."

The content of these remarks seems to suggest that while information about employers' requirements is welcomed by educators, there is a communication gap between the two sectors which will be narrowed only as a result of direct exchanges and cooperative efforts between them.

Are Educators Concerned about Employability of Students?

All six respondents felt there was some concern about the employability of their graduates among faculty and administrators, but it was not a high priority at the present time.

"It is not a major concern and will not be. even if it should."

The concern may grow, however, out of necessity if general studies programs continue to lose students.

> "More and more liberal arts faculty are concerned with this issue because they don't want to lose all their students to the school of business. And students now believe they need a degree in business to get a job."

But for the most part, this issue loses out to concerns about departmental turf." And in many institutions it is easy for faculty to avoid the issue by saying it is non-academic or by assuming someone in administration or student services is responding to the need.

> "The concept of 'skills' is not a popular one here.'Abilities' seems a bit less loaded."

When they were asked if this issue of employability skills should be a major concern of faculty, the respondents all said yes, but added certain qualifications, such as "it should be a concern insofar as it fits into the curriculum," or "as long as it corresponds to the subject matter already being taught." There was, however, general agreement that many of these skills are being acquired by students.

"Fortunately the prejudice of faculties against 'career' and 'work' isn't fatal—because a good liberal education happens to be a good career education."

It was also proposed that employability should be a major concern only for some faculty, and these faculty "should be assigned that concern by the institution. This could take the form of a campus-wide board or committee similar

in scope to committees which already exist for library or computer services, research, or community service."

The point was also made that rather than attempting to make the issue a major concern, "perhaps a more realistic and compatible way to address the problem is to help students translate their general studies skills to non-technical employability skills. And there are many equivalencies."

And finally, one respondent observed that "many institutions are already concerned with the skills, but not necessarily with their development."

"Colleges and universities are very concerned about communication skills, but they are not necessarily committed to teaching them."

Can these skills be taught? Which ones belong in the general studies curriculum? What does it take to help students acquire or develop them?

Skill Development—What Can Be Done?

All six educators agreed that some of the non-technical skills, both adaptive and functional, are developed in the curriculum, but that "institutions have not clearly formulated their application to the job market." In some cases it is only a question of analyzing the course activities and outcomes and translating them into the language of non-technical skills. And some courses could "with minimal revision" develop specific skills.

When asked which skills are most appropriate for development in which courses in the general studies curricula, the educators gave the responses quoted on the facing page.

These responses indicate that many of the non-technical skills could be developed in several different courses or even across disciplines. They also include some interesting process suggestions for faculty, e.g. the importance of classroom discussions, essay exams, term papers, definite deadlines, oral presentations, group work--all suggestions related not only to skill development but also to active learning and practical application.

This theme was reiterated when the respondents were asked about including the development of employability skills in the actual course design. Their responses indicated that it was not a question of course design but rather one of attitude, general instructional approach, and sometimes of including a specific learning activity or event. Course re-design would not only meet with faculty resistance and possible administrative difficulties, but also would be unnecessary since many of the skills are already being taught.

What is needed is increased awareness by both faculty and students of how these non-technical skills enhance students' employability.

> "Faculty need to relate the importance of these skills beyond the discipline, to life and work in general."

> "I don't think it's a question of adding much to the existing curriculum but rather of communicating to faculty that what they are teaching is important on the job. That's what's missing now in liberal studies. Students believe that technical knowledge is more important than writing and speaking effectively. They don't see how writing a term paper involves skills they will use on a job."

In addition to recognizing they have these skills, students also need to understand "how to communicate to employers the valuable skills they have."

"There are many courses which, with minimal revisions, could develop specific skills."

Skill Development—What Can Be Done?

SIX EDUCATORS RESPOND

"Successfully completing college, it seems to me, requires developing such functional skills as time management, setting priorities, and meeting deadlines. Any course requiring term papers would develop information management skills and most research and investigation skills. We are weakest in developing human service and design and planning skills."

"In terms of communication skills, courses in English and Speech and Communication Studies most obviously meet these needs. Organizational, interpersonal and small group communication are courses taught in speech communication which deals with most of the skills listed in the first four functional skill categories and with most of the adaptive skills which are not directly work-related. Many courses in sociology and psychology develop research and information gathering skills. Courses in philosophy are particularly geared toward developing critical thinking skills."

"Some institutions actually have courses with competency objectives in such things as problem solving and critical thinking. But most will require matchups like: communication/persuasion in speech departments; research/investigation in history and English; human service in psychology, counseling and social work; information management in business. But organizational management and design/planning may not actually have sources in any coursework at some campuses."

"The basic functional skills of writing, reasoning, and organization of data form some part of every college course if properly designed and conducted. Every course requiring written examinations and term papers necessarily demands exercises in writing skills; seminars offer opportunities for sharpening verbal skills as well as cooperative activities; organization of data and shaping arguments are essential both in classroom discussions and in written exercises. It is not always the case that instructors emphasize sufficiently the importance of clear writing and reasoning, but this lack is becoming more and more a topic for discussion and revision within the university."

"If individual departments recognized their responsibility for the general education of all students, then the communication skills, problem solving skills, and information organizing skills could be taught across the disciplines. In fact, all of the top ten functional skills would be good candidates for campus-wide attention, with the exception of interpersonal skills. There is a real reluctance by faculty members to address this as an explicit educational goal."

"Of course instructors should be concerned with communication skills problem solving, research and analysis. Formal oral presentations and group work would help develop personality skills and assertiveness and would actually make the teaching less demanding for the section leader. Setting up debates would require the students to take a stand (decision making), meet strict guidelines as to time and form, and seek to be persuasive (assertive). Since debates are generally conducted by teams, it would require division of labor, cooperation, and compromise. It would make learning active rather than passive. I see this format as applicable to any academic subject. The design of assignments is crucial. Too many assignments seem disconnected from any practical application."

As a part of the instructional approach, several of the respondents suggested including some field-based learning activities in the course. Their comments are included in the above table. These learning activities would give the students a chance to apply their skills and to discover for themselves what the employers value and how "transferable" their academic skills are.

"No matter what the subject matter, we are bound— or should be— to teach clear thinking and writing."

EDUCATORS RECOMMEND: INCLUDE FIELD-BASED ACTIVITIES

"Where possible, have students apply the skills via internship or field studies or invite guest speakers and panels from business."

"The means for accomplishing competency outcomes ought to be a calculated individualized mix of experiential and traditional learning modes. In order to implement this approach I would recommend much greater use of learning opportunities in the workplace. In institutions where many (or even most) students have jobs, we are losing a major opportunity to utilize the workplace as an internship."

"In terms of course design, I would recommend getting students involved in academic work as opposed to academic study; that is, get students involved right away in research projects, policy studies, lab experiments and include that major piece of academic business--manuscript and memo preparation. If students were subsequently given workplace experience in non-academic settings--through internships--then the students themselves could make informed judgments about the transferability of academic skills to non-academic workplaces."

"I have designed a one unit class called a 'mentorship' which can be attached to any three unit course in the humanities. For the mentorship, the student identifies someone in a career of interest to him or her and works with that person on a project in which they apply what is leaned in the classroom to a work setting. The mentorship is designed for lower division students who are trying to identify a career. It can then be followed by an internship in which on-the-job experience is gained. I would take this approach rather than suggesting faculty re-design their courses around employability skills."

The following two instructional "scenarios" illustrate the theme of the respondents' recommendations regarding course structure and process. The first is by a professor of history and the second by a humanities professor.

Skill Development—What Can Be Done?

TWO INSTRUCTIONAL SCENARIOS

"Set up classes around a set of important questions, e.g. why the Roman Empire fell. Present competing interpretations, relevant background, pertinent evidence. Then require the students to use the material to "solve" the question in a paper and an oral presentatioin. Rather than just a grade at the end of the class, there ought to be constant feedback from the teaching assistant, the professor and possibly other students. Professors would be available for "interviews." Students who failed to ask the right questions would not get the important information. Students would be graded for the persuasiveness of their position, not its closeness to prevailing academic opinion. The entire class would be less professor-centered than student-centered. Learning would seem more practical and applicable to other problems and situations."

"I would recommend that critical writing be made part of the requirements of all substantial courses without regard to subject field. But even this demand would be less than effective if the instructor is not willing to subject students' writing to careful scrutiny and comment. Courses should be designed so as to allow written exercises to be related intrinsically to educational goals and also to allow adequate time for consultation, review, and revision as required.

Students respond well to group assignments, and I would suggest that discussion courses provide opportunities for students to design and carry out assignments for oral reports or research projects. Lecture courses should make provision for discussion sections if at all possible. In short, designs should attempt to incorporate as many and as varied opportunities for students to generate projects of their own as the general structure of the course can accommodate."

What Are the Barriers?

The barriers or impediments to implementing the above suggestions include considerations about time and money, training, administrative requirements, and teacher autonomy. But the most significant barrier, according to these educators, was attitudinal: "At least 80% of the need is a change in attitudes." Many faculty and administrators feel employability development is not appropriate to the university, that it is distinct from academic development.

Money and faculty time, which are always in short supply, are especially so right now. The respondents recognized that some of the suggestions they made will require additional resources, for example, providing supervision of student writing or including discussion sections to supplement lecture sessions. It was also recognized that students have a limited amount of time for each class.

"Another barrier is the extreme shortage of time which students have to devote to each particular class. The result is superficial, sloppy work which professors come to accept as the norm. Students ought to be forced to redo and redo until the result is excellent. In this way they would learn what excellence means."

Some financial support may also be required for training of teachers or teachers' assistants to supervise the critical writing exercises or the off-campus learning activities.

What Are the Barriers?

"One obstacle is the general lack of receptiveness of university teachers to the notion that they should try to train students for the job market. I don't believe that the obstacle is as insurmountable as it might seem, largely because it is built on stereotyped ideas, mostly unexamined in a long time. But also because most faculty members are concerned about their students' welfare and will respond cooperatively if it is pointed out that a good deal of what they are doing already can be of help in preparing students for future employment."

"Large research universities pride themselves on being more "pure" at heart than the business world into which most of their students will graduate. This has several consequences, one of which is that faculty members do not like to see themselves as workers and are reluctant to look at academic work as a craft which they themselves practice and have learned to practice. Without a willingness to see what they do as work, it is hard for faculty members in these institutions to positively identify with the employers who will be hiring their students. They think they are in an adversary relationship rather than a collaborative one. In colleges and universities under stress, of course, some of this reluctance will come unglued. Declining enrollments, student activism, declining financial resources can all bring an institution to a position of great vulnerability, within which all sorts of new ideas can be seen as promising, including the development of employability skills."

Administrative constraints associated with accrediting policies and course outline regulations were mentioned but did not seem to pose much of a problem. One respondent pointed out that instructors were "perfectly free to act without special permission and implement course changes without anyone except their students noticing it." But the other side of this "freedom" is that while the "courses are usually the province of individual faculty members, that alone is a barrier to having them emphasize anything other than their own perceptions."

One final and very important obstacle that was cited is faculty's lack of experience in dealing with the business world, of knowing its expectations and practices. This situation, one respondent felt, creates an artificial environment for the students which makes them slow to adapt to the demands of the business world.

"I am more and more convinced that academic performance is related to life performance, but that the academic environment is extremely artificial. There is far too much emphasis on test-taking in our society. Performance should be rewarded, not test taking skill. Businesses and law firms and hospitals do not give tests to get things done. They do not pit people against each other, but rather make them work with each other. Nothing critical is done in spans of one hour or three hours.

One barrier to making general studies more useful in teaching employment skills is that academics generally have no firsthand experience in the business world themselves. Professors ought to be brought into the job placement problem themselves. They ought to be encouraged to spend summers and sabbaticals in the business world."

All of the above insights into the reality of the academic world underscore the need for postsecondary faculty to engage in cooperative efforts with representatives of the business community for the purpose of exchanging views on the nature of the employability skills issue and of defining some mutually satisfactory means of approaching its resolution.

"All of the top ten functional skills would be good candidates for campus-wide attention."

In summary, the educators' responses to the employers' skill priorities included the following points:

- o The lists of non-technical skills named by the employers were consistent with their own impressions of necessary job skills.
- o The employability of college graduates is not a major concern among faculty and administrators, but the issue is attracting more widespread attention among them.
- o Many of the non-technical skills are already being developed in the general studies curriculum.
- o Course re-design is not needed to teach non-technical skills.
- o Faculty should be encouraged to examine their instructional procedures or processes and to emphasize writing skills, oral communication, group work, and more active learning.

"Course design is not the way to go."

"Many of these skills are already being taught."

- o Faculty should be willing to subject students' communication skills (writing, speaking) to extensive scrutiny and comment.
- o Field-based activities help students acquire and apply the functional and adaptive skills needed in the workplace.
- o The academic environment can be made less "artificial" by decreasing emphasis on test-taking, encouraging cooperative student projects, and avoiding 1 to 2 hour time spans for activities.
- o The most significant barrier to planned development of employability skills is a negative faculty attitude.
- o Some kind of institution-wide agency or committee should be responsible for making information about employability skills available to students.
- o Faculty themselves could benefit from increased contact with representatives of the business community.

The educators' message--although they were concerned with the employability issue--was not "teach for employability." Their recommendations for action seemed to be more along the lines of "identify the skills related to the academic work involved and teach those well." Students will get the remaining skills they need through other courses, extracurricular activities or work experience.

One of the educators proposed a kind of exercise for instructors which makes use of the non-technical skill lists and forms a basis for the skill identification and development process.

> "Colleges are workplaces for faculty members, and they should be encouraged to identify the skills required to do the work of an academic. I would have faculty assess the skills related to their own work in terms of the sets of skills which the employers identified. I think the commonalities would suggest a number of ways to proceed. Then, I would have them communicate this information to students in their courses, and assess the present level of ability of their students. Having gone through that process, I think there would be a set of skills which would be crucial to the pursuit of academic goals, to employability development, and may also be underdeveloped in the student population. If faculty could focus on these--and alert students to pick up the others somewhere else--we'd be way ahead."

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Additional Research Briefs on topics related to education, work, and productivity are available from Far West Laboratory:

- Developing Good Workers
  by Robert M. Peterson

  Summarizes factors that seem to account for individual differences in employability and productivity. Based on published taxonomies and data gathered from interviews with young workers and employers.

- Employment Practices Affecting Entry-Level Workers
  by Karen Chatham

  A summary of findings from interviews with personnel officers in San Francisco Bay Area companies in the private sector.

- Teaching about Work in the Social Studies
  by James N. Johnson

  A summary of a workshop attended by social studies teachers and university faculty.

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