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ABSTRACT

Reviewing literature and research, this paper examines the arguments in the debate over the importance or desirability of a general education component in vocational technical programs. After an introductory section tracing the history and role of the community/junior college, the increasing curricular importance of vocational education, and current approaches to general education, the paper outlines arguments for the retention of the general education component. Included are arguments based on humanistic, basic life competencies, pragmatic, and theoretical orientations which favor general education. The paper then identifies a second faction composed of those who warn of the dangers of the increasing domination of technical skills courses in vocational programs. Next, arguments are presented for the limitation or exclusion of the general education component, which focus on students' desires for additional technical courses, the unnecessary lengthening of vocational programs by general education requirements, the possibility that students' personal and social growth is achieved without general education, among other arguments. Next, the essay reviews efforts to respond creatively to new demands to combine general education with the world of work, looking at cooperative efforts between schools and industry, experiments with interdisciplinary and nondisciplinary approaches, and suggested ways of revitalizing general education courses. The paper concludes with a summary of the purposes of general education. (AYC)

THE GENERAL EDUCATION COMPONENT IN VOCATIONAL TECHNICAL PROGRAMS DEBATE: FROM A COMMUNITY COLLEGE PERSPECTIVE

by

Jeffrey Bartkovich

INTRODUCTION

Student enrollments in occupational programs have grown phenomenally since the early sixties and have heralded a new direction for the community college movement. From a predominantly two-year, post secondary, baccalaureate oriented institution, the community junior college has taken on some sisterly characteristics of its more humble twin, the technical institute or vocational school, to resemble an occupationally oriented institution. Until the sixties, enrollments in occupational programs (i.e., programs stressing vocational interests and technical skills and leading to immediate employment upon graduation) rated second to enrollments in transfer courses (i.e., programs stressing liberal arts interests and cognitive skills and leading to further education at the bachelor's level upon graduation). This was expected as most two-year colleges were viewed as either the common man's finishing school or schools providing the first two years of a four year education.[1] Their liberal arts and general education orientation was assumed to provide the polish for a middle class elite person or provide the intellectually curious with the academic background necessary for further study at any four year college. When the educational aspirations of the junior college and the training commitments of the technical/vocational institute were integrated in the late sixties, the new comprehensive community colleges began adding occupational courses to their standard general education curriculum. Today it is not unusual to have colleges, or entire state networks of colleges, with occupational enrollments in excess of transfer enrollments. Indeed, evidence indicates that occupational education is becoming the community college's major function in terms of credit enrollment.[2]

All institutions of higher education are realizing a student population, in fact recruiting a student population, more diverse in terms of age, culture, socio-economic status, and educational preparedness than ever before. Risking simplicity, if the typical college student of the sixties were to be termed heuristic, then the students of the seventies and eighties can be termed hedonistic. These "New Students," as Cross labels them,[3] entering the mass education euphoria and realizing the freedom of academic choice won during the turmoils of the sixties, are demanding relevance in their educational fare, and increasingly the benchmark for academic relevance is employability. A major theme of higher education in the seventies was the students' claim that their education was becoming increasingly divorced from their life and to the world in which they were to live and work. However, no academic philosopher, administrator or institution would propose or maintain any irrelevant form of education. In fact, all education claims as its basic aim the enrichment of the life of the student or seeks to provide the means to increase the student's possibility of success.[4]

One trend stemming from this demand for relevancy appearing in the community college is the increasing number of students opting for vocational training and turning away from academic subjects typified by general education courses.[5] This consumer oriented demand coupled with the heterogeneous nature of the community college population has resulted in an academic dichotomy which in effect has established a rigid tracking system for the student: enroll in discipline based university parallel courses providing transfer status, or enroll in technically based vocational courses providing a terminal degree and a job.[6] The goals of occupational-technical education and the goals of liberal general education need not be mutually exclusive or incompatible. Community colleges are particularly

adept at implementing programs which ardently embrace in philosophy both poles of the spectrum. However, even still, the traditional purposes of general education are being challenged in the community college since the resurgence of vocational technical programs, and the topic of general education requirements for occupational students is now a much debated issue.[7]

It is the purpose of this paper to investigate this topic specifically stated as the issues relating to the general education component in vocational technical programs in community colleges. While no effort is made to define historically or philosophically general education, its use will be basically limited to those courses which attempt to promote or enhance humane learning, to improve the quality of life, to sensitize the student to his cultural heritage, to improve social and self awareness. (Examples would include Psychology, Literature, Sociology, History and Government, and Geology.) Similarly, vocational technical education will basically be defined as those courses which attempt to provide the student with technical skills, job related industrial competencies, practical and applied abilities. (Examples would include Machine Technology, Electricity, Nursing, Instrumentation, and Welding.) It is recognized that such a division is artificial, and that many courses, depending on the rationale of the student taking them, may be defined differently.

Curricular planning for community college programs has typically defined the general education component in three ways. First is the traditional distribution system whereby academic program designers establish a minimum number of credits to be elected from basic core areas such as English, Math, social sciences, and the physical sciences, or from more broad divisions such as communications, humanities, life sciences, etc. There is a reliance on the standard introductory courses usually entitled

Introductory to _____, Survey of _____, or Fundamentals of _____. Usually, vocational-technical programs require a lower number of credits than transfer programs, and students are given greater leeway to bypass these requirements by substituting adjunct courses from their technical area. Second is the "core curriculum" system whereby all students are required to take the same or similar courses required for graduation. A recent development congruent with the "core curriculum" concept is the basic competencies requirement whereby all students must display certain levels of proficiencies in certain areas (usually reading, writing, and computational mathematics). Courses are usually interdisciplinary and attempt to provide students with knowledge for responsible citizenship and to achieve a commonality of education. Finally, the third system is a combination of the first two. Transfer students are given distributive and elective requirements, while occupational-technical students are required to take particular courses. This dual system is based on the idea of different needs of the students and constraints of their programs. The basic thrust of this paper is to review the arguments, pro and con, for the existence of the general education component in vocational-technical programs in the community college.

THE GENERAL EDUCATION COMPONENT IN VOCATIONAL TECHNICAL PROGRAMS DEBATE

As evidenced by shifting enrollment patterns, major portions of today's community college students are participating in vocational technical programs (vo-tech) rather than traditional academic, transfer subjects.[8] Due to this increased student consumer demand for pre-employment training, the historically sacred general education requirements for all post secondary students are being seriously challenged. Advocates for and against these requirements have entrenched their ideals on opposing fronts and done verbal battle. Some maintain that general education is too irrelevant and impractical for the specific educational/employment goals of the vo-tech student. To impose these requirements severely detracts from the student's instructional training and lab work which are far more important in the obtainment of marketable skills. Others feel that the intellectual and cultural virtues of general education are an academic necessity for all students' personal and social growth, knowledge and attitude development. To reduce these requirements does an injustice to the students and denies them the opportunity to experience their cultural heritage and the humanistic foundations of society.

Arguments for the Retention of the General Education Component

In 1974 a major survey was conducted in the Virginia Community College System to determine the attitudes and perceptions of occupational-technical graduates toward their community college program. In one segment of that study, the former students were asked to rate the quality and value of their preparation in seven areas (technical knowledge and understanding, job or learning skills, getting along with people, self-understanding,

knowledge about career opportunities, communication skills, and general education). The respondents consistently gave the highest ratings of superior or good to both the quality (81%) and the value (76%) of their general education component above all other six areas.[9] While these results may be unexpected in view of the employment goals usually ascribed to occupational-technical students, it raises the larger question of the relationship between quality and value of their community college career preparation and the content of general education requirements.

Should a general education component be required in occupational programs? Is it an integral part of the curricular intent to provide these students with employment credentials? Does exposure to the content of these requirements benefit the student to such an extent that they should be prescribed despite students' seemly reaction against their supposed irrelevancy? Does the community college have the obligation to inculcate the ideals of a liberal education to these students? Vineyard has identified three basic philosophical approaches which argue the necessity and value of retaining the general education requirements in vocational-technical programs. They are the humanistic, the basic life competencies, and the pragmatic approaches.[10] While they are in no way inclusive, they are indicative of basic themes used to stress the importance of these requirements and can be used to serve as guideposts to the multitude of articles which support the premise.

The major assumption of the humanistic approach is that higher education should broaden the student as a humane person. To the greatest extent possible, vocational programs should extend their students' personal and intellectual horizons with the inclusion of cultural offerings, courses in the arts, literature, music appreciation, and selections from the behavioral and social sciences which accentuate the student's awareness

of his self and the varied human capacity for creative expression. As the one- or two-year vocational program may be the only formal contact with the liberating influence of higher education for the technical student, community colleges should not deny these students the enlightening and enriching opportunities to explore and experience the finer qualities and achievements of man's civilization. Returning to the classical rhetoric and logic of Hutchins and Bell, the humanistic approach denounces the power and prestige of the demagogic paycheck which symbolizes the economic popularity of occupational training programs. Such programs, if not infused with the general education requirements, fail to touch upon the many other interests and needs of the human personality and intellect and man's need to become familiar with his cultural heritage and those great concepts that make life worth living.[11]

The basic life competencies approach assumes that higher education should broaden the student as a participating and informed citizen. If indeed one of the most fundamental rationales for the existence of community colleges is to improve the quality of life in the community it serves, then one of the foremost means to realize this mission is to promote social and behavioral learning for all its students. Not only must vocational-technical programs provide their graduates with the marketable skills necessary for employment, they should also attempt to make their graduates into decent and contributing citizens. Naturally, the general education component which includes courses which deal with the American political system and its history, consumer education, personal health, and environmental science is the chosen path to these realities.

U. S. Representative William C. Wampler, speaking to the Virginia Association of Vocational Clubs of America, stated to his vocationally oriented audience that they would increasingly be "called upon to pass

judgement on problems ranging from those of major national concern to simple personal ones . . ."[12] He would remind them that technologists perform their duties in a social setting which involves interpersonal relationships and community and national involvement. Consequently, the general education component should be preserved in vocational programs because it enriches the instructional program by incorporating into the curricular structure not only occupational training but interpersonal awareness,[13] not only employment credentials but liberal learning, not only technical expertise but social skills, not only current events but historical precedents, not only applied knowledge but practical wisdom. If these ideals seem lofty, a recent study by Winter et al. endorses them by validating the effects of liberal learning.[14] Their study found that a liberal education appears to promote increases in conceptual and social-emotional growth, and that students who enroll in general education courses seem better able to formulate valid concepts, analyze arguments, and define and orient themselves maturely to their world.

The third approach identified by Vineyard which argues the retention of the general education component in vocational-technical programs is labeled the pragmatic approach; and more than the other two approaches, it strikes home at the employment concerns of the vocational student; namely, job performance and career development. The inclusion of general education requirements insures an academically more well-rounded student who advances more rapidly and goes higher in his career field than the student who has received only applied technical skills courses. Those general education courses which are required should have some relationship to the future success of the student after his desired credentials are obtained. The major criteria should be whether the course will contribute to the student's ability to function and advance in his employment situation

after gaining entry.[15] Allen and Guttenridge researched the assumptions of this approach and found that salaries and promotions received by graduates from community college occupational programs which included the general education component grew at a significantly faster rate than compensation for graduates from single-interest, proprietory programs.[16] Wage differentials stemming from the additional general education requirements in vocational-technical programs can also be seen in the follow-up study of occupational-technical graduates at New River Community College in Dublin, Virginia. Students who received the A.S.S. Degree which requires general education courses realized an average monthly salary of $996, while graduates in the certificate and diploma programs which do not have such academic performance standards realized only average monthly salaries of $759 and $640 respectively.[17]

A fourth approach and one not mentioned by Vineyard is the theoretical orientation argument. The basic assumption is that the most beneficial occupational education for successful vocational careers is not technical in its orientation but rather is designed to equip the student with the ability to teach himself adaptive practical skills through theoretical understanding.[18] General education theoretical in nature is necessary for vocational employment and professional practice. Although it may seem irrelevant in terms of direct on-the-job applicability, such an education gives purpose and direction to the technical skills.[19] Community colleges should consequently shift their vocational-technical emphasis on graduating good practitioners to producing occupational theoreticians. Instruction should be grounded in theory to provide sufficient theoretical knowledge to enable the student to apply his skills in a multi-dimensional manner and to provide the intellectual bases from which new knowledge and skills may be extended.

Arguments Against the Dominance of Vocational-Technical Training

A second faction in this large debate concerning the nature of the general education component in vocational-technical programs are those who ally themselves with the pro-general education camp but who approach the issue by warning of the dangers to be incurred with the increasing domination of technical skills courses in vocational-technical programs, even to the exclusion of all or most of the general education component. Proponents grant that while the vocational-technical training function of the community college is a valid and primary concern, programs should not be so restrictively contrived as to negate the obligation of the college to provide students who seek pre-employment training with a general education background. It is assumed that vocational-technical students who enter the employment world will face the same problems and decisions as those who continue on for the B.A., and since their training may be the last formal education they receive, it is imperative that they receive some general education.[20]

The main line of reasoning for this argument is that if the purpose of community college vocational-technical programs is to provide their graduates with "salable skills," as former U. S. Commissioner of Education T. H. Bell has stated, then programs limited predominantly or exclusively to technical skills are too specific, too narrow, and too limited in purpose and pursuit.[21] In today's economy, it is difficult to know which skills will be marketable or obsolete in five years.[22] No matter how well prepared a student may be to apply his education to the current demands of an occupation, without some general education background he will not have the understanding of the principles involved to master new technologies, new techniques, new social relations, or adapt to swiftly changing employment demands.

A second line of reasoning is the belief that vocational-technical programs without general education requirements or electives force students to make a career choice too early in life by trapping them in a unidirectional course of study and then penalizes them through the loss of credit if they change their minds. The idea that the only aim of a vocational-technical program is to increase employability through a single-skill preparation is simply insufficient to prepare the student for the unpredictability of the future and the changing nature of skills from manual to cognitive.[23] Faculty, counselors and administrators should not be swayed to rash behavior by the consumer behavior and short-sighted attitudes of students who believe that the more intense their instruction in their career field, the faster they will rise in the echelons of remunerations and responsibilities.[24]

Arguments for the Limitation or Exclusion of the General Education Component

In the survey of occupational-technical graduates of the Virginia Community College System mentioned earlier, a second segment of the study asked the participants to give their opinions on the balance of applied technical skills courses and general education courses in their programs.[25] Fifteen percent preferred more general education courses, 33% accepted the proportion of classes, and 52% expressed the desire to have more technical and skills courses. This research indicates that vocational-technical graduates felt the need for additional courses which would have prepared them for their career rather than the general education courses. It is intriguing that while greater than 50% of the respondents would have appreciated less general education, they also rated the value and quality of that education as superior or good. One plausible explanation is that graduates who looked upon their community college

education as terminal would sacrifice the liberating virtues of general education for greater career competencies.

Stephenson began the obsequy for the general education component when he stated, "If we cannot convince many others of the continuing value of liberal education, then perhaps our arguments are merely self-serving contrivances anyway."[26] Advocates for the limitation or exclusion of the general education component in vocational programs would argue this wholeheartedly. If arguments for their side of the debate have not been as numerous nor as rhetorically eloquent as their opponents have been, perhaps they have put aside their pretenses and are waiting for the last eulogy to end.

Kroeger and Bruce conducted a national survey to determine the humanities and general education courses required in vocational programs in two-year colleges and their relevance in occupational curricula. The result they found is simply stated as vocational-technical programs are unnecessarily lengthened with the addition of required general education courses. One conclusion that they reached is that general education and humanities should be optional in vocational programs because the primary reason students chose those programs was to get a job, and that the longer their college training becomes, especially with courses they feel that they do not need or will not use, the longer they are kept off the job and the more frustrated they become.[27] Hall supports the frustrative, irrelevant argument of the general education component by purporting that occupational students frequently do poorly in them, frequently object to being required to take courses which they see as having little relationship to their anticipated specialty, and frequently appear to gain so little from them.[28]

A second conclusion of the Kroeger and Bruce study is that the

instructional philosophy of the community college is to adapt the college to the educational needs of the student. Also, the service philosophy of the college is community based and responsive to public needs. Therefore, since vocationalism is an accepted valid response to society's manpower needs, academic planners should look to the market place for assistance with curricular development and devise programs as restrictive as required.[29] If the need for skills courses is so great that insufficient time remains for general education, then so be it, for to do otherwise is to deny the college's own philosophy.

The need to emphasize vocational skills and the training of technicians at the expense of general education is not simply dialectic. The number of students enrolled in programs culminating in employment as compared to further higher education indicates the demand for the practical. Community colleges are tied directly to the manpower and training needs of the businesses, industries and professional institutes of the communities they serve. Via advisory committees and employee leaders' participation in the development of courses and programs, the issues of general education vs. job related education leave off the lofty realms of philosophy and theory and become issues of supply and demand, and thorough negotiation.[30]

And who is to say that general education has a monopoly on the development of the whole person? Defenders of the vocational-technical dominance insist that much of the personal and social growth that is believed to result solely from the general education component takes place, and for some students more effectively, in the occupational-technical courses of the program.[31] Additionally, with students assuming greater responsibility for their own education, it is becoming even more possible for occupational programs to develop the student's ability to think, to

make judgements, to discriminate, to communicate effectively, and to improve social skills in human relations.[32]

Another argumentative approach used by the advocates for the curtailment of the general education component stems from the basic democratic belief that to improve the state you must improve the citizens.[33] Who would deny that it is advantageous for each citizen that all other citizens in society produce to their greatest potential, and that when any citizen of a society produces at a level below the optimum, the total society suffers.[34] The logic is as follows. People must earn a living. People must have training for earning a living. Vocational education is the foundation for earning a living for the majority of the citizens. Community colleges have opened the academic doors of higher education to allow citizens to participate in this vocational education. Therefore, what we need is more occupational education and more community colleges if we are to improve the state. While the syllogism is not balanced and the logic faulty, the implications are interesting in that general education courses are merely tools which one needs to have to master one's skills or technology and so enrich one's life.

Finally, vocational-technical education is a success. A follow-up analysis of the June, 1979 graduates at New River Community College indicates that 80% of the occupational-technical graduate respondents are employed, and that over 90% of those are employed on a full-time basis, and that over 60% are employed in their field of training.[35] Educational priorities should be reexamined based on proven manpower needs and job placement data of graduates. As job descriptions become more and more narrow in scope, educators should stress the technically oriented classes which assure the student of a meaningful job upon completion of the program.

In a study to access the status of general education in California community colleges and the extent to which major departments prescribe or restrict student choice of general education courses in non-transfer vocational programs, Hudson and Smith found that clearly the primary focus of non-transfer programs was the single-minded preparation in a trade specialty, and that general education was of secondary importance, "something to be 'fitted in' the student's program."[36] The promotion of generalized, theoretical knowledge rather than specific entry-level skill is an academic injustice to the majority of students who are career oriented when the supply exceeds the demand in the job market.[37]

FOR THE SAKE OF THE STUDENT

One reason for the reluctance to mix vocational and general education is that a perception prevails that vocational students are somehow different from those who choose to earn a baccalaureate degree.[38] As mentioned in the introduction, the clientele of the community college has altered significantly in the past decade as a new stratum of society has gained access to higher learning. Yet, it is interesting that both the vocationally oriented, academically poor students in the two-year colleges described by Cross[39] and the professionally oriented upper middle class students described by Jencks and Riesman[40] perceive higher education as a means to a higher status occupation, increased income, and social mobility. The major difference is that the new students of the seventies and eighties have rejected the efficacy of culture and liberal learning as requisite educational goals pursuant to this desired status in society.[41]

In an a tempt to respond creatively to the new demands to combine general education with the world of work, collaborative efforts have

been adopted by many diverse institutions. This approach allows community colleges with a special mission to preserve the integrity and unique role of their mission and at the same time open up new opportunities for their students.[42] Joint degree and merged degree programs, as well as expanded opportunities such as work-study, cooperative education, travel study and block transfer, and articulation agreements have all been tried.

For the sake of the student, the general education component within vocational-technical programs has also been experimented with in attempts to improve its vitality, value and perceived relevancy to the new students. Interdisciplinary, multi-disciplinary, and non-disciplinary approaches centering on the survey, theme, problem and concept technique have all been tried with dubious success. Eli Ebel has likened the problem of general education to the problems of industry when there is a downturn in the business cycle. Managers reexamine their product, the production process, and the administrative structure as a means of improving quality and efficiency.[43] Similarly, as the confusion of general education courses and anti-courses has placed the entire community college curricula in jeopardy of disintegration into a set of haphazard events, the time has come to conduct a similar examination within the community colleges. General education faculty must determine who they are teaching, what they are teaching, and what is their standard of excellence.

However these problems are addressed, they must be resolved in the context of the open door policy of the community college. Open access implies open exit. When students can enter and withdraw at will, the idea of a general education component as a unified set of courses within a curricular program is severely limited.[44] This casual approach to

higher learning is unprecedented and requires special planning to be effective. What is called for in the literature[45], is a change in the basic philosophy of the general education component. A selection of proposals necessary to revitalize general education courses is as follows:

- subject matter and knowledge accumulation are not intrinsically important
- educational importance should be derived from what it does for the student and what it enables the student to do with his life
- breadth, depth and academic rigor should be sacrificed for intensity, relevance, and immediacy
- the concept of laying the foundation for a lifetime of study in a given discipline should be dropped
- definitions of what constitutes acceptable classroom experience should be broadened
- presentation of knowledge should be based on the practical selection of relevant events not saturation of all events in the field
- knowledge should be integrated and not fragmented
- evaluation systems should be based on personal growth and not information retention
- interest the student in pursuing more general education options

If there is to be a desegregation of vocational students from general education, students must be convinced of their worth in relation to their aims and goals. Can the liberal arts content and classical traditions be made more relevant to contemporary problems? Numerous suggestions abound in the literature. A few selections indicative of the basic themes concerning what general education should do are presented below:

- enhance a student's natural curiosity through confrontation with actual problems
- provide immediate application of classroom theory
- encourage the development of theory through personal experiences

- be designed to be relevant, immediate, and pertinent
- focus on the areas of interface between vocational-technical and general education
- be problem centered and responsive to contemporary social concerns
- be interdisciplinary in approach to universal problems of human life and great issues
- deal with concepts rather than cover material
- focus on creativity as common to all valid intellectual endeavors
- show that unity of knowledge can be made to correspond to the basic unity of life
- be self contained
- insure that the student gains some valuable knowledge even if he does not pursue the subject further
- encourage the experiental and insightful
- analyze the problems, issues and activities in which all citizens become involved and need to deal with

If the general education requirements in occupational-technical programs are to survive and remain an integral component within these specialized curricula, they will have to surmount a number of formidable barriers, not the least of which is the lack of specific courses designed to meet the basic educational needs and interests of the vocational-technical students. Educators can no longer offer or demand that students take courses solely on purpose, intent, structure or context. Content must be considered and given the importance it is due. Further study is needed to determine the ways that general education courses are changing their approach to instruction.

CONCLUSION

We are all well acquainted with the economic and demographic constraints that are besieging higher education today. Enrollment patterns have suddenly downturned and the growth that we experienced in the sixties has now turned into a widespread concern for the future of higher education. The anticipated negative impact of demographic projections on enrollments in the eighties has resulted in society's questioning of the value of higher education in the job market. In turn, much of higher education has responded to what society says it wants by designing programs to meet current needs rather than confidently leading society to understand the purpose of what higher education is or should be.[46] Despite all the efforts that have been made to make undergraduate education responsive to the needs of contemporary man, the enrollments in general liberal arts programs have just not kept pace with other areas of higher education. The irony of this decline is that it occurs at a time when society at large is concerned with values and direction of life traditionally treated by the liberal arts.[47]

"As the occupation structure of the country continues to change as a result of job retraining needs, technological innovations, expanding social services . . . most providers of occupational training seem likely to prosper."[48] The AACJC report from which this quote was taken also states that of the estimated 64 million participants in various kinds of post secondary education, over 27 million cited job/career transitions as causing them to "start learning when they did." Additionally, of the 40 million adults who will be going through a career change in the next ten years, 24 million will likely attend community colleges for training or retraining. The goal of community college vocational-technical

training must be to provide opportunities for an adequate, thorough preparation for work and career expectations. At the same time, however, as shown by the figures just given, careers and occupational skills change very rapidly. Therefore, it is essential that students through the incorporation of general education requirements, be prepared for successful job entry or reentry and for the world itself.

References Cited

[1]Deborah Crandall, "General Education for the Occupational Student: A Survey of the Literature," Community College Review, III, 1 (June 1975), 59.

[2]John Lombardi, Resurgence of Occupational Education. Topical Paper Number 65. (Los Angeles: ERIC Clearinghouse for Junior College Information, 1978). (ED 148 418)

[3]K. Patricia Cross, Accent on Learning. (Washington: Jossey-Bass Publishers, 1976).

[4]Richard Magagna, "Community Colleges - Source of a Liberally Educated Citizenry," The Journal of General Education, XXV, 3 (October 1973), 201.

[5]M. G. Scully, "Students Focus on Practicality Hits Humanities," The Chronicle of Higher Education, 8, 18 (February 4, 1974), 1 and 3.

[6]The Future of the Humanities in the Community College (Conference Summary), edited by Jacques P. Thiroux. (Bakersfield, California: Bakersfield College, 1975). (ED 110 148)

[7]Bonnie M. Sanchez, "General Education and the Two Year College Occupational Student," Community College Frontiers, 6, 1 (Fall 1977), 54.

[8]Lombardi, Resurgence of Occupational Education.

[9]John E. Trufant, et. al, Perceptions of Former Occupational-Technical Students. Research Report Number 4. (Richmond: Virginia Department of Community Colleges, 1974), pp. 7-8. (ED 111 461)

[10]Edwin E. Vineyard, "The General Education Component," Community and Junior College Journal, 48, 8 (May 1978), 24-25.

[11]Edwin Gill, "Emphasis on Education for Careers?," Community College Review, III, 3 (January 1976), 23-24.

[12]U. S. Representative William C. Wampler, Speech given at the 16th Annual Leadership Conference of the Virginia Association of the Vocational Industrial Clubs of America, Pulaski, Virginia, April 19, 1980.

[13]Gill, 20-21.

[14]David C. Winter, et. al., "Grading the Effects of a Liberal Arts Education," Psychology Today, 12, 3 (September 1978), 69-70.

[15]Vineyard, 24-25.

[16]Robert E. Allen and Thomas G. Guttenridge, "Intensity of Occupational Training: Its Effect on Subsequent Labor Market Experiences," Community/Junior College Research Quarterly, 2, 4 (July-September 1978), 87.

[17]J. Doyle Lyons, Follow-up Analysis of June 1979 Graduates. (Dublin, Virginia: New River Community College, 1980), p. 6.

[18]Morton S. Baratz, "Career Education is Complementary to Liberal Arts," The College Board Review, 105 (Fall 1977), 25-26.

[19]Bernard S. Adams, "Liberal Education and the New Vocationalism," Liberal Education, 61, 3 (October 1975), 342.

[20]Magagna, 206.

[21]James U. Rundle, "Liberal Arts Should Be Saved for Adults," Community College Review, II, 4 (March 1975), 44.

[22]Don A. Carpenter, "Bridging the Gap Between Vocational Education and the Liberal Arts," Community College Review, VI, 3 (Winter 1979), 13-14.

[23]Dhirenda Verma, "Occupational Programs Should Include General Education," Community College Frontiers, 1, 2 (July-August 1973), 61.

[24]Earl J. McGrath, "The Time Bomb of Technocratic Education," Change, 6, 7 (September 1974), 25.

[25]Trufant, Perceptions of Former Occupational-Technical Students.

[26]John B. Stephenson, "Efficiency and Vocationalism - Renewed Challenges to Liberal Education," Liberal Education, 63, 3 (October 1974), 385.

[27]Fred Kroeger and Carl Bruce, National Survey of Humanities Courses Offered in Occupational Curricula in the Two Year Colleges, Unpublished paper, 1973. (ED 065 114)

[28]Dixon S. Hall, "Revitalization of General Education in the Auto Mechanics Curriculum," Community College Review, II, 2 (Summer 1974), 30-32.

[29]Carpenter, p. 16.

[30]James F. Gollattscheck, "Liberal Education and the Community College," Liberal Education, 63, 2 (May 1977), 248.

[31]Louise F. Batmale, Career Education and Elitism, Paper presented at the Annual Meeting of the AACJC, (Seattle, Washington: April 1975), 3-4.

[32]Batmale, 4-5.

[33]Gerald B. James, "Emphasis on Education for Careers?," Community College Review, III, 3 (January 1976), 16.

[34]James, 16-17.

[35]Lyons, p. 5.

[36]Steven L. Shapiro, The Role of Certificate Programs. (ED 105 154)

[37]A. James Hudson and Ralph B. Smith, "Does General Education Have a Future?," Community College Review, IV, 2 (Fall 1976), 60.

[38]William J. Moore, The Role of General Education in the Community College. Paper presented at the Forum on Future Purposes, Content, and Formats for the General Education of Community College Students. (Montgomery College, Maryland, May 22, 1978), p. 31. (ED 167 216)

[39]Cross, Accent on Learning.

[40]Christopher Jencks and David Riesman, The Academic Revolution, (New York: Doubleday, 1968).

[41]Arthur M. Cohen. The Case for General Education in Community Colleges. Paper presented at the Forum on Future Purposes, Content, and Formats for the General Education of Community College Students. (Montgomery College, Maryland, May 22, 1978), p. 19. (ED 154 849)

[42]Carpenter, 19.

[43]Eli Ebel, "Liberal Learning: A Tradition with a Future," Bulletin of the Association of American Colleges, (May 1978), 119.

[44]Cohen, 27-28.

[45]The following lists were gathered from the following articles;

Don A. Carpenter, "Bridging the Gap Between Vocational Education and the Liberal Arts," Community College Review, VI, 3 (Winter 1979), 13-23.

Arthur M. Cohen. The Case for General Education in Community Colleges. Paper presented at the Forum on Future Purposes, Content, and Formats for the General Education of Community College Students. (Montgomery College, Maryland, May 22, 1978). (ED 154 849)

J. Derek Harrison, "General Education in the Community College: A Recent View," The Journal of General Education, XXV, 2 (July 1973), 89-90.

Alfred W. Nall, "What About Terminal General Education in the Junior College?," Junior College Journal, 33, 1 (September 1962), 20-24.

Charles M. Stanton, "Reflections on 'Vocationalized' Liberal Education," Educational Forum, 40, 3 (March 1976), 297-302.

Robert A. Waller, "General Education: A Challenge for Community Colleges," Community College Frontiers, 5, 4 (Summer 1977), 47-51.

Robin Wilson, "Bridging the Gap Between Technology and the Humanities," Engineering Education, 63, 5 (February 1973), 349-351.

[46]Lewis H. Drew, "The Greek Concept of Education and Its Implications Today," Bulletin of the Association of American Colleges, (May 1978), 9.

[47]Moses S. Koch, "Liberal Arts: Carrier Pigeon or Albatross," Community College Frontiers, 6, 1 (Fall, 1977), 4.

[48]Fontelle Gilbert, The Adult Lifelong Learner in Two Year Colleges. Draft document from the AACJC, (March 1980).