This regional conference assessed the status of guidance programs as they relate to area vocational-technical schools (AVIS), and formulated strategies for improvement in this area. The discussions of the following issues are summarized: (1) providing a balanced educational experience, (2) effective communications between sending schools and AVIS, (3) counseling responsibility, (4) student selection criteria, and (5) placement and follow-up. Printed in its entirety is the address of a consultant, who discussed the need for validating selection procedures. In the final session of the conference, the participants discussed conclusions and recommendations. These are summarized. A roster of participants is also included. The following papers devoted to the vocational aspects of guidance are also reproduced: (1) The Role of Theory in the Psychology of Occupational Behavior; (2) What We Know About Career Selection; (3) Youth, Too Young to Choose?; (4) A Point of View About the Place of Vocational Education in Contemporary Education; (5) The Challenge of Vocational Education to Guidance; (6) The Challenge of Guidance to Vocational Education; (7) Vocational Aspect of Elementary Guidance Programs; (8) Your Public Relations; (9) The Problem of Forms to Gather Follow-Up Data from Early School Leavers and Graduates. (IM)
A Report of
The Regional Conferences
On Guidance Services
For Present and Potential Students
Of Area Vocational-Technical Schools
And Related Papers

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Bureau of Pupil Personnel Services
Division of Vocational Guidance
Department of Public Instruction
Commonwealth of Pennsylvania
Harrisburg
1968
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A NOTE TO THE READER

Many of the people who read the material assembled herein were participants in the conferences about which this report is written. To those participants, we express our sincere gratitude, not only for their valuable contribution to the content of the report, but for the personal and professional commitment to their task which they demonstrated throughout the conferences. Such commitment to the goal of providing a meaningful educational experience for all students, in our judgment, foretells significant progress toward the development of appropriate guidance services as integral and complementary to the total educational process in the Commonwealth.

To the reader who did not attend either conference but who, as a teacher, administrator, or counselor, is interested in the potential of the area vocational-technical school to significantly and positively influence the lives of our young people, we invite your thoughtful consideration of the message contained in the pages which follow. Hopefully, you too, will invest yourself in the growing effort to realize that potential.

In addition to reporting the conference proceedings, we are pleased to have this opportunity to make available to a wider audience a number of important, related papers, most of which were presented at guidance staff development sessions or at other meetings devoted to the topic of vocational aspects of guidance. We include these papers (several authored by nationally recognized leaders in their respective fields) with the expectation that they may serve to enrich your understanding of the mission of the Regional Conferences.
OVERVIEW OF THE CONFERENCES

It was almost two years after the first Guidance Staff Development Program was held in Erie in February, 1966, when the Division of Vocational Guidance implemented the first stage of the AVTS Guidance Conference Project.

Intended as the vehicle for assessing the current status of guidance programs as they relate to AVTS and for formulating strategies by which to proceed, the Conference was viewed by the Division of Vocational Guidance as a sort of way station, an intermediate point from which could be seen the route that had been traveled and the nature of the road ahead.

From the look backward, one could see six Staff Development Programs encompassing a 23-county area in all, each a series of one-day sessions in which theories and techniques relevant to career development and meeting needs of students enrolled in area vocational-technical schools were explored and tentative guidelines prepared for local operation.

How were area programs progressing? What obstacles were being encountered? How were local districts coping with their concerns? What were the basic issues as the area vocational-technical schools expanded their number?

Armed with these questions, staff members of the Division of Vocational Guidance, during the late winter months, visited AVTS personnel and counselors of participating schools to identify the major issues surrounding the development of guidance services for present and potential students of area vocational-technical schools. The conference program and its format evolved from these visits.

Invitations to attend the Eastern Regional Conference (Harrisburg, April 29-30) or the Western Regional Conference (Pittsburgh, May 7-8) were extended to the director of every area vocational-technical school in the Commonwealth, including those in the planning stages as well as those in operation. In turn, the director was asked to invite one person from the AVTS staff (namely, the counselor if one had been appointed) and a counselor from one of the home or sending schools in that area.

Both conferences were publicized as "work conferences," and they lived up to that billing! Participants received copies of the issues several days prior to the conference, along with a request that they come prepared to engage in small group discussion directed toward resolution of common problems and the identification of strategies to improve
guidance services for present and potential students of AVTS. Participants also responded graciously to pre-conference requests to serve as chairman or recorder for one of the sessions.

Throughout the two-day conferences, the composition of each small discussion group was changed as each new issue was confronted, with the result that all participants had an opportunity to interact freely and to gain both an understanding and an appreciation of diverse viewpoints.

A number of questions relevant to each of the issues were posed to provide a framework and stimulus from which discussion might emerge. These questions precede the summaries which were compiled and edited from reports submitted by each recorder at the conferences. Finally, a section is devoted to implications of the conference and recommendations for traveling the road that stretches ahead.
ISSUE I: PROVIDING A BALANCED EDUCATIONAL EXPERIENCE

What evidence do we have concerning the appropriateness of procedures used to guide curriculum development?

To what extent are you able to provide more than one level of instruction? What does this indicate in regard to meeting the needs of a wide range of individual differences among students (e.g., ability, aptitude, etc.)? How does AVTS incorporate specialized curricular offerings for students of limited employability? For students who intend to continue their education after high school, is the transition a smooth one in terms of all available learning opportunities?

In what ways is it desirable to coordinate the academic course of study with the specialized curricular areas? What are the difficulties in attaining these desirable conditions? How are difficulties being resolved?

Within the AVTS, what kinds of exploratory or trial experiences have been conducted and/or anticipated? Results?

What is the status of work-study programs?

Summary:

In general, more emphasis was placed upon identifying procedures that are and/or should be used than upon evidence that these procedures are appropriate. For example, there was broad agreement that surveys should be conducted in the community to determine program needs as viewed by certain groups and individuals. However, no suggestions about how survey results should be used were included in recorders' reports. Therefore, questions of the following nature may be in order: How much weight should be given to responses of parents and members of service clubs? Are program needs as identified by personnel in industry more valid than those identified
by other groups? If students are surveyed, on what bases are they responding? Have they been provided the necessary background to respond other than by whim?

Considerable discussion was generated in regard to planning curricula that will meet students' needs. Although counselors claim competency in the area of identifying student needs, in many instances they have not been and are not now involved in curriculum planning. If counselors are to perform a consultative function in regard to the development of appropriate curriculum offerings, it was suggested that they will need to give more attention to developing their own skills in studying and in turn interpreting student characteristics and needs.

Other suggestions receiving support were the following: courses requested by industry should be inaugurated on a pilot basis, using job placement as the criterion of appropriateness, rather than to plunge full scale into a variety of new offerings where the need may have been established without sound and substantial evidence. Advisory committees, composed of individuals who are knowledgeable and who are willing to invest themselves and their time in long-range curriculum planning, are highly desirable. If such committees can be formed, the task of curriculum development becomes a group project rather than an individual burden.

Flexibility was the word most often used by participants who addressed themselves to the questions dealing with multi-levels of instruction. "You need flexibility," however, seems not to constitute a direct answer. Rather, the implication is that the extent to which a given AVTS may be able to provide more than one level of instruction is dependent upon the amount of
flexibility that can be mustered -- by AVTS instructors, sending school and AVTS schedule-makers, and in fact by all persons who share the responsibility for implementing the concept of education that meets students' needs.

It was agreed that even though flexibility on the part of every staff member in both AVTS and sending schools would create a climate for learning that might approach the ideal, fostering flexibility is not always a simple task. For instance, some individuals are inflexible in their teaching because they have yet to develop skill in individualizing instruction; others may be inflexible in attitude. However small the observable gains, continuing attempts must be made (often by counselors) to assist such individuals in a personalized way.

When discussing the role of the AVTS and a theoretical allegiance to three instructional levels -- occupational, vocational, technical -- a number of participants expressed concern that so-called technical programs may be a major source of misunderstanding among the publics to be served, particularly with respect to community colleges. It is important, therefore, that each AVTS carefully defines its position relevant to levels of instruction and the scope of students' educational/vocational objectives it can reasonably expect to fulfill.

Lagging far behind most other AVTS program developments are those designed for students of limited employability. Recognizing their inability to supply evidence of significant progress in this area, AVTS personnel talked about things they hoped to accomplish. For example, they would like to establish clearly differentiated levels of proficiency based upon well-defined, yet widely varied skills. Thus, time spent in a given training program would vary according to each individual's abilities and other characteristics. Another area singled out for more emphasis was that of providing meaningful
training other than in trade skills alone, particularly citizenship, communications, and character development. An expansion of carefully designed work study or cooperative programs, conducted by either the AVTS or home school, was also recommended for students whose potential for employment is extremely limited.

To meet the needs of students intending to continue formal education after high school, a slightly different problem must be solved by both AVTS and home school personnel. In effect, the question is, "How can we fit in all the things that are required?" Of major importance, according to participants, is to supply accurate and current information to such students, not only prior to their entering the AVTS but during the course of their training as well. A number of schools have incorporated academic math and science courses at the AVTS for students in technical-level programs. In other cases, students are assured of college preparatory courses in the home school through individualized scheduling. Occasionally, foreign languages are offered after school, or students planning to continue their education take academic courses during the summer if they cannot be scheduled during the regular school year.

The overall need for a closer liaison between AVTS and home schools in the area of curriculum planning was expressed by virtually all participants. However, wherever the AVTS operates as a service center, awareness by AVTS and home school personnel of the total curriculum structure and purposes is mandatory.

Developing awareness of the "big picture" might be expected to ease the major difficulties confronting AVTS and home school personnel in their quest for effective articulation. Scheduling and transportation, collectively,
appear to represent the major obstacles. To reiterate a few of the concerns already discussed, some of the home schools within an AVTS attendance area are reported to maintain such rigid curricular promotional patterns that an AVTS student is handicapped in receiving an adequate academic program, even sometimes being forced to remain in school for extra terms to complete the home school graduation requirements. Often, lengthy travel distances present a difficulty in scheduling students for required courses at the home school. As a consequence, many AVTS students are placed in courses which are "convenient" rather than being assigned in those courses which best meet the students' needs. Not only did most discussants claim that home school personnel control decisions about the pattern of students' educational programs, they also felt it was not uncommon for the home school to declare educational and vocational foreclosure on student planning through a system of inflexible scheduling.

The call, then, for immediate improvement in joint curriculum planning was loud and clear. Home school counselors received from participants a strong challenge to become actively involved in facilitating needed changes within their institutions. If counselors are willing to accept such a challenge, they were advised to make the first step one of learning everything they can about what's going on at the AVTS and why.

One of the "do it now" prerequisites is to establish a common school calendar for the entire AVTS attendance area. Keeping in mind the goal of providing programs to serve students of all levels of ability, it was suggested that AVTS students attending service centers should be among the first to be scheduled at the home school, thereby strengthening the probability that their academic programs would be appropriate to their needs.
Another possibility to explore in the attempt to incorporate greater flexibility in scheduling is that of reducing the length of class periods or the number of class meetings per week while continuing to function within the scope of State mandates.

Some areas have begun to combat the transportation problem by awarding two bus contracts, one each by the AVTS and sending school, thus expediting travel between the schools.

In general, participants felt that all areas must eventually arrive at unique solutions to their own particular problems. To do this, they desperately need people who are not content to wait for what tomorrow may bring, but instead, are eager to shape tomorrow so that it will, in fact, be better or at least different than today.

Exploratory or trial experiences, designed to give the student an opportunity to "sample" areas of technical and vocational education and to acquire a first-hand knowledge of what the training entails before making a more specific curricular decision, are viewed as highly desirable from a developmental point of view, but somewhat difficult to implement on a scale broad enough to include all students who may be interested.

Among the programs of this nature which are in progress, but for which no evaluation was reported, are the following:

1. Ninth grade students are offered a trade exploratory course comprised of a 10-week assignment to each of four trades and/or skill training areas.

2. Exploratory experiences are offered to interested students during summer sessions.
3. First year students (grade 10) are assigned to exploratory courses in building trades, graphic arts, electrical-electronics, automotive service trades within a job-cluster framework. During the second year at AVTS students choose a specific training course.

Attitudes toward work-study programs were generally favorable, particularly in their potential for providing personally-relevant experiences for students of very limited capabilities. Also, small schools with limited offerings were encouraged to consider work-study programs as a means of broadening the experiences available to students. In whatever ways work-study programs may be implemented, however, the need for continuing, high-quality supervision does not diminish; rather, it was suggested that extreme care must be taken to insure that students are trained, not exploited.
ISSUE II: EFFECTIVE COMMUNICATIONS BETWEEN SENDING SCHOOL AND AVTS

What are the most effective strategies for building an appropriate public image of the AVTS?

What is being done to develop student awareness of all of the available alternatives in selecting a high school curriculum? How early and in what ways can we begin to develop this awareness?

What progress is being made in helping all teachers understand, accept, and contribute to the realization of guidance goals?

What are the most effective techniques for coordinating the use of data which have been collected about students (cumulative records, report cards, class ranking, graduation requirements, anecdotal reports, etc.)?

Summary:

Inasmuch as all vocational educators are anxious to eradicate the unjustified "second class" status often affixed to their area of endeavor, much has been attempted in connection with building a better public image of the AVTS.

The utilization of the mass media received the most extensive coverage as a means by which a better public image can be fostered. A planned program of news releases might include the following aspects:

1. Each AVTS should assign the supervision of publicity responsibilities to one staff member who is willing to accept these duties as an on-going endeavor.

2. Publicity should not be confined to a single medium but, rather, encompass all of the available mass media.
3. Information should be reported in an inclusive manner to convey purposes of the program, advisory committee decisions, curricular offerings, school activities, and employment data of graduates.

4. School publications should carry a periodic message about the AVTS and vocational-technical career opportunities. Home schools within an AVTS attendance area might devote an issue of the school newspaper to AVTS activities and yearbooks should include the AVTS along with other departmental coverage.

Prominent among the essentials of a good system of communications is *school visitation*, rooted in the concept that AVTS must be seen and understood if it is to be valued.

Some of the methods for handling school visits include:

1. **Open House** - held annually for all interested citizens of the AVTS attendance area. During this activity, the program is explained, slides or films are shown depicting the school's operation and a tour of the building is conducted. The convocation is usually conducted by members of the school staff and advisory committees; the school's counselors and student leaders usually direct the tours.

2. **Parents' Night** - held periodically to acquaint the parents of present and potential AVTS students with the school's offerings and policies. Time is provided during these visits for teachers to speak to groups of parents.

3. **Student Visits** - serve as a means of student orientation. While some schools restrict this activity to students who
have been admitted to AVTS, others offer this opportunity for additional student groups, including those from upper elementary grades. Some schools invite students from all grade levels of selected participating schools; others invite home school student leaders and vocationally-oriented students. Regardless of the group's composition, visiting students are exposed to AVTS purposes, facilities, and staff, with special emphasis on observing the program in action.

4. **Home School Teacher and Staff Member Visits** - planned for acquainting all home school personnel with a program about which many educators lack an understanding. To be an effective tool in building better home school-AVTS communications, several visits of this type should be scheduled for each school year. A superficial treatment of what should be a professional undertaking yields poor results.

In addition to large group visitation by home school staff, an open invitation should exist for departmental groups (especially practical arts departments) to meet at the AVTS for in-service purposes. Counselor and administrator groups should visit the AVTS monthly. Following the initial home school staff visitation, the AVTS should become a center for articulated professional planning. During some of these visits, home school personnel should have the opportunity to see students in action in regular class or laboratory settings.
5. **Other Visitors** - conferences and tours arranged as needed. Even on those occasions when visitors arrive unannounced, a pleasant and informative visit must evolve. The school must be able to improvise within a previously arranged framework to make such visits meaningful.

6. **Community Service Organization, Business-Industry Visits** - directed toward fostering community understanding of the philosophy and objectives of the vocational-technical school. Because of the nature of the AVTS, members of community agencies and service clubs as well as local businessmen and industrialists have a keen interest in the school's activities. Scheduled meetings of these groups can be held in the school setting during which an informal public relations program is conducted. Usually, the visiting groups are given an overview of the school's program followed by an exploration of the types of training offered. Often, a meal is served to acquaint the visiting groups with the food services area of study.

Other attempts to improve the public image of the AVTS have become successful ventures in strengthening effective communication among various groups.

1. Establishing a speaker's bureau from which people can be selected to meet with interested community groups for the purpose of furthering an understanding of the AVTS function.

2. Bringing the AVTS students and graduates before the public whenever possible. Successful and satisfied students do much toward building a good image of the school.
3. Scheduling visits for AVTS teachers to participating schools within attendance area.

The general statements of discussants pointed to the need for establishing a planned program of action involving a number of educators and students of both the AVTS and home schools. It must become common knowledge in the community that school personnel are competent and willing to discuss the AVTS anywhere. Spokesman must convey the message that although the AVTS does not profess to be all things to all people, it does seek to offer more opportunities to more people.

If adults within the school and community are insufficiently informed about AVTS, it seemed logical to assume that many students who would profit from attending an AVTS fail to select the AVTS curriculum because they, too, lack awareness and understanding of its purposes and opportunities. In addition to the publicity and school visitations mentioned above, other means of stirring student interest were discussed as follows:

1. Specially prepared brochures and booklets describing the AVTS program are distributed to all junior high school students.

2. Assembly programs for students and parents are arranged by the home school during which the vocational-technical program is discussed at length.

3. Orientation sessions are held during the summer months for eighth and ninth grades.

4. Parents are encouraged to enroll in adult courses at the AVTS with one of the purposes being that of becoming more familiar with the school's offerings. Parents who participate in these courses often become good public relations agents.
5. Practical arts teachers are actively involved in the dissemination of information concerning opportunities in vocational-technical fields.

The potential of elementary guidance to become a significant vehicle for developing appropriate attitudes and understandings about AVTS was a topic which was explored with a great deal of interest. Few, if any, avowed experts or spokesmen for elementary guidance were present; therefore, participants enjoyed the luxury of uninterrupted dreaming, ascribing to the elementary school counselor a role that represented almost a panacea for the AVTS of the future. With their feet firmly planted on the ground, however, a number of discussants contended that well-planned, sequential experiences begun early and continued throughout the elementary grades would go far to remedy many of the current concerns about students, such as their lack of information about educational and vocational options and opportunities, distorted perceptions about all facets of the world of work and the workers within it, and inability or lack of readiness to engage in self-relevant decision-making. (A paper by Mr. Edward D. Smith, excerpts from which appear on page 122, treats this subject in some detail and offers suggestions for program development.)

At the secondary level, counselors have begun to provide "equal time" for vocationally oriented students. That is to say, in many schools college-bound students no longer can lay claim to the major portion of counseling time available to individual students. This trend drew wide approval, most participants indicating that it is long overdue. Likewise, they felt that much more effort must be directed toward convincing parents that college represents only one of many attractive alternatives available to today's youth.
In regard to home school teachers' understanding and acceptance of the goals of guidance services, there were indications of progress resulting from in-service programs of various types and from teacher-counselor consultation, both informal and formal as in case conferences.

An area of urgent concern, however, and one about which little progress was noted, is that of providing effective training programs for AVTS teachers in developing their understanding of guidance services. Because of the AVTS teacher's limited exposure to education courses, an AVTS administrator and counseling staff must undertake the task of equipping these teachers with a broadened perspective of guidance purposes. This may be accomplished through in-service sessions which begin at a very rudimentary level and proceed as an ongoing long-range program at increasingly sophisticated levels of understanding.

It was the opinion of many that the AVTS counselor's effectiveness is hampered because he lacks valuable information contained in cumulative files which are retained at the home school. Even though an exchange or sharing of information was viewed as common practice between the home school and the AVTS, a great many inadequacies were cited in connection with the coordination of these practices.

A system suggested for the handling of the cumulative record, adaptable to the service center AVTS, is the following:

1. A concise report, which includes all of the pertinent cumulative-record data, accompanies each student application submitted to the AVTS.
2. When a student is admitted to AVTS, a photocopy of the complete cumulative file is forwarded to the AVTS by the home school guidance department.
3. The AVTS counselor may choose to devise a supplementary record card for data accumulated during the students' enrollment at the AVTS, or additional data may be summarized on the original photocopy.

4. Inasmuch as the home school serves as the final depository for all records in most of the attendance areas, one of the following plans might be used for the final processing of cumulative file materials:

   a. The AVTS prepares and forwards to the home school a photocopy of all data accumulated while the student was enrolled at the AVTS. The AVTS retains the original photocopy submitted by the home school at the time of the student's enrollment as well as the supplementary data compiled during the student's AVTS attendance. Thus, each school has a complete record for reference purposes.

   b. The complete file is returned to the home school when the AVTS student graduates or withdraws, in which case the AVTS retains no records except for its current students.

Aside from the above summary, there was little evidence of common practices of coordinating the record keeping between the AVTS and home schools. There were, however, many comments concerning the need for a cooperative effort between the schools in developing procedures for effective handling of report card, class ranking and local graduation
requirements. Apparently, the policies concerning grade-period, marking intervals, and local graduation requirements are as diverse as the number of participating school districts within an attendance area. While one AVTS attendance area encompasses seventeen participating schools, another involves only five. Therefore, it was not an easy matter for the discussion groups to offer realistic suggestions which would apply to all local situations. However, the conclusion was similar to the one reached in the discussions about curriculum planning: immediate, joint action should be taken by administrator and counselor groups within each attendance area toward the goal of more effective coordination.
ISSUE III: COUNSELING RESPONSIBILITY

The following situations are presented to stimulate discussion aimed at clarifying the counseling function. For all situations, the question was: How might this case be handled?

Situation 1:

Janet Johnson, grade 12, has been enrolled in the data processing course at AVTS since the beginning of 11th grade.

Miss Brownell, 12th grade counselor at South Side Junior-Senior High School, is conducting interviews with all senior students at this time to check the progress of their plans following graduation. After greeting Janet, Miss Brownell comments that she hopes Janet has finalized plans to enter the state university in September.

"That's just the trouble, Miss Brownell. I really don't know what to do now. I've been offered a job at Valley Electronics to work with the senior programmer, and they'd like me to start the day after graduation."

Summary:

Although there were a few dissenters, most participants felt that Miss Brownell's behavior fell short of good counseling practice, that she may have infringed upon a student's freedom to choose for herself, and perhaps even jeopardized Janet's opportunity to explore freely the ramifications of her dilemma.

Rather than expressing her own views, Miss Brownell may have more appropriately encouraged Janet to discuss the state of her present planning, thereby allowing Janet to examine the several dimensions of her concern and identify some of the possible courses of action she would want to consider.
Other questions and suggestions for Miss Brownell included the following:

1. Would the AVTS counselor be able to provide additional pertinent information?

2. Should the parents be invited to share in this decision-making process?

3. Janet should be made aware that the expressed problem need not constitute an either-or decision.

4. Miss Brownell should try to keep herself up-to-date in regard to the current and projected status of women in our changing society so that her conferences with girls might assume greater significance as well as be based upon accurate information.

5. Finally, it was suggested that a work-study experience, sometime during Janet's enrollment in AVTS, may have helped to provide important data in the resolution of her problem.

Situation 2:

Bill Bradford, grade 11, enrolled in carpentry at AVTS, has been called into the office of Mr. Greenwood, counselor at Adams Senior High School.

It is the custom at Adams for counselors to interview students who have failed two or more subjects in a given marking period. Bill tells Mr. Greenwood that Miss Graystone, history teacher, simply does not like him and that in English class, they have been working on grammar which he despises to the extent that he won't do his homework.
Summary:

One of the most spirited discussions of the entire conference was generated from consideration of Bill Bradford's case.

Evidently many participants hold firm convictions about cases similar to this one, their positions ranging from a solid "Bill simply has to face the fact that grammar and history are both important subjects which he must pass," to "It is the teachers' responsibility to have more positive attitudes toward students and to make their subjects more interesting."

However, between these two somewhat extreme positions was to be found the bulk of the commentary, much of which was addressed to the need for the counselor to mobilize and use all of the skills at his disposal as he explores the many facets of this problem. Most participants felt that the counselor's ability would be severely tested inasmuch as Bill Bradford's case requires concurrent consideration of philosophical and psychological issues, school policy (both explicit and implied), teacher-pupil-counselor relationships, and the extent and nature of counselor involvement in curriculum.

From the host of questions raised and issues explored, the following recommendations emerged:

1. Mr. Greenwood should gather as much data from as many sources as possible, keeping in mind that to speak and act in haste may do irreparable harm to all concerned.

2. Investigating the problem with the teachers may prove more fruitful than the circumstances appear to warrant.
Mr. Greenwood can use this opportunity to share pertinent insights and information as well as to demonstrate his confidence in teachers' ability to take into account the individual needs of students.

3. In counseling with Bill, Mr. Greenwood may be able to help Bill accept and deal with, at increasing levels of sophistication, some of the unwelcome demands upon him as he matures. To the extent that Bill is performing well in his shop work, such counseling goals should be attainable.

4. Situations similar to the one under discussion often reveal gaps in policy-making and in other areas requiring close cooperation and coordination between AVTS and sending schools. When that occurs, the counselor should take advantage of the opportunity to make a significant contribution to the welfare of students by strengthening the educational institution of which he is a part.

Situation 3:

Bob Boswell, grade 10, has been interested in art since he was in elementary school, and he feels that art should figure prominently in his career plans. He enrolled this year in the commercial art course at AVTS, over the strong objection of his parents who felt he should be in the college prep curriculum.

Bob has come to see Mr. Redmond, AVTS counselor, with the announcement that although he likes the commercial art course very much, his parents have insisted that he switch to straight college prep next year.
Summary:

At first glance, it appeared that Bob Boswell's case represented no real problem since most participants indicated that Bob should be allowed to combine a college preparatory academic curriculum with commercial art work at AVTS. However, situational differences in AVTS philosophy and structure can result in circumstances falling far short of the "ideal" (i.e., student needs receive top priority).

In the latter case, where alternatives numbered only two -- AVTS or college prep -- it was recommended that Mr. Redmond confer with the parents, after synthesizing the available data in regard to Bob's anticipated academic and artistic potential, his achievement, level of aspiration, etc. From such a conference, Mr. Redmond should gain a valuable foundation upon which to formulate plans for assisting Bob.

Many participants rejected the rigidity inherent in the either-or approach, suggesting instead that this situation constituted a classic example of the need to "tailor" programs to suit the individual's needs. Perhaps Bob, only a sophomore, needs the additional experiences and maturity another year would give him before a decision is made. Meanwhile, Bob's goals and his parents' goals for him could be examined and additional options explored without being saddled with a possibly irreversible and/or inappropriate decision.

Finally, the need for a comfortable professional relationship between the AVTS and sending school counselors is especially obvious in this situation; most participants believed that Bob should be invited to work with the counselor with whom he feels the greatest rapport.
Situation 4:

Ed Ellsworth, grade 11, in his second year in machine shop at AVTS, tells Miss Tanner, counselor at Monroe Senior High School, that he wants to drop his course at AVTS and return to Monroe full time in the fall.

Miss Tanner knows that Ed has not been earning good grades at AVTS, but this announcement is unexpected. Furthermore, it creates all kinds of scheduling problems.

Summary:

Incredulous head-shakes from some and faint, knowing smiles from others describe the reactions to Miss Tanner's apparent preoccupation with scheduling difficulties in the case of Ed Ellsworth. Obviously, a considerable gap exists, for many participants, between what ought to be and what is.

The point of Miss Tanner's misplaced focus having been made, and therefore, set aside, most groups attended to the need for exploring the "real" reasons behind Ed's expressed desire to drop his course at AVTS and return to the home school. A number of possibilities were entertained, beginning with the speculation that Ed's original AVTS placement may have been inappropriate; moving on to the notion that the AVTS counselor, if aware of the situation, should have been in open and continuing communication with his colleague at the home school; and concluding with the recommendation that Ed should be free (despite scheduling inconvenience) to exercise the option to return if he understands and accepts the implications in such a decision and, hopefully, has formulated a personally satisfactory alternate plan of action.
Situation 5:

Dick Dandridge, grade 11, has been enrolled in the auto body course at AVTS, and although his work in the shop has been satisfactory, his grades at West Side High have been very low, actually slipping to F in several marking periods.

When Dick is chatting with Mr. Blackman, AVTS counselor, in the shop one day, he announces that he is going to quit school since "it's simply not worth it to knock yourself out and never get any place at West Side."

Summary:

According to conference participants, Dick Dandridge's case further points up the necessity for developing a close working relationship between counselors of AVTS and sending schools.

The extent to which Dick may be producing, academically, commensurate with his abilities seems to be a critical factor, and it is the home school counselor who should be able not only to make such a determination but also to bring about whatever academic program changes might be indicated.

In any event, participants agreed that all counselors must set aside a regularly scheduled time block in which to confer together on problems and issues of mutual concern. Certainly the problems represented in Dick's case cannot and should not be resolved unilaterally!

Some possible solutions to Dick's problem were proposed as follows:

1. A work-study program might offer an incentive for him to do better academic work, assuming he has the capabilities.
2. If the home school is unable to provide experiences of an academic nature at which Dick can succeed, his dropping out to take a respectable job need not be viewed as catastrophic. He could, at some later time, prepare for the GED test if a high school equivalency diploma were essential.

3. The auto body shop instructor may be a key person with whom Dick identifies and who could provide the support and encouragement needed for Dick to remain in school and profit from it.

A few of the discussion groups indicated that Mr. Blackman's presence in the AVTS shops was commendable evidence of his interest in students' progress, a fact that might be expected to enhance his counselor image among students enrolled at AVTS.

Situation 6:

Jack Jones, grade 10, is enrolled in drafting at AVTS and has been doing outstanding work. However, some of his teachers at Jefferson Senior High School have spoken to Jack about their feeling that he really should be enrolled in college prep, that he is wasting his potential at AVTS.

Several teachers have recently approached Mr. Bluefield, Jefferson counselor, asking that he talk to Jack in an effort to persuade him to "get back to college prep where he belongs."

Summary:

Jack Jones' case was one in which emotionally charged responses characterized the contrasting points of view, ranging from "Why must teachers be so narrow-minded?" to "What a wonderful opportunity for the counselor to educate teachers!"
Most participants subscribed to the latter point of view, suggesting that Mr. Bluefield might find it profitable to follow up individual discussions among teachers involved with some organized, continuing inservice activities for all teachers in the school.

Whatever direction Mr. Bluefield may elect to take in capitalizing on this chance to broaden teachers' knowledge of AVTS and perhaps to modify inappropriate attitudes toward it, he should enlist the cooperation of his colleagues within AVTS.

Scheduling a conference with Jack, as well, seems to be indicated from the case information. Despite an earlier personal commitment to his present course of action, Jack may be having some "second thoughts" as a result of teachers' comments that do not endorse his plans. Mr. Bluefield might (1) invite Jack to review his planning and the bases upon which his decision had been made, (2) encourage Jack to consider any new, pertinent information about himself, and (3) support the continuation of Jack's attempts to make appropriate decisions for himself.

Situation 7:

Mr. Whiteside, Director of Leader County AVTS, and Mr. Browning, AVTS counselor, are meeting to discuss plans for the coming school year, which will be the second year of operation for Leader.

Mr. Whiteside indicates that he will be able to allow Mr. Browning full time next year to further refine the guidance program. "I think we need a good, strong, guidance service, Brownie, and you are the man who can do the job. Take a few days to lay out plans; then come back and show me how you plan to operate."
Summary:

"A few days are not nearly enough to do the kind of planning that needs to be done!" From this point of consensus emanated a steady flow of valuable observations about ingredients essential to the development of a guidance program that would become an integral part of the AVTS concept, rather than an appendage that only by happenstance would serve some good purpose.

Inasmuch as the available information implied that planning during the first year was limited (or even nonexistent), participants identified an urgent need for Mr. Whiteside and Mr. Browning to sit down together and come to some common understanding about basic issues. For example: Were the two men in agreement regarding philosophy and objectives? Were their positions congruent with views held by the board, etc.?

Another concern voiced by participants was that Brownie might find himself "on the outside, looking in" from the start, if he tried to attack this task alone. The more people he could involve, the greater the probability that the guidance program would eventually demonstrate effectiveness in serving both student and institutional needs.

From these very broad, yet important prerequisite considerations, the group discussions centered more on specifics such as enumerating ways to enlist maximum cooperative effort from those who should be involved, suggesting methods for assessing student needs, identifying services that might be included, and delineating responsibilities within the AVTS and between the AVTS and sending schools.
Despite the contention of some that "starting from scratch" would, in effect, waste still another year before the guidance program could get off the ground, most participants stood firm with this recommendation, claiming that it was only through careful preplanning that the program could have its intended impact.
ISSUE IV: STUDENT SELECTION CRITERIA

What information is needed to effect a meaningful student selection?

What strategies should be employed in assigning priorities to the collected data used in the selection process?

What is the methodology used in the screening and final selection process?

What are the implications for making available to applicants more than one choice of training?

What consideration should be given during the selection process to the appropriateness of the level of instruction within a given training program chosen by the applicant?

Summary:

The format of Issue IV differed in that a consultant from the field of educational and psychological measurement addressed the conference prior to participants' consideration of the issue in small group discussion. Dr. William Rabinowitz, Head of the Department of Educational Psychology at The Pennsylvania State University, spoke to the need for validating selection procedures and presented a step-by-step process whereby AVTS and home school personnel might determine empirically the value of criteria they now use in selecting students for AVTS programs. As a result of Dr. Rabinowitz's talk and subsequent interaction with his audience, conference participants found their small group discussions devoted largely to identifying gaps between what they are now doing and what they might do to increase the effectiveness of AVTS selection.

Participants approached the topic of information needed in selection from two sides: (1) What information does the student need in considering AVTS as a broad curricular option and in choosing a more specific program of training within it? and (2) What information is needed by those who share the responsibility for admitting students to AVTS programs?
Once again great importance was attached to the elementary school and early junior high years for developing an appreciation and understanding of all educational alternatives from which students will be expected to choose, probably in grade nine. Although planned orientation to AVTS (as well as to other curricular options) before grade nine seems now to be the exception rather than the rule, there was unanimity in the opinion that this state of affairs must change drastically, and soon, if students are to begin to show desirable progress in developing vocational maturity.

Some suggestions for helping students acquire valuable information are as follows:

1. Arrange to have prospective students spend a half day, or more if possible, in several different shops to get a better idea of the program than might be gathered from a guided tour alone. In the experience of one participant, the "first choice" made by a student sometimes becomes his "last choice" as a result. There is the additional possibility that AVTS teachers' observations of students, in the situation just described, could contribute pertinent information to admissions decisions.

2. Counselors were urged to share information with students in the form of understandable, synthesized interpretations of test results, achievement patterns, teacher observations, etc. Very often, it was reported, students are on the receiving end of decisions made for and about them by others, who use as a base information to which the student
himself is entitled. To expect students to become adept at making realistic decisions without, at the same time, providing data relevant to such decisions, is to perpetuate the myth that students are simply too immature to engage in the decision process. It was felt that the elementary school would be an ideal laboratory for developing student decision-making competence, using content applicable to the developmental tasks with which youngsters are presently concerned, rather than to focus specifically on future oriented educational/vocational decisions.

3. Along with organized information about themselves, students also need better information than is currently available about the specific skills they need and/or will be expected to develop in AVTS training programs. More will be said about this important topic throughout the summary as well as in the presentation by Dr. Rabinowitz, but the principal point seems to be that concerted attention must be directed toward establishing the validity of many intuitive assumptions which now undergird selection procedures and permeate the content of counseling sessions with students.

Much of what appeared to be the other side of the information coin, i.e., that which is needed by staff who share the responsibility for admissions decisions, turned out to be additional examples of the kinds of information which students should have about themselves if they are to be active participants in the selection process. For instance, interests
measured and expressed, attitudes demonstrated, reasons for wanting to enroll in certain programs, record of school achievement, work experiences, hobbies, extracurricular activities, attendance patterns, physical characteristics and/or disabilities, standardized test scores -- all of these are critically relevant to the student's composite picture of himself, just as they may be relevant, although not necessarily equally applicable, input to the selection process as generated by others.

Whatever else may have been said at the conferences in defense and praise of certain practices, there were few voices raised in support of the apparently all-too-common custom of collecting recommendations and ratings from teachers, counselors, and other staff members. Most participants agreed that such judgments are often biased and too subjective to be of much use in selection.

The General Aptitude Test Battery (GATB) drew a lot of comment. Many participants who had been eagerly awaiting the availability of the GATB as a "sure fire" selection device found their hopes dashed on the rocks of research and others' experiences. Neither the limited research conducted in schools nationwide, using the GATB, nor the pilot projects employing this instrument in Pennsylvania's schools, have provided the kind of evidence in support of the GATB which had been anticipated in view of its apparent usefulness to the government employment services. Nevertheless, participants were urged to experiment and determine locally the extent to which parts of the GATB may serve as valid predictors of performance in certain AVTS programs.

In assigning priorities to data, no one took issue with the group consensus that needs of students should have top priority. However, as had
been the case several times previously, this was yet another instance of the lack of correspondence between what ought to be and what is. Two basic problems were identified. One dealt with the difficulty in assessing student needs; the other was concerned with quotas.

All participants, as members of the major groups which they represented, were taken to task as the two basic problems were explored. It was suggested that everyone should be better equipped to study student needs, but that home school counselors have an especially critical responsibility in this area when they are making judgments with far-reaching implications, judgments which others often have no opportunity to examine and/or question. The point made here was directed to the reported practice of home school counselors conducting their own pre-selection screening wherein student indications of interest in AVTS may never reach the stage of application if counselors are certain they know what's right for each student and insist upon the student's sharing their point of view. As a result, the list of names eventually submitted for joint consideration has already been restricted, apparently in a variety of ways depending upon the counselor's own frame of reference. Home school counselors, therefore, whether they operate in the manner just described or in some other more student-centered fashion, were urged to examine their procedures in establishing needs of students, and hopefully, to enlarge the scope of their awareness and understanding of the diverse factors contributing to the present development of students about whose futures they are making important judgments.

Both AVTS counselors and administrators were chided about quotas on much the same basis as were home school counselors about student needs. That is to say, if the AVTS is to exercise final judgment regarding admissions
(an apparently accurate portrayal of the role desired, particularly by AVTS administrators), then the question becomes one of determining criteria and providing evidence of their adequacy. As yet, no satisfactory response has been formulated, and until each AVTS and its attendance area inaugurate an ongoing program of validation based upon identifiable, relevant outcomes, it is doubtful that significant progress can be claimed in selection and admissions procedures. With the anticipated growth of AVTS and the attendant increase in the number of applicants for specific programs, the problems just described will become even more acute.

Because the quota system drew so much adverse criticism, particularly in instances where an apparently well-qualified student in school "A" is forced to step aside to make room for a less qualified student from school "B" (on the basis that school "B" has not yet filled its quota), it should be reported that participants failed to agree on a more suitable alternate plan. However, there was general agreement that many existing quota systems bear close examination and hopefully, will undergo trial modification in locations where personnel are interested in experimenting with change.

Another general area which kindled lengthy discussion was that of testing. Aside from the critical need to validate tests used in selection, probably the most troublesome aspect dealt with the wide variety of tests administered by the several sending schools in a given attendance area. Even within the category of tests labeled "mental ability," as many different tests as there are sending schools might well be used, thus creating an obstacle to meaningful comparison of students' scores. Although no unqualified recommendation emerged, participants suggested that all sending schools in an attendance area might want to consider trying the same mental ability test at the same grade level, providing, of course, that such a test
appeared to have relevance for a given AVTS program. This procedure, it was felt, might serve to kick off an area-wide program of validation as well as overall improvement in the communications among sending schools and AVTS.

If one were to formulate an ideal division of responsibility in regard to screening and ultimately selecting students for AVTS, it was proposed that the sending schools might describe, with accuracy, the characteristics possessed by each student; the AVTS might describe, with equal accuracy, the characteristics required in each area of specialization. Thus, one could order applicants according to their qualifications and expect to maximize the number for whom a particular area of training represents an appropriate choice. However mechanistic such an approach may appear on brief reflection, most participants felt that it did, in fact, possess a dynamic, decidedly humanistic potential for involving both students and staff in desirable ways.

At the present time, identifiable progress in refining selection procedures seems to have reached little beyond the stage of impassioned pleas for cooperation and coordination. Agreeing to cooperate, while a commendable first step, must be viewed as only a first step, according to participants. There needs to follow a definitive process, devised cooperatively and adopted throughout an attendance area, whereby selection becomes less encumbered by intuition and more open to systematic evaluation. Thus, if testing is to be included, the questions of what kind, when, and by whom administered, scored and interpreted need to be answered. If interviews are to be a part of selection, what are the critical questions? Who is to ask them? How are responses to be recorded and judged?
No one at either of the conferences presumed to know the "best" way to approach selection, but all concurred that efforts must be redoubled to at least develop an explicit methodology which could then be tested. (It is hoped that the presentation by Dr. Rabinowitz, reprinted on the pages to follow, will provide the reader a frame of reference from which his own school and attendance area may move toward improving certain aspects of student selection. Future conferences, more locally applicable, may be expected to deal with evaluation of selection procedures. Editor)

During discussion of the number of choices available to students interested in attending AVTS, it was suggested that unless a student's second and third choices appear to be related to his first choice, these alternates may not be choices at all, in the positive sense, but merely an indiscriminate game of "fill in the blanks." Consequently, a theoretically desirable practice (offering several options) could in reality fall far short of meeting the student's needs. Although there were no reports of actual research to substantiate the notion that second or third choices are often "unrealistic," participants felt that some form of exploration (e.g., several weeks of concentration in two or more areas) would provide students a firmer basis upon which to make more personally-relevant selections. Additionally, where initial choices are obviously allied, students might reap the maximum benefit from an AVTS program that incorporates the concept of occupational clusters.

A final topic which evoked considerable interest and discussion but few tangible suggestions was that of levels of instruction within a given curriculum. Once more participants chose to deliberate about the ideal situation, recommending that flexibility and individualized instruction
should characterize the performance of AVTS instructors. Close adherence to time schedules for the development of individual skills was viewed with disfavor, the majority of participants indicating that students would discover their own optimal level of functioning if allowed to progress as individuals. It was concluded that these recommendations are applicable to all teaching and learning, not only that which takes place in the AVTS, but that implementation requires the bending, if not actual breaking, of long-hallowed, currently meaningless rules of the educational establishment.
Applying Measurement Principles to the Selection of Students for Area Vocational-Technical Schools

A Talk by William Rabinowitz

I should probably begin my remarks this evening with a few brief words of explanation and introduction. I am neither a vocational educator, nor a specialist in guidance or counseling. My field is educational psychology, and I have a specific interest in tests and measurements. I am convinced that an intelligent use of measurement in the schools can help to make the schools more efficient. And a more efficient school, I am convinced, can and should be of greater service to the individual pupil.

Given these convictions, I am pleased to be with you this evening and to talk with you about measurement principles in the selection of students for area vocational-technical school programs. I hope that my remarks will contribute to your thinking at this conference and subsequently to your work in the schools.

I told you that I am not associated with the area vocational-technical school program. But as part of my preparation for this talk this evening -- and in an effort to make my comments as relevant and useful as possible -- I have tried to learn a bit about this program.

As I understand it, the area vocational-technical school program is designed to extend the mission of the comprehensive high school by making preparation for productive and rewarding work a fundamental and integral aspect of the educational program.

The program is relatively new, and it is expanding rapidly. It is also a highly flexible program with very ambitious objectives.
Whether we measure the significance of the program by the number of schools in which it is housed, the number of specialized facilities in these schools, the number of different courses offered, the number of students in attendance, or any other comparable indicator, it is clear that the area vocational-technical school is a major new development in education in Pennsylvania.

It seems to me that this program has had a very auspicious beginning, but its success is by no means assured. In a society where technology rapidly changes the nature of employment opportunities, it is not a simple matter to provide vocational preparation for students who, in a few short years, will be entering the employment market -- students who will be spending as much as 50 years in that market.

Obviously, the effectiveness with which the area vocational-technical program achieves its purposes depends upon many factors. One of these factors, but a very important one I believe, involves the nature of the students who enter area vocational-technical programs. Clearly, not every high school student will or should undertake a vocational or technical course of study. Just as soon as we make this observation, however, certain difficulties begin to appear. The easiest way to express these difficulties is by formulating them as a series of questions. First of all, what students should be encouraged to undertake programs in the area vocational-technical schools? And if you ask what students should be encouraged to take these programs you have conversely, the question, what students should not be encouraged to undertake these programs? Then, if you get more specific, you could
ask what particular vocational programs and courses are best suited to students with different levels of ability, different aptitude patterns, different prior achievements, different interests, and so on. How will decisions be reached regarding the selection and placement of students in area vocational-technical programs? Who has the responsibility for making these decisions? And finally, on the basis of what evidence and information will these decisions about selecting and placing students be reached?

Now I think it's clear that these are difficult questions to answer; I suppose one purpose of this conference is to examine questions of this kind. But in a sense questions like this cannot be answered. Certainly final answers, answers in which you have a great deal of confidence, seem impossible. Instead, I suspect, what you're doing is always moving toward and formulating tentative answers which you recognize as more or less adequate but hardly perfect.

Let me be clear; I don't flatter myself that I have answers to these questions. What I do believe is that I can introduce some relevant ideas and concepts and that is what I propose to do this evening. To do this, I'm going to discuss with you how specialists in the area of measurement undertake to validate tests and measurements used in the selection of students for educational programs. In doing this, I want to suggest that many of you in your local situations can and should engage in the process I shall describe. I'm discussing this process then because I believe that many of you are in a position to validate your selection procedures as specialists in measurement; I know that you're not specialists in measurement; I know that you are not prepared by background, training or
facilities to undertake a comprehensive validation program. But I do
believe that the basic procedures for validating tests can, to some
extent, be introduced into your work, thereby making your programs much
more efficient.

I want first to describe this validation procedure very briefly
and in a somewhat sketchy form. To do that I have a handout (Table 1)
which lists the steps that I want to go through. After I enumerate
these steps very briefly, I then want to consider in more detail some
of the specific aspects of the procedure which may have relevance for
your work.

To some of you, I know that what I will be saying will constitute
a review of material that you first encountered, not too many years ago,
I hope, in measurement or research courses. Although I recognize much
of what I say will not be entirely new to you, I'm still encouraged to
go through it once again because I think that in many practical situations,
people who have learned about measurement procedures do not employ them.

Let me turn now to the handout. This is first of all a highly
general series of steps; this could apply to any program, not specifically
to the one in which you're engaged. If you are trying to validate some
procedures to be used in selecting students for an educational program,
you would or should go through something like the seven steps which I
have outlined here. The steps are sequential, that is to say you start
with the first and proceed on until you've reached the seventh. Now let's
go through them briefly.

The first step is to analyze the requirements of the educational pro-
gram in terms of student characteristics. What you do is to take a good
hard look at the program and you ask yourself a basic question. What does
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<th>Steps in Establishing an Empirically Validated Procedure for Selecting Students for an Educational Program</th>
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<td>1. Analyze the requirements of the educational program in terms of student characteristics.</td>
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<td>2. Select or develop tests that seem promising as predictors of success in the educational programs.</td>
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<td>3. Administer the tests to a group of applicants.</td>
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<td>4. Decide on a criterion (or several criteria) of success in the educational program.</td>
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<td>5. Obtain criterion measures of success in the educational program for the previously tested applicants after they have participated in the program for a period of time.</td>
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<td>6. Determine the relationship between each test predictor and the criterion of success in the program.</td>
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<td>7. Select the best predictors, weight them optimally, and use them to help screen applicants in the future.</td>
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the student have to do or have in his background in order to be successful in this program? Given the requirements of this program, what kind of students do we need to look for? After you have done that, we turn to the second step which is to select or develop tests that seem promising as predictive of success in the educational program.

Once you have established in your mind what you think are the requirements for success in the program defined in the terms of student characteristics, then you look for tests that will measure these characteristics. That's step number two.

The third step is to administer the test to a group of applicants. Presumably, you are in a real-life situation where you have some people who want to get into this program, and so you administer the tests to these applicants.

The fourth step says that you should decide on a criterion, or several criteria, of success in the educational program. Here we are saying that every educational program has an implicit or explicit set of goals toward which students are expected to make progress. By defining these goals and specifying them, you are defining a criterion of success in the program. This step may not come after step three; it may be one of the first steps that you undertake. But it has to be done rather early in the game; you have to decide what it is that you believe constitutes a reasonable measure of success in the program.

The fifth step says that you should obtain criterion measures of success in the educational program for the previously tested applicants, the people who were tested in step three. Obviously this could be done only after the
students have participated in the program for a period of time. Taking steps three and five together, what you have is a group of applicants who are given the tests at the stage of application. They then go into the program and subsequently, for each of them, you get one or more criterion measures of success within that program. This would mean that for each student in the program you have a set of predictive measures and a set of criterion measures.

Step six says that you then determine the relationship between each test or predictor and the criteria of success in the program. Essentially you find out to what extent the measures obtained in step three are related to the measures obtained in step five. If your tests are good predictors, the relationships will be substantial. If your tests are poor predictors, the relationships will be negligible.

Step seven says, select the best predictors, weight them optimally and use them to help screen applicants in the future. Essentially, what you do is identify the best predictors that you have been able to find and then you combine them, giving more weight to one and less weight to another, in such a way that they give you the best possible prediction of success in the program. You then proceed to use this formula as part of the selection process.

Let me make one point about the selection measures. I have talked exclusively about tests as predictors, but it should be understood that my comments are not limited to tests. I speak of tests solely because that is what we frequently use in connection with selection of students. But we can use any information about the students provided we have this information for each applicant in an objective, comparable form. We could use,
for example, the students' prior grade point average. Or we could use teachers' or counselors' ratings or any other such information.

These seven steps constitute the basic procedures that go into the process of establishing an empirically validated selection procedure. It really doesn't matter what kind of a selection job you are trying to do. In one way or another, when you are trying to establish a valid selection procedure, you have to go through something like these seven steps.

At each step there are a number of issues that arise. Some of these involve theoretical or statistical problems that go beyond the scope of my remarks this evening. I want to discuss each of these steps in turn, however, and consider some of the simpler problems that you are likely to encounter if you attempt to follow them in developing a valid procedure for screening student applicants for area vocational-technical programs. So let me go through each of these steps once again, and spend a bit more time with it, trying to anticipate some of the difficulties and problems that may arise in your attempt to implement the procedure.

First, "Analyze the requirements of the educational program in terms of students' characteristics." This requires a kind of job analysis. You have to take a good hard look at the program and ask yourself what it is that a student will have to do in order to work his way through the program successfully. There's no special technique involved in undertaking step one. Instead what you have to do is to examine carefully the curriculum. Look at the textbooks that the student will read. Study the training manuals that the student will use, and analyze the tests that he will be
expected to pass. Always when you're doing these things, you must ask yourself what understandings, abilities, personal characteristics, attitudes, and interests does a student need to possess, when he enters the program, in order to be successful in it.

Let me give you an illustration, something close to what I have in mind. In a student handbook for one of the area vocational-technical schools, I found the following statements under the heading of "Requirements for Entrance." In this particular case, it was requirements for entrance in the data processing course. "A background in business education or interest in business machine methods and practices. Problem solving ability and efficient work habits are essential. College preparatory mathematics, physics, ability to do theoretical thinking and transpose it into solutions to complicated problems and an interest in electronic equipment."

In the same pamphlet, under the machinist curriculum, again describing requirements for entrance, it says, "The student who selects this course should have a high mechanical aptitude, excellent hand-eye coordination, and the ability to work neatly and accurately to very fine tolerances. He should be a good all-around student who takes pride in his work. He must be at least 14 years of age and preferably entering the 10th grade."

These statements, and I think some of you may have produced statements of this kind and certainly all of you have seen them, are probably the result of something like the kind of job analysis that I have just described. They probably are an attempt to specify student characteristics which are essential to success in the program. So in a sense, they do fulfill, or attempt to fulfill, the requirements for step one in the procedure I am describing. In that regard, I have a couple of observations that I would like to make.
First of all, while these are commendable attempts to specify student requirements for success in the programs, it is important to recognize that they are probably only educated guesses. They are hunches as to what is important, hypotheses to be tested; they are not verified facts. At least, I doubt that they are verified facts. Insofar as they are only hypotheses or guesses or hunches, they are subject to test and they need empirical verification. The process that I am describing constitutes a method for empirically verifying statements such as these.

The second point I'll make is that the statements tend to be rather vague. We may ask, what exactly does it mean to say that a student applying for a particular program should have high problem solving ability or high mechanical aptitude? How much ability or aptitude is high? And by what method would a counselor or administrator identify the problem solving ability which a student possesses as a critical requirement for entry into the program? One of the requirements talks about a good all-around student. What is a good all-around student? It's a little hard to recognize one; certainly very competent people looking at the same student might disagree as to how good he was all-around. Clearly, statements of requirements, in order to be most useful, need to be translated into a form which is more precise and quantified. Otherwise, it seems to me that all we have is a vague general statement which anyone can interpret as he chooses and which, for that reason is not especially useful. The procedure that we are discussing here is a way, in effect, of taking statements like this, which, in their initial formulation, are necessarily vague, and giving them some precise, quantitative form.
The second step says, "Select or develop tests that seem promising as predictors of success in the educational program." If you were working in a research context you would probably develop the tests that you wanted to use. Certainly you would be free to select them from those that are made available by publishers or are to be found in the literature. In your situation, however, I suspect that you are limited to tests that are currently being administered in the schools, such as the SVIB and DAT. Developing new tests will probably be close to impossible although, if it were possible to do so, certainly you should consider trying to develop some tests that may have validity for particular area vocational-technical programs.

In general, the best predictors are likely to involve test performances that are very similar to the work that the student will do in the program itself. By that I mean that the tests that predict most adequately a student's performance in a program are likely to be tests that involve the student in a program-like performance. We sometimes say that the best predictive tests are like miniature criterion situations. The more the test embodies performance characteristics that are also in the criterion situation, the more likely the test will be a valid one. And this means that for a curriculum in which there is a great deal of conventional paper-and-pencil classwork, a scholastic aptitude test or an achievement test is likely to predict fairly effectively. But in a course calling for a manual performance, then it seems to me, these tests are less likely to be useful than tests of manual dexterity or mechanical comprehension. I recognize even as I say this, however, that I am really expressing only a
hunch. It is a good hunch, probably because it is based upon research, but it is still a hunch. It needs empirical confirmation before any firm conclusions are drawn.

The best predictors are likely to be those that are obtained at a point close to the time when the student enters the program. The smaller the time interval between the administration of a predictor test and obtaining criterion information, the more likely it is that you will get a relationship between the predictor and the criterion. Extending the time interval tends to wash out the relationship. If a particular test is a reasonably good predictor when it is administered in the ninth grade and the students enter the program in the tenth grade, the chances are that the same test administered to seventh grade students will not predict the tenth grade performance in the program nearly as well. The larger time interval tends to attenuate the relationship between test and the criterion.

Step three says, "Administer the test to a group of applicants." Here we assume that you have a group of students who want to go into the program as well as a set of tests, and you can administer the tests to the group of applicants. The tests, if they are to serve as predictors of success, should be administered before the students enter into any particular course of studies. It is, after all, the predictive effectiveness of the tests that you want to determine. That means that the tests must be administered before the students enter the program in order to see whether or not they will predict their performance subsequently. Sometimes, it is difficult to administer all of the tests you are interested in before the students enter the program; sometimes it is
possible or necessary to administer some tests after the students are in the program. If that is done, the tests can still provide useful information, but, under those circumstances, it is important to recognize that you are no longer dealing with the predictive effectiveness of the tests. You may be able to draw some conclusions but they should be recognized as tentative.

In test validation, it's always a good idea to test all of the applicants for the program and then admit, if it is possible to do so, all of the applicants into the program, even those who you have good reason to believe may not be successful. Of course, there are always some people who have applied to a program and in the course of examining them, their records, test scores, and so on, it is very clear that they are unlikely to be successful in the program. Ideally, in a test validation phase, you should admit them to the program anyway. You can, of course, screen them out. But when you screen them out, you then deal in the program with a curtailed group. In the Air Force, during the Second World War, typically whenever they developed a new battery of tests to pick pilots, bombardiers, or navigators, that's exactly what they did. They took a fairly substantial number of applicants, tested them all with this new battery of tests, and then admitted them all to the program. They did this even though they knew that a substantial number would wash out. They did it nevertheless because they wanted to establish, clearly and unambiguously, how valid the new tests were. And that is difficult to do when you deny admission to some proportion of the individuals because, on the very selection tests that you are trying to validate, you have ruled them out. It is possible to do this;
you can rule certain people out but then you have to make a statistical correction to the correlation coefficient between predictor and criterion. Since the correction is based upon certain assumptions, it is better to admit, at least once, everybody who applies.

One question that sometimes comes up concerns the number of students that are needed. How many students are required in order to get anything like a statistically dependable result? There is no really simple answer to this question. But, the more the better, is probably the best answer we can give. If you have less than 25 students, that is probably too few. Even though you might want to go through with it, you should recognize that the results you get will not be results that you can rely on. Twenty-five subjects is then too few; it is much better to have between 50 and 75. If you can get 100 or more, that's better still. If you cannot get numbers of this kind in one group, one thing you can consider is combining groups. You can combine groups from several schools, from two successive years, or from two very closely related programs. There are obviously a number of ways of building up the number of cases that you deal with in order to get more dependable results than you can get in very small samples.

Step four says, "Decide on a criterion (or several criteria) of success in the educational program." If you plan to evaluate a test as a predictor, you must have some standard against which to evaluate and this standard we will call a criterion. This criterion should reflect, in some fundamental way, the goals and objectives of the program. In most academic programs, we tend to use grade point average as a criterion. For example, when colleges want to demonstrate how successful they are in selecting students, they almost always correlate their predictor measures with grade point
average as a criterion of success. One could question whether or not this is the most relevant criterion, but certainly it is the most widely used criterion at the college level. But how about a vocational-technical program? How appropriate is grade point average there? I must confess that I don't know how appropriate it is; I think that is something you are better able to judge than I. It seems to me, however, that one could make a case for another type of criterion. Since helping a student to get and keep a job is an important goal of the program, one might consider this a more appropriate criterion than grades.

Job success may be a more appropriate and defensible criterion against which to evaluate our tests than academic performance. There's a catch, however. It also is a more difficult criterion to employ, and it is not always possible to use it. One thing that is very hard to define is what we mean by job success. What does job success really mean? If it is hard to define, it is even harder to measure. In addition, a large component of job success is based not upon what the student brings to the job but on what the job entails for the student. If the student has a supervisor on the job with whom he cannot get along, his job success may be very low, but this is not necessarily due to an inadequacy in the student. Jobs are not equated, and so success is determined by situational factors which are outside the control of a student and cannot inherently be predicted by any test.

It also is true that it takes a long time to find out how successful the student was in getting and keeping the job. We probably would want to know something about the efficiency of our selection procedures before three, four or five years had elapsed.
Under these circumstances, it seems to me somewhat more appropriate to turn to grades as a criterion measure. There is some embarrassment here, however. As many of you know, there is not a very high correlation between the grades a student earns in a program and his subsequent success on the job. Insofar as success on the job is not very well correlated with grades one can't make a very strong case for using grades as a criterion when one is really interested in job success. So the criterion problem can get very complicated to say the least.

All of this suggests that it is not easy to define a satisfactory criterion measure. It never is. It's always one of the thorniest problems that we face in studying a selection procedure. One thing you can do is to recognize that no criterion is ultimate, and no criterion is perfect. All criteria have flaws; all criteria are something less than perfect. This suggests that one ought to use multiple criteria. Instead of using grades alone, or job success alone, one might try to use grades initially, job success later on. And in addition one might try to invent other criteria which might be useful in defining success in the program. For example, one might try to develop certain standardized performance measures, to see whether or not you can measure levels of skill which the program is supposed to develop.

Step five says, "Obtain the criterion measures of success in the educational program for the previously tested applicants after they have participated in the program for a period of time." There is one significant problem here. It is sometimes called "criterion bias."
Bias occurs whenever criterion scores of individual students are influenced by irrelevant factors; when, for example, an otherwise excellent student is given a low grade by his instructor who considers him disrespectful. If the student's attitude is a legitimate part of the criterion, it should be weighted in some way in reaching the student's criterion score. But often it's included without regard to whether it is legitimate to do so.

Most obvious examples of bias are those that involve race, religion, and the like. Grades are, of course, especially susceptible to bias, since they involve personal judgments of one person by another. This again argues for some kind of objective proficiency examination as at least one criterion of success in a program.

A very special aspect of criterion bias is something we call "criterion contamination". This occurs whenever predictive information becomes available to those who must make the criterion judgments, that is to say, whenever a criterion judge or instructor who is charged with giving a grade to a student is aware of the student's aptitude test scores. If he knows these scores, and these are being used as predictors, he can modify the student's criterion grade in the direction of those aptitude test scores. In that way he can suggest that there is a stronger relationship between the predictors and the criterion than actually exists. The criterion has become contaminated by the predictor. Insofar as you want to get an objective, unbiased estimate of the relationship between predictor and criterion, this contamination tends to inflate the relationship. This could be a serious problem in schools where students' records follow them through their program and their instructors frequently have access to these records.
Step six says, "Determine the relationship between each test predictor and the criterion of success in the program." Here, of course, we are beginning to enter the more esoteric realms of statistics. All the techniques involved here are, however, fairly simple and easy to use. When you first encounter them, usually in a course in measurement, you probably think they are hopelessly complex and difficult.

Let me summarize some of this material in very nontechnical language. As you know, when you have a set of scores for a group of individuals, and for each individual you have one set of predictor scores and another set of criterion scores, if you want to show the relationship between any two of these scores, the best way to do it is through something called the product moment correlation coefficient. This statistic we usually study in the first course in statistics and I'm sure many of you spent a few hours, maybe days, at a desk calculator pounding out sums of squares and cross products and then putting them into a formula that led to something called $r$ which is the product moment correlation coefficient.

You probably also know that if the data take certain forms, for example, if they take the form of ranks, you would compute a rank correlation coefficient instead of a product moment correlation coefficient. Or if the predictor or the criterion are in the form of a dichotomy, then again you wouldn't compute a product moment correlation coefficient. Instead you would obtain something called a bi-serial correlation coefficient or a point bi-serial correlation coefficient.

It is even possible, if you wish to do so, to show a relationship between a test and a criterion without computing a correlation coefficient. What you can do is build something called an expectancy table. Many of you have seen
such expectancy tables, since they are very useful in counseling work. What they basically show is the probable criterion score for a student with any particular test score. With an expectancy table, you can say, when a student's test score is 60 or above, he will probably earn an A but there is a 20% chance he may earn a B and a 2% chance he will earn a C. Similar statements can be made for students with other test scores. You can, in other words, interpret a student's test performance in terms of his probability of earning some criterion level. You know what you can reasonably expect the student to achieve in the criterion based upon his known performance on the test. Such expectancy tables are, as I said, fairly familiar in counseling situations. Fortunately, for me as well as perhaps for you, consideration of these techniques at a sophisticated level is impossible in a discussion of this kind. I'll merely make a few additional observations.

First, the techniques are really not complex. They can be found in any, or almost any, standard text in statistics or measurement. They aren't difficult to apply, and they make a lot more sense when you are working with data that you collected by the sweat of your brow rather than data an instructor gave you in a course. If you need some assistance, it seems to me you can almost always find someone around who knows a little bit more than you do about statistics and is willing to give you a hand. Those of you who have access to computers, and many of you do, I suspect, will find that it is not difficult to put the problem up in such a way that the computer can deal with it. In that way you can avoid the drudgery of working at a desk calculator trying to obtain correlation coefficients. The computer has one additional advantage; it does not make as many errors as human beings do.
The seventh step says, "Select the best predictors, weight them optimally, and then use them to help screen applicants in the future." Now this step assumes that what you've done, up to now, has involved the use of several test predictors. And that you now have something like a matrix of inter-correlations. That means that what you have is the correlation of test one with test two, test one with test three, test one with test four, etc., and also test one with the criterion or each of the criteria. And the same for test two; you have its correlation with each of the predictors and its correlation with each of the criteria. And so on for test three, four, etc. Clearly you've got quite a few correlations.

The question that arises is how the predictor measures should be weighted in such a way as to form a composite score which maximizes the accuracy of your prediction of success in the program. In other words, how should we combine the various predictors so that our predictions are most accurate? Here too, the problems are essentially statistical and they are, for that reason, beyond the scope of our discussion here this evening. But they are not especially complex. They are more difficult than the ones that you'd undertake in step six, but they are not beyond your resources. Here in particular, the availability of a computer, one with a multiple correlation program, can reduce the job to very manageable proportions. For a computer, it is not really much of a job to establish a regression equation, that optimally weights the predictor tests. But you must provide the data; the computer can not do that for you.
A few additional observations may be helpful to you. The best single predictor of success in a program is the measure with the highest correlation with the criterion. So if you are going to use just one predictor, the one to pick out, obviously, is the one that correlates most highly with the criterion. Now if you are going to start with that measure and then combine other measures with it to form some kind of composite, it is appropriate to ask, which ones would you put together with the first one? Other measures may be useful, if added to form a composite predictor measure, insofar as each of these new measures contains uniquely valid information. But what does "uniquely valid information" mean?

First of all, it must be valid, and that means that it must correlate with the criterion. (There are certain unusual exceptions which we can ignore here.) So in general, each test that you add to a composite must contain valid information. But the information must also be unique. It is not unique if the information is contained in other tests that are already in the composite. Insofar as the test contains nonunique information, the information is redundant, telling you what you already know. It therefore will not contribute very much that is useful in the development of a composite measure.

In most prediction situations, you tend to find that the multiple correlation between a set of predictors and a criterion does not increase appreciably after you have put three or four predictors into a composite. With three or four predictors, you have just about reached the maximum of your predictability for the criterion. If you have a fifth, sixth, or seventh predictor, you typically don't get any appreciable increase in multiple correlation between the expanded set of predictors and the criterion.
That is a very interesting fact. I suspect that most administrators and counselors operate under the assumption that the more information you have the better you are in making a decision. And yet the statistical evidence doesn't show that that's the case. It seems to me very likely that in many counseling situations, once we have taken into account the three or four most relevant pieces of information, additional information does not contribute very much to whatever decision we are trying to reach.

This concludes the seven points that I wanted to discuss with you. I want now briefly to consider what I anticipate are some of your objections to this process. What I've done is a little mental exercise. I said to myself, if I were in your shoes, what would I say to some fellow who came from a university and said why don't you people validate your selection program. Let me see if I have anticipated some of the objections that may have occurred to you.

One objection you may have is that the process that I have described implies a mechanical or statistical approach to student selection which is not, in fact, the approach that you care to employ. Your approach, you may say, is centered on the individual and not on his test scores. At the very least, a program, you may say, should be based on something more than a formula which decides if a student is admitted or not. My answer to this is that the process that I have described really yields relevant information concerning the student's probability of success in a program. How you use this information is not specified in the process. Now you may use this information in a variety of ways. You may say that the student who doesn't have a particular composite score cannot get in the program. You will, if you do so, be establishing a very rigid cutoff point. But
there is nothing in the process that says that that is the way to use the information. You could use it in a much more flexible way. You could say students with scores below 30 are strongly advised not to consider this program since the probability of success is very low. Students between 30 and 40 are advised to consider other programs first, before considering this one because their ability is marginal in this program. Above 40, and so on. Clearly you could use the information in quite different ways. My point then is that this procedure generates data, but how the information is used is up to you as a counselor or administrator to decide.

A second objection that you might have is that to undertake a program of this kind would involve time, money and facilities that are beyond your resources. This may be true. But I don't really think that in most cases where people reject something of this kind, it is a matter of time or money. I think most often it is a matter of saying, "This is an alien activity for a person like me." It is just not your kind of work. If that is the case, I would urge you to get someone else who is a little more optimistic about what he can do in a situation of this kind and perhaps work with him. It seems to me that by pooling resources, you may be able to overcome your initial reticence about getting started on a project of this kind.

Another objection you may have is to ask if it is actually necessary to go through a procedure like this. "After all," you may be saying to yourself, "We use reputable standardized tests in our school. They have already been validated. Why should I go through this process when someone else has obviously done it for me in order to get these tests published?"
The answer here is that no matter how thoroughly a test has been validated by the test author, the test user always has some additional responsibility to validate the test in his particular situation. Nobody ever validates a test in a final and ultimate sense. Tests are validated against certain criteria which are more or less similar to other criteria. In the area vocational technical program, there are probably very few tests, if any, that have been validated against the criteria you are concerned with. Therefore you cannot simply depend upon what is now in the DAT Manual or what Dr. Kuder has done in connection with his interest inventory. You may assume validity, but you should recognize what you are doing in assuming it. Ideally, of course, you shouldn't assume it. What you should do instead is demonstrate it.

A fourth and final objection is this. In many of the area vocational technical curriculums there probably is no problem of student selection since the number of applicants is less than the number that could be accommodated. As I see it, this is not really an objection, since it is in precisely such situations that one should undertake validation studies. It is here that you have a relatively unrestricted group, one that includes the best, and in some cases the worst. By validating selection procedures in such a situation, you are really getting ready for the day when the course or courses will be much more popular and when selection will become an essential activity.

These are the objections that I have anticipated. I doubt that this exhausts all the objections that you may raise. I shall therefore welcome your comments.

In closing I just want to summarize the essence of what I've been saying. I think that the success of any new educational program depends in large measure on the students it attracts. Ideally, there should be a close fit
between the qualifications of the students and the qualities that are
demanded by the program itself. Obtaining this close fit between student
and program is not an easy matter. Necessarily, we have to work with
hypotheses, hunches, and educated guesses. But evidence concerning the
validity of these hypotheses, hunches, and guesses is far better than
simply assuming they are correct. You people, I think, are in a unique
position to gather some of this evidence. I hope that I have persuaded
you at least to try.
ISSUE V: PLACEMENT AND FOLLOW-UP ACTIVITIES

What specific responsibilities are involved in providing placement services for: graduates of the area schools? students terminating training before completion of program? appropriate placement within the training program with allowance for student mobility compatible with demonstrated performance?

What kinds of information should be sought through follow-up studies? What are the most efficient and reliable means of gathering follow-up information? How should this information be used?

Summary:

Among those designated as responsible for providing placement services for graduates seeking immediate employment were AVTS teachers, coordinators of industrial services, the Pennsylvania State Employment Service, AVTS counselors, and home school counselors. A team approach to the placement of graduates, involving a combination of the aforementioned groups, was suggested, but most discussants placed this responsibility with the AVTS teacher because of his comprehensive understanding of student qualifications and employer demands. An interesting supplement to the previous statement, however, dealt with the diminishing need for teachers to assume a prominent role in placement in the presence of an improved guidance service. From these reports, one might infer that most counselors are not now adequately prepared to handle placement, primarily because of a lack of sufficient knowledge about the industrial scene.
Despite the variety of personnel currently involved in aspects of placement, all areas within the Commonwealth appear to have adopted somewhat similar approaches. Listed below are several suggestions about which there was general agreement:

1. Students should receive organized training in job-seeking and in activities related to it.
2. Business and industry must be well versed in the operation of AVTS.
3. A direct line of communication must be maintained with business and industry.
4. Courses of instruction must be kept current and closely aligned with employer demands and projections.
5. Community employment needs must be surveyed annually.
6. Newsletters and other media should be utilized to inform students of employment opportunities.
7. Opportunities should be provided for students to meet with potential employers and union officials at the school or at the place of business.
8. Counselors should make regular visits to business and industry.
9. Home schools should receive current information about the status and progress of the placement service.

For graduates who choose advanced trade training or higher education, placement responsibility was more closely identified with counselors than with any other group. To serve these students effectively, home school and AVTS counselors must pool their efforts, making certain that individual and/or small group counseling is available as students explore alternatives. Opportunities should also be provided for students to meet with representatives of post-high school training programs as soon as interest is evident.
In considering students who may terminate training before completing a program, participants elected to stress a preventive point of view. That is to say, they felt that educators are obligated to exercise all possible efforts to encourage a student's continued enrollment in an AVTS training program insofar as he can profit from it. In addition to expanding counseling services at both AVTS and home schools, it was recommended that personnel responsible for curriculum development should include exploratory and occupational cluster opportunities, particularly for the potential dropout whose main reason for wanting to leave school may be a lack of interest and/or ability in curricula with inflexible standards of performance. When attempts to motivate the student to continue at AVTS are to no avail, immediate steps were suggested for his return to an appropriate program of studies within the home school. The combined efforts of the AVTS and home school counselor are required to ensure this student's right to a worthwhile educational experience upon his return to the regular, home school program.

In the event that a student rejects all opportunity to continue his education, he should be made aware of dropout retraining programs, general education equivalency diploma requirements, adult and extension classes, as well as be given whatever assistance is available in locating employment.

Even though most AVTS policies, at present, appear to adhere to a rather rigid pattern of student placement within the curriculum structure, it was evident that many participants believe that change is necessary.

In regard to follow-up studies, the groups' focus was on gathering as much useful information as possible while staying within the bounds of an instrument that would be simple to design, easy for respondents to understand, and manageable from the standpoint of analysis. Most participants indicated
an interest in receiving the following kinds of information: where and in what position the respondent is employed; his degree of satisfaction with his job; the extent to which his training at AVTS prepared him for the job; areas in which his training was inadequate; the nature of his future educational and vocational plans; decisions he might have made differently in high school given a second opportunity. In addition to individual student follow-up, it was suggested that employers should also be surveyed in regard to performance and progress of AVTS graduates. Conducting follow-up studies after three, five, and ten years was considered more valuable than attempting to draw possibly invalid conclusions from data collected after only one year.

A popular approach to collecting data is to include a questionnaire with a birthday card mailed to former students. Another technique is to prepare an annual publication of personalized alumni news which is offered to everyone who completes a follow-up questionnaire. Conducting interviews and collecting information at alumni meetings are other methods that have been tried.

The assignment of school personnel to the follow-up activity does not adhere to a rigid pattern. One school claimed a 60 per cent return through the AVTS instructors' efforts in soliciting information from former students. In another school, a 90 per cent response was reported from contacts made by a P.O.D. teacher and members of his classes. A follow-up planned jointly by the AVTS and home school counselors resulted in a 60 per cent initial return from a mailed questionnaire; telephone contacts of those who had not submitted a written response swelled the total return to 98 per cent. It was agreed that no single approach to follow-up could be identified as clearly
the most effective; what fails miserably in one area might prove highly successful in another. Therefore, schools were encouraged to try out a variety of methods and to solicit ideas and suggestions from students as well as staff members.

Having collected information from former students, schools typically use the data to improve the instructional program, to justify budget and expansion planning, to improve methods of attracting and selecting students for whom AVTS represents an appropriate choice, and to evaluate existing programs. It is significant to note that discussion groups were hesitant to use initial placement data as criteria for program evaluation, most participants attaching much greater value to later on-the-job success of graduates as the basis for a more valid evaluation of AVTS training programs. The vocational educators in attendance at the conferences seemed to be firmly convinced that any significant progress for the AVTS hinges upon the extent to which a sound public image can be established and maintained. Therefore, high on the list of advantages from obtaining follow-up information is its value as a public relations tool. Analyzing and publishing these data constitute, for many, the most important key to presenting a realistic picture of the AVTS.
WHERE DO WE GO FROM HERE?

No matter how infectious the enthusiasm, no matter how satisfying to unload one's professional troubles and discover that others find the going equally tough, no matter how warm the feelings stirred by an awareness that one's colleagues also care about striving for educational excellence, sooner or later the question, "Where do we go from here?" is inevitable. So it was that the final session of the conferences (which, for the first time, found participants grouped homogeneously, i.e., AVTS administrators, AVTS counselors, home school counselors) was devoted to a consideration of that question.

In terms of a general response, participants were pleased, if somewhat surprised, to discover that meaningful, productive dialogue between administrator and counselor groups could not only be generated, but maintained in the context of mutual concern for meeting students' needs. The observation often made, that administrators and counselors experience difficulty in communicating and even operate with widely dissimilar goals, gained no support at either of the regional conferences. In fact, there was unanimity in the recommendation that continuing, open dialogue among an even broader range of school personnel would have to be established before significant, lasting progress could be made in providing guidance services appropriate to the needs of all students.

Without exception, all conference issues drew from discussants the conclusion that cooperation, communication, and coordination were the key concepts for which no substitute could be identified. Hence, all professional staff, AVTS and sending schools alike, must be encouraged to become involved.
Rather than to bring together at this time a larger, more heterogeneous group in a state-wide conference, the Division of Vocational Guidance was asked to lend tangible support to programs involving personnel from a single AVTS and its sending schools where the emphasis might be task-centered in terms of needs unique to a given area. Thus, although the broad issues discussed at the regional conferences represented concerns common to each AVTS, the most troublesome aspects varied considerably from one region to another. In response to this recommendation, the June, 1968, issue of *Pennsylvania Guidance Keynotes* conveyed the intent of the Division of Vocational Guidance to assist in planning and implementing such local conferences. (Please consider this an additional personal invitation from the DVG to write or telephone 717-787-6955 for help in devising programs corresponding to your specific needs. No hard and fast rules emerged concerning the assignment of local leadership responsibility in this activity. Thus, whether the AVTS administrator, AVTS counselor, or home school counselor picks up the challenge seems not to be the main issue. What does appear to be of greatest immediate importance is that everyone does not decide to "let George do it.")

In addition to providing assistance to local attendance area conferences on specific issues such as student selection criteria, etc., the Bureau of Guidance Services was asked to disseminate periodically to guidance personnel throughout Pennsylvania information about the purposes, progress, and plans of the AVTS and its relevance to student growth and career development. (It may be noted, editorially, that not only will *Keynotes* continue to publicize and feature activities concerned with AVTS, but this fall will also mark the birth of a new publication series of the Division of Vocational Guidance -- *The Counselorganizer* -- devoted to improving the vocationally-related information service for all students.)
While topics discussed by each of the three groups in the final sessions were clearly interrelated, a few recommendations and/or solutions were proposed for specific concerns.

AVTS counselors, exploring the problem of role definition, concluded that the title counselor is a misnomer when applied to the kinds of duties they are called upon to perform. Despite the conspicuous need for professional counselors in the AVTS, this group felt that outside pressure (perhaps in the form of State mandate) would have to be brought to bear before they could be freed to work with students, home school counselors, and AVTS staff in the desirable ways outlined during the conference. They proposed that a statewide job analysis be conducted to verify the discrepancy between duties to which they are presently assigned and those which they ought to be performing, thus providing a valid rationale for change. Further, the AVTS counselors recommended that regional or state-wide meetings for AVTS guidance personnel be held throughout the year according to a regular schedule in an effort to strengthen individual programs through group effort. Another proposal, perhaps an alternative to the one just mentioned, included the formation of ad hoc committees (composed of consultants as well as field personnel) which would be available on a consultative basis to local areas at their request.

The home school counselors focused on the general inadequacy, both in background knowledge of AVTS and in appropriate action, that characterizes their group at the present time. In terms of a reaction to the conference as a whole, the home school counselors indicated that it contributed significantly to their own professional growth and that a similar experience would be helpful to each of their colleagues. To improve the situation that now exists, this group felt that they would have to take the initiative to increase their own
understanding of the AVTS program, rather than to wait for an invitation from AVTS staff, which, in some cases, does not yet include a person nominally assigned the responsibility for guidance services. As home school counselors' knowledge of AVTS increases, it was anticipated that service to students would show a corresponding improvement. No specific procedural recommendations grew out of home school counselors' convictions that their group must become more active and knowledgeable, but they did indicate the greater probability of progress in situations where an AVTS counselor, functioning in a professionally appropriate role, might serve to facilitate cooperative guidance program development.

In terms of pre-service preparation, however, both home school and AVTS counselors emphasized the critical void which currently exists in counselor education programs. Seldom adequate to meet the needs of past generations, the traditional "occupational information" course is now woefully outmoded and probably should be discarded in favor of a modern, flexible approach to career development for all students within the context of technological and social change. Further, participants expressed the view that counselor educators could profitably broaden their own understanding, not only of AVTS and its implications for counselor education, but of all other aspects of the public school today.

After acknowledging their concordance with the goals of guidance, AVTS administrators chose to identify areas that should be bolstered if counselors are to realize their rich potential for positively influencing the growth and development of students. If guidance in career development during the elementary and junior high school years is to be meaningful, rather than an exercise in futility, counselors must look to their own professional develop-
ment, according to the AVTS administrators. They felt that counselors' work in this area will be largely ineffectual as long as it reflects only the past and/or the personal experiences of the counselor. Instead, a future-oriented spirit of inquiry must typify the counselor's day-to-day behavior. Counselors were also urged to "practice what they preach," particularly in demonstrating concern for all students, being open to change and free of prejudice, and activating the student's right, as well as responsibility, to make his own decisions. It was implied in the administrators' report that they would be much more likely to support actively the counselor's interest in assuming a clearly defined professional role if there were tangible evidence of his readiness to do so.

Employing an editorial prerogative, we would ask, "Are counselors willing to accept such a pertinent, albeit pesky, challenge?"
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Since Adam and Eve left the Garden of Eden, man has been required to earn his daily bread. The meaning and variety of work in which he has engaged over the centuries and across various cultures has differed, depending upon the particular context. However, the generally distasteful attitude man has held toward his daily work has not changed. To be poor meant to work long and hard simply to stay alive. To be wealthy meant to have someone do your work for you. Only relatively recently have social scientists clearly recognized that man accomplishes more by his daily work than the maintenance of his bodily needs and that Western man derives considerable psychological gratification from his work, despite his chronic complaints.

As one attempts to define work, it becomes increasingly clear that definitions confined to economic and societal factors alone do not include the wide variety of behaviors involved. Work is partly an attitude in the mind of the person toward the activity in which he is engaged at the moment. One man's work is another man's play. It is clear that working holds an important place both in society and in the psychological lives of individuals.

Our civilization has evolved to the point that, in Western society at least, man possess an element of choice concerning the activity with which he will occupy himself and the manner in which he will do so. Though the variety of work from which any given man may choose varies from broad to narrow, one of the most highly prized, though not always implemented, freedoms in our culture is the right to decide what kind of work one will do, for whom, and when. Although men do not always exercise this freedom, they value the potentials of choice very highly. One of the key, if not the key, goals of the civil rights movement is occupational opportunity for Negroes.

The importance of work in an individual's life cannot be overemphasized. Upon meeting someone for the first time, one of the first items of information sought concerns occupational status. Students substitute questions about college major for occupation. Such information yields much additional experiential data to use in guiding our interaction with the new person. We have stereotyped ideas about physicians, plumbers, and salesmen. Knowledge of a man's occupation tells us something about his background, family, skills, and interests. I behave differently with a college professor than with an accountant, and if that college professor is also a psychologist, my behavior toward him, and his toward me, will be different than if his field is engineering, or one of the humanities.

While it is only very recently that social scientists have become methodologically sophisticated in their study of occupational behavior, interest in occupations and the occupational world can be traced to ancient times. Freedom of choice of vocational activity was, in the time of the Greeks restricted to the ruling classes. During the Renaissance this freedom rested with artists and scholars. In French society of the 17th and 18th centuries are seen the first signs indicating the recognition of the possibility of freedom of choice.
These ideas were given full force in the ideas of Jefferson in the early days of our Republic, and are reflected in our institutions which provide for public education and vocational training.

Probably because of the freedom of choice, the vocational counseling movement began in American during the early part of this century. Frank Parsons developed one of the first systems for assessing a man's potential and matching it with the world of work to produce the best fit possible. Early thought in modern day vocational psychology, thus, fits the model of the trait-factor approach to human behavior. The trait-factor approach is based on the idea that man possesses inherent characteristics which may be measured through the use of psychometric devices. The sum of these various attributes results in the behaviors in which he engages. Applied to vocational behavior, this theory suggests that we should assess the occupational world in terms of the same traits and thus develop a means of matching men and jobs.

From this early theoretical conception of vocational decision making have grown several more sophisticated attempts to account theoretically for the decision-making behavior involved in vocational development. I would like to review some of the major approaches briefly.

There is the theory developed by Anne Roe (1957), a clinical psychologist, which reflects a strong recognition of the role that early experiences play in shaping personality, which, in turn, directs vocational choices. Her theory proposes that every individual is predisposed to use his energy in a particular way. This predisposition, combined with childhood experience, shapes the general style an individual develops to satisfy his needs throughout his entire life. The style that results has specific and major implications for career behavior. It is the relationship between the genetic factors and early childhood experiences on the one hand, and vocational behavior on the other, that Roe's theory attempts to make explicit.

Another theory of vocational behavior has been proposed by John Holland (1959). His theory combines two streams of thought in vocational psychology. One aspect elaborates the hypothesis that careers are an extension of the personality. The other is the notion that people project their views of themselves in the occupational stereotypes they hold.

Holland proposed six work environments: the motoric (or realistic), illustrated by farmers, truck drivers, engineers, etc.; these are strong, masculine types; the intellectual type: chemists, professors, physicians, economists, etc.; the supportive or social type: teachers, social workers, etc.; the conventional type: accountants, bankers, managers; the enterprising type illustrated best by salesmen, politicians, lawyers; and the artistic type: musicians, artists, etc. As people mature, they grow to resemble one or perhaps two of these types. Where one orientation becomes clearly dominant over the others, a vocational choice leading to a corresponding occupational environment will result. Also pressing on the nature of the vocational choice is the level hierarchy. This is defined in terms of a person's intelligence in combination with his self-evaluation. The level hierarchy will dictate whether a person will decide to be an engineer (if a realistic type) or a mechanic (still in the same personality type, but requiring different intellectual attributes).
A third theory influential in current thinking about vocational development was proposed by Ginzberg, Ginsburg, Axelrad and Herma (1951), who are, in order, a sociologist, psychiatrist, economist, and psychologist. They suggest that vocational choice is an irreversible process, which occurs in clearly demarcated periods, and is characterized by a series of compromises an individual makes between his wishes and his possibilities. They divide the process into three major periods: Fantasy, tentative and realistic. The fantasy period is characterized by the lack of reality orientation and serves as a practice phase preparatory to the more serious development to occur later. During the tentative period young people first concern themselves with their interests and preferences, but these preoccupations gradually give way to the recognition that aptitudes and talents are highly important to vocational success. As growth continues, the adolescents realize that certain activities have more intrinsic or extrinsic value than others, and they add this recognition as a third element in their vocational deliberations. At this point, they are beginning to reach the period where they will integrate these four states and move into the final period, that of realistic choice.

Having made some tentative educational-vocational commitment, the first phase of the realistic period is one of exploration characterized by attempts to implement plans on a job or in early college study. The results of this exploration become more apparent to the young person and he evaluates them. The evaluation leads into the crystallization phase, during which time some clear vocational pattern based on the successes and failures of the exploratory stage begins to emerge. The final stage, specification, is the end result of crystallization. At this point, the individual chooses and enters a profession or position. The process is, theoretically, then complete, having occurred over a 10-15 year period.

Psychoanalytic thought has contributed to conceptualizations about career development. It has been reported that Freud once said that a psychologically normal person is one who has the ability "to love and to work" effectively. The mechanism of sublimation is basic in psychoanalysis. It provides an acceptable way for an individual to release portions of his psychic energies that would be out of bounds in society if expressed directly. Work is ideally suited to provide outlets for sublimated wishes and impulses. According to Brill (1949) work is the one realm of society in which an individual is permitted to combine the pleasure and reality principles. For example, the selection of a profession as a career goal provides the student with some anticipatory prestige, status, and vicarious satisfaction while at the same time offering the potential stability of eventual entry into a stable and socially and economically productive profession. The analysts, then, consider sublimation to be intimately bound up in vocational choice. An individual's personality and impulses lead him to choose a career in which he may satisfy, through sublimation, his basic life impulses.

While not taking as extreme a position as Brill, other psychoanalytic writers have illustrated how psychopathology viewed in psychoanalytic terms may account for vocational problems.

Another major theory concerning career development was proposed by Donald Super (1963). He has proposed that, with respect to educational and vocational decision making, a person strives to implement his self-concept
insofar as he is able to match it with information he has about the suitability of any given occupation to fulfill his self-expectations. Furthermore, the particular behaviors a person engages in to implement his self-concept vocationally are a function of his stage of life. Attempts to make vocational decisions during adolescence assume a different form than those made during late middle age. An adolescent is concerned about educational matters with vocational implications. A middle-aged dentist is concerned with planning for the tapering off of his professional activities a decade later. Super suggests that diverse vocational behaviors can be better understood by viewing them within the context of the life cycle in terms of attempts to implement a self-concept which, though it is an evolutionary entity, provides some continuity to the vocational decisions that a person makes.

Other, less elaborate formulations about career development have been proposed, but these generally resemble the major approaches I have just described. What is particularly noteworthy about these attempts to conceptualize vocational selection is their recognition of the development and continuous nature of decision making of all kinds, including vocational decision making. In other words, the decisions a person makes reflect his general style of behavior in addition to the current problem and effects of past decisions. It is predictable that a cautious man will make decisions of a different kind and in a different manner than an impulsive man will. There is also a recognition of the likelihood that no decisions, particularly vocational decisions, are ever really final. Not only are they periodically evaluated, but they lead to other but related decisions. No man chooses a career at age 16 or 18 or 24 and forgets it. At 32 he must decide on a step which might lead to advancement, at 48 he must consider whether future expansion is feasible for him, at 59 he must begin making immediate plans for retirement.

The question is, then, what do theories of career development have to offer in ideas concerning the structuring of counseling programs? Can counselors and their programs be equally effective with or without recourse to theoretical foundations? I think the answer is no. Counseling without a theory is impossible. We all use theories in a loose and implicit way at the least. However, the degree to which we are willing to expend the effort to relate our ideas systematically to theory will increase the richness of our ideas about the sources of difficulty our clients are facing and the ways we may be of use to them. On the basis of Super's theory, for example, one may plan, in detail, a counseling program oriented toward the facilitation of career development throughout the life span. In the elementary years the program would be oriented toward the developmental tasks of early and middle childhood. Emphasis would be placed on broadening experience and awareness of different kinds of work and work settings. Efforts to development wholesome attitudes toward work would be put forth. A basis for the important part of adult life that work plays would be generated. As the child grows older and moves into secondary school, the task shifts toward accumulating the data relative to more specific decision making. Ground rules for making good decisions would be developed, and understanding of the evolution of decisions and their modifiability would become an objective. Definitions of self in terms of interests, talents, values become important. Discussion in later years of high school about implications of particular values, interests, and achievement patterns and their translation into training and employment become important. Later, the elaboration of these early efforts into long range
objectives and their short term tasks become important. The particular techniques to be used by counselors in accomplishing these objectives must vary, partly because of the nature of the task and partly because of the nature of the age group with which one is working. Dealing with the elementary age groups is likely to be done best in a group setting engaged in active pursuits (visits to places where people are employed in active occupations and visits by people who can demonstrate their employment in a lively and interesting fashion) or neighborhood projects in which students may investigate the variety of career activities engaged in by fathers of their friends and neighbors. Where decisions are to be implemented as for secondary students, individual conferences, tests, and family discussions are better suited, though many group activities cannot only be useful in increasing the amount of people a counselor may reach, but also generate some different experiences as a result of group interactions. Later, where plans have been implemented and now need elaboration or people need to make minor adjustments, group discussions may be useful, such as T groups. Should major career retraining be necessary during the course of a man's career, a counselor might be wise to consult the developmental tasks suggested by Super (1963) and retrace those steps with his client.

In summary, though a counselor can talk about careers with people on the basis of his personal experience, his understanding of people and the world and the richness of his concepts about behavior can be immeasurably broadened by the use of theoretical concepts about people and their careers.

References


Career selection like all human behavior is complex. It involves a progressive development on the part of those involved and is a result of a great many forces impinging upon the individual. The least that can be said is that career selection is not a point in time but rather the result of the synthesis of many personal, social and vocational factors as one matures. Vocational behavior like other behavior develops over time, through processes of growth and learning. Furthermore, vocational behavior and career selection develops from less effective behavior and unrealistic or fantasy choice to more complex behavior and more realistic choosing. Hence, career selection becomes increasingly reality-oriented and more specific as one moves toward the choice itself.

Young children, as we know, select any and all careers without regard to the social consequences or the social values attached to their choices. They also change direction very rapidly and without regard to the barriers of an educational nature that stand in their way. They have little awareness of the time span and sequential nature attendant to preparing for and advancing in a career. Professor Ginzberg and his associates at Columbia University have suggested that until about age 11 or 12, the factor which is most important in career selection is interest. In other words, youngsters choose those careers which appeal to them because of their relationship to things in which they are immediately interested, which they enjoy doing and which seem glamorous or adventurous. They are also influenced by those whom they enjoy being around. It is not surprising that the young child will almost concurrently express desires to be a garbage collector, a milk man, a cowboy, a fireman, an aviator, a teacher, or a physician all in the same breath. As the youngster matures a bit, ages 12-14, another factor enters the picture: capacity. The youngster begins to raise questions about his ability and his adequacy to do certain kinds of things. As reality in the form of needed education, financial needs, social/psychological restrictions, social class limitations begin to intrude upon his fantasy, his day dreams, his choices begin to filter out in terms of those which he believes himself capable of success in accomplishing. The Horatio Alger myth that anyone can become President of the United States becomes tempered with the realization that there is only one President at any given time and that there are millions of young people with the same aspiration. Thus, the odds for individual success are affected by the abilities and the potential of these other presidential aspirants too. He begins to realize that one does not become a medical doctor, nurse, astronaut, or teacher without a long period of training and that along the way certain prerequisites are required. Since the medical doctor or nurse must be "good" in biology and chemistry and mathematics to get to the next step up the educational ladder he begins to think about his competencies in these areas. He wonders whether his C in algebra is an indication that he might better consider something else where algebra or physics is less important. This is not to suggest that young people have just learned about individual differences at age 12, 13, or 14. Their awareness of the differences between themselves and their peers began early in
the family and in neighborhood play groups. This simply means that capacities have now been clearly tied to careers and prerequisites for these careers.

As questions of personal capacity become more intense, a further factor intrudes in the reveries of youngsters: value. The adolescent begins to realize that society places different values upon different careers and provides the individual occupying different career roles better or poorer rewards whether these be status, or money, or vacation-time, or security. It is also clear that when one chooses a career, one in fact chooses or adopts a value system. Hence, where one works, the kinds of people with whom one works, the hobbies that he will have, the friendship patterns possible, the seasonal or shift nature of the work, the need for geographical mobility or separation from one's extended family are all parts of this value system, this subjective dimension of career choice, to which one either adapts in career selection or finds himself misplaced and incompatible.

As these three factors, interests, capacities, value, become sequentially prominent, they act as screens by which career choices are narrowed in a type of vertical or progressive fashion. The child starts with what might be described as fantasy choices—with increasing maturity some of these choices become tentative choices—and, finally, he arrives at what are for him realistic choices. As the child and young adult matures, then, we get a convergence effect, moving from the general to the specific in terms of careers and in terms of the increasing reality of career choices. Even the realistic choices have stages of convergence and greater specificity. These have been labeled the stages of formulation, crystallization, and implementation. Hence, the child after considering his interests, his capacities, his values as well as his family's approval, the reactions of his peers, financial implications and other forces affecting career selection, arrives at a point called formulation: where, for example, it appears that the broad field of science is for him the best career choice. With some digging and contemplation he moves to the stage of crystallization: the kind of science which interests him most is physical science; because of all the things he has heard and read, nuclear science seems to be a valued and rewarding physical science career. He, then, moves to the implementation stage in which he gets the training required and begins to progress in the career he has chosen. If it does not work out, he may reinstitute in condensed fashion the whole cycle, fantasy—tentative—realistic—as he considers other jobs to which he might move or transfer.

It seems clear from the observations that have been made that the young person in the 7th, 8th or 9th grade is in a state of transition, and that the choices he expresses are not yet concrete. It should be noted that unreliability is not tantamount to instability. At any given point, he is probably in a state of equilibrium and feels pretty good about a given choice but he is engulfed in experiences which will cause him to continuously rethink his picture of himself and what he can become. This is healthy, and natural, but it sometimes pains those of the adult community who want him to settle on something and stay there.

But let me not mislead you! It is not only the pre-tenth grader who is in a state of ambivalence. A large group of youngsters even at the conclusion of their high school careers or well into college or their first jobs are still uncertain about which of the multitude of opportunities which lie at their feet seems clearly best.
Models of Vocational Choice

There have been several models of career selection and decision-making which give us added insight into the multiplicity of the aspects of career selection.

The first is a rather traditional trait and factor model. The assumption is made that the individual possesses a variety of traits; occupations can be assessed quantitatively in terms of these traits, and by matching the two, career selection is accomplished. This is, in a real sense, the way vocational guidance began and is even today too common or too limited an assumption upon which much guidance activity operates. The major criticism of this explanation of career selection is that it is too static. It does not provide for or consider the dynamics, the changing nature, of the individual or the environmental situations which will confront him and to which he must relate himself. It is analogous to fitting round pegs in round holes with neither pegs nor the holes remaining round for a consistent period of time.

A second major model for career selection is that which is economic in origin. The assumption is made, based upon Keynesian economic theory, that one chooses a career or an occupational goal which will maximize his gain and minimize his loss. The gain or loss is, of course, not necessarily money but can be anything of value to the particular individual.

A third model is called the social structure model and is concerned with the limitations placed upon career selection by restrictive social class horizons. Much career floundering is a result of limited avenues of career choice, or limitations upon the knowledge of opportunities available to the individual so restricted. This model also speaks to the concept of error and accident as the determinant of career choice. That is to say, the individual blunders in or finds himself in careers without any purposeful selection on his part, because the only guideline he has is immediate gratification. This is, of course, a sociological model which implies that the narrowness or the breadth of the individual's cultural or social class horizons has much to do with the choices he can make, can consider, or can implement.

A fourth model is one which might be described as a complex-information processing model. It suggests that the magnitude of the information, of the factors which need to be considered in career selection is so overwhelming, that the individual prematurely selects a career, and supports this selection by rationalization or cognitive dissonance, without sufficient thought to the implications of the choice.

A final model and the one which is currently being given most research and theoretical attention is one which might be called a need reduction model. It is more comprehensive than the preceding models and in fact subsumes elements of all those which have been described. The assumption is made that the individual has a self-concept, a picture of himself, which he attempts to implement in a career choice. He sees himself as compatible with certain occupational roles and he gravitates toward careers which will permit him satisfaction for his needs and outlets for his capabilities, interests, etc. His gravitation toward specific careers may be quite unconscious as suggested in the psychoanalytic or Freudian oriented theories. For example, the assumption is made that a man decides to become a butcher or a boxer because he has a basic sadistic,
aggressive drive which he must satisfy in socially approved ways. Or, more recent psychological thought suggests that gravitation toward specific careers may be a much more rational, conscious activity by which one learns through experiences and maturation what kind of person he is, that of which he is capable, what he values, how he needs to find satisfaction, and the kind of careers which will be compatible with this picture he carries of himself and which in large measure affects his behavior. This is a dynamic model which provides for change in individual behavior, change in environmental expectations and change in the interaction between the individual and the environment.

**Forces Impinging Upon Career Selection**

Regardless of the comprehensiveness of the career selection model that one uses to describe how decisions are made, it must be remembered that the individual does not live in isolation. The student progressing through a career selection process is also a social creature, besieged by diverse forces. He is at once torn between the need for independence from his family and the security which dependence upon the home provides. He is to a large degree a product of the family background in which he is reared. There is a growing body of research information, for example, which suggests that within limits one can predict the type of career characteristics a child will move toward as the result of the early child-rearing practices of his parents; indifferent, negative, over-protective, or democratic.

At any rate, much of the self-picture which the individual carries about himself and what he will become is a direct reflection of how he has been or is viewed by others. Hence, the role models to which he is exposed in early childhood in his family and his neighborhood have much to do with the kinds of attitudes which will later be observed in his work life. The approval of his parents of his decisions, the freedom to make some personal decisions as he matures, the reinforcement of certain behaviors by his peers, the "words of wisdom" provided by relatives or people he respects, the "expert" judgments about careers of different kinds conveyed by the mass media, the ways in which education or occupations or personal responsibility or achievement is valued by the culture in which he finds himself, are forces of significance in shading his expectations and his ultimate decisions. Finally, it must be remembered that the adolescent is a creature undergoing rapid glandular, emotional, intellectual, and physical change. These are changes which have as yet not been tied as directly as they might to the implications for education and work to which they are related.

**Implications**

1. It must be borne in mind that career selection does not just magically happen at a point in time but is an ongoing process which extends from infancy through at least young adulthood.

2. That individuals progress through life stages which place different expectations upon them in terms of the specificity and realism of career choice; and, various subcultures set standards of specificity and career possibilities to which these individuals subscribe.

3. In order to progress developmentally, certain learning tasks are important at each stage of development. These, too, are to some extent culturally mediated.
4. Vocational behavior and career selection is the result of a complex network of determinants which are intrinsic as well as extrinsic to the person involved.

5. It is relatively futile to expect an individual to commit himself to a specific career in adolescence unless much more sophisticated occupational and educational information and many more exploratory opportunities are made available in cooperative efforts between the school and the vocational or educational environment to which the child must relate.

6. Career information must be made available which is accurate, free of bias, current, and developed in a format which is relevant to the developmental needs of youngsters and which incorporates the most effective learning principles of which we know.

7. Career information to be effective needs to include not only objective factors like earning possibility, training requirements and numbers of positions available but also the social and psychological aspects of careers as well. If we wish to provide informational input to the decision process of the individual in the most effective manner, we must provide the context by which he can literally project himself into the career role and in a real sense act it out or test it for himself. To illustrate let me give you an example of what you want to avoid. There was a young man who was quite good in mathematics and science. He was also very fond of good music and the arts. He was attracted to mining engineering because there were good salaries available, many job openings, and he would need to use his math and science background. He completed his college preparation and secured a job in a rather desolate area of the Rocky Mountains. He enjoyed mining engineering, but he did not share interests in common with the other men with whom he worked. There were no outlets for the picture he had of himself as a cultured professional man. He left mining engineering and entered another career field in which he could implement the total picture of himself, the self-concept, which guided his satisfaction and productivity. This illustration carries a message for us. People generally leave careers or fail in them, not because of lack of ability, but rather because of personality difficulties. And, certainly, inappropriate original choice of career can generate these difficulties.

8. Because of the importance of early childhood experiences in the family, the school, the community, the place where effective intervention in career selection needs to begin is the elementary school. There is a theory called Luchins Primacy Effect which states that the information which one receives first carries the most weight in the final decision. The implication is that if youngsters are taught early in life that college is only the kiss of the wishing rock, or that the physician's sole activity is saving the lives of famous people, or that the lady in white has a soft but always glamorous life consisting primarily of falling in and out of love with Dr. Ben Casey or Dr. Kildare, they are being misled. But these romanticized dimensions of life which I have obviously exaggerated are the ones which will carry residual effects into many dimensions of their career choosing. And, later efforts at providing more accurate information will be diminished in effectiveness.

In conclusion, then, it is important to remember that young people cannot be rushed into committing themselves to specific careers; neither can we nor do we wish to remove from them childhood fantasies. But we do want to provide them
with the best information that is available, and guidance services that give them opportunities to test one alternative against another in ways which will maximize understandings that a career and a life are not mutually exclusive terms.
Youth: Too Young to Choose?

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The question which is posed in the title of this paper is of the type commonly referred to as rhetorical. That is, the question is raised but the answer is already known or understood. By youth, we mean roughly ages 14 to 18, and the answer most people would give us is "yes, youth are too young to choose." Most would feel that a certain maturing process must take place before youth can sensibly make choices—especially vocational ones. This process is usually viewed as a physiological process and one which time and the unfolding of nature will produce. The assumption is that the process must proceed at its own pace and cannot be affected by outside forces.

It is the vocational aspects of this question that this paper will explore. Let it be stated at the outset that the writer rejects the idea that youth are too young to choose—especially vocationally. The paper will focus attention on what seems to be a growing body of writing and research that supports the notion that youth can choose and choose knowledgeably. The reader is certainly free to draw other conclusions, but it is the writer's position that the answer to the question is "no." Youth are not too young to choose, only too poorly prepared to make choices.

The following outline is proposed as a way of analyzing the question in more detail:

1. Why the belief?
2. Current challenges?
3. How can Youth be helped to choose?

Why the Belief?

It seems this belief has long and deep traditional roots—ultra-traditional, as a matter of fact. The view seems to be a carryover from the last century, when education in this country was viewed as a liberalizing force that was to be taken at a leisurely pace. As will be shown later, even in the year 1900 very few students graduated from high school, and those who did went on to higher education in large numbers. Elementary and secondary school education has historically been a preparation for higher education. Who needed to make choices? If you stayed in school until graduation, you were prepared primarily to go on to further education at the next level. In many school systems today this is still the prevailing philosophy.

The traditional position on this belief is one thing—there seems to be a historical explanation. The professional position which educators take is quite another matter. For reasons which are not clear, the professional position seems also to be youth are too young to choose. Two Columbia University Professors, Super and Ginzberg, have done much to foster this position. Ginzberg and his co-authors published their book, Occupational Choice in 1951. It was based on a small sample of 65 boys who were enrolled at the time in Columbia University. Out of this beginning, there came the vocational development stages he called
Fantasy, Tentative, and Realistic. The implication that has grown out of this 20-year old study is that youth do not leave the tentative stage until they are in their late "teens" or "twenties." Ginzberg's work is still often quoted and referred to in the literature. It has been a major influence on the guidance field.

The work of Super is, of course, more substantial than that of Ginzberg. His Career Patterns Study (C.P.S.) has been going on for many years now. The major writing that has served as a professional influence on the issue at hand was The Vocational Maturity of Ninth Grade Boys (21). This does not seem the place to completely review this book or others in the CPS series. A passage though that has given rise to what might be referred to as the postponement theory of vocational development may be in order. In a concluding chapter, it was put this way:

(We are) "led to the conclusion that in grade nine, vocational maturity is not characterizable as goal-attainment, as the having of consistent, realistic preferences, nor as having begun to make a place for oneself in the world of work" (21). This conclusion and other supporting data have given rise to the belief that the ninth grade is too early for youth to make vocational choices. Super, of course, did propose a number of things that could be done to assist the ninth graders developmentally. The issue taken with the work of both Super and Ginzberg is that they simply reported what existed 15 to 20 years ago. In neither case were their theoretical positions established as the result of any counseling. Their work was observational and descriptive. In Ginzberg's case, it was after the fact. They do not report on the results of any action -- no counseling influence, no developmental plan through the elementary or junior high school grades. Both report on situations prior to any massive build-up of guidance programs in this country. They report on what happens if you don't do anything. Effective guidance programs, at least in the view of some, are of an intervening, not a passive nature. Effective guidance implies creating a climate for choice, not bewailing the lack of sophistication that makes choices impractical.

In very sketchy form, some of the public and professional reasons behind this belief have been touched upon. These beliefs need to be challenged more openly in the writer's view.

Challenges can be made on the following three counts:

Biologically - Today's youth are more highly developed physically and intellectually than any comparable group in our recorded history. They are taller and heavier than those of a generation or more ago, and certainly far ahead of their forefathers of 50, 100, or 150 years ago. Cole reports (3) that between 1902 and 1952 all age groups in the youth category were 2.7 in. taller and 5 to 27 lb. heavier. In a study by the Library of Congress for a Senate Subcommittee (25), it was shown that youth had fewer sick days than adults, thus suggesting they are in reasonably good health. Physically, today's youth cannot be taken for yesterday's variety. They are developing rapidly; ideas about them must also change rapidly.

A part of the biological challenge is also reflected in the changing picture of what is known about the intellectual potential of today's youth. The writing and research of Bruner, Piaget, Guilford, and many others challenge some of the static concepts of what can or cannot be learned by youth. Much of the curriculum
change in the past several years in mathematics, science, social studies, and other fields is based on some of these revised learning concepts. Television, when used appropriately, has served to spur early intellectual development and certainly provides an avenue for vocational exploration not present previously. Today, youth learn more and learn faster than any comparable group in history. It seems they could learn to make vocational choices if they were prepared to do so.

**Educationally** - The challenges here are twofold: (1) a changing school population, and (2) a knowledge that some youth will be entering the work world before graduating from high school. To support the first educational challenge, attention is directed to the most recent figures released by the U. S. Office of Education in the *Digest of Educational Statistics*--1966 (24), on percentages of 17-year old high school graduates. It looks this way:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>6.4 percent</td>
</tr>
<tr>
<td>1910</td>
<td>8.8 percent</td>
</tr>
<tr>
<td>1930</td>
<td>29.0 percent</td>
</tr>
<tr>
<td>1940</td>
<td>50.0 percent</td>
</tr>
<tr>
<td>1965</td>
<td>72.0 percent</td>
</tr>
</tbody>
</table>

No longer is the nation keeping in school and graduating just a handful of youth. This country has moved from 6.4 percent to 72 percent of its 17-year olds graduating from high school in 65 years! But, are some of the ingredients of the education formula changing to accommodate a vastly different set of students today? One of the challenges to counseling is no longer to work with a small number of students, primarily going on to higher education, but to help youth who are going to have to answer the vocational questions put to them. Another dimension of this challenging change in education is the fact that there were more Masters degree graduates in 1964 than there were high school graduates in 1900, roughly 100,000 in each case. Education in this nation has been turned upside down. The same old answers to questions raised under radically different circumstances won't do any more.

Partially because of the education youth receive, they are already making vocational choices. They are already in the labor market! Five million-plus youth 14 to 17 years of age were in the labor force in 1964, and Department of Labor estimates (9) indicate that the percentage and the number are increasing. The employment figures for May, 1967 (23) showed that there were more than 5 million 16 to 19-year olds in the labor force. Youth are in educational settings in greater numbers. But they are also in work settings as well. Youth are making choices. The concern is whether the choices are informed ones. The fact that youth are trying to obtain work challenges the belief that they cannot choose.

**Professionally** - The third area is where counselors can take issue with the "not ready syndrome." There is a slowly accumulating body of research and writing concerning vocational choice by youth. While no one single study stands out, the work of Gribbons and Lohnes seems to be the most comprehensive.

There is reported in the literature a number of articles dealing with the question of vocational readiness. Evidence of concern for the elementary grade level child has been more obvious in the last six or seven years. Walter Lifton (16) reviewed some of the dynamics of elementary grade school programs and
concluded that the general tone of what is done at this level is directed toward information about white collar type jobs and higher education. He felt that most of what students do pick up of an educational-vocational nature comes from their parents or other more general influences. The notion that schools do not teach for vocational development drew further support from a study of elementary school readers by Tennyson & Monnens (22). They found, after an analysis of readers from six major publishers, that there were twice as many mentions of professional types of occupations as any other job group - 61 percent. Clerical and sales workers, which make up about 20 to 25 percent of the labor force, were mentioned in only about 6 percent of the total references to occupations. Information about skilled workers was almost as distorted. On the basis of this study, it appears that little accurate information comes to children of 6 to 12 years through the avenue of their elementary school readers. Little wonder they aren't ready to make choices.

In a cross-sectional study of boys in grades 1 to 12 by Barbara Gunn (11) in California, she detected a sophistication of choices and vocational readiness by grades 7, 8, and 9. Perhaps of greater interest in her study was the fact that some growth in vocational understanding was indicated by grades 5, 6, and 7, without an active program of readiness for vocational development. What will happen when teachers or counselors make an active effort in the direction of vocational development readiness? Wellington and Olechowski (20) reported on just such an effort in a suburban Chicago elementary school. They found that a teacher, without elaborate special training, could assist third graders to develop a more realistic understanding of the world of work, as well as an appreciation and respect for work being performed. Advantages and disadvantages of occupations could also be picked up. All of this was accomplished, of course, on a developmental basis, and not on a basis of forcing early vocational choices in the elementary grades.

L. A. Grell (6), has made a strong appeal for a systematic readying for vocational development in grades K-6. It is in the early school years that Grell (an elementary school principal) feels much can and needs to be done on such matters as work habits, attitudes toward work, relating one's self to work, and establishing a tolerance and understanding for the work that various people perform. Grell reminded his readers that the structure of the elementary school lends itself to more imaginative ways of accomplishing some of these goals than does the secondary school. Along this same line, Goldie Kaback (13, 14) of the City University of New York has reported on a number of activities regarding vocational development readiness in the elementary schools of New York City. These have been over a wide range of projects and programs at all grade levels. Kaback concluded from her work over several years that there is a great interest on the part of children of this age group in vocational information. They expressed a strong interest in knowing more about the nature of work in the world about them. Many of the city youngsters badly needed and wanted occupations models to relate to.

In a study that covered both elementary and secondary schools, Nelson (18) challenged 600 students in grades 3, 5, 7, 9, and 11 to relate themselves to occupations. Nelson concluded that the occupational elimination process starts early and that many attitudes are already established by the ninth grade. He felt that many occupations were rejected at an early age. In Nelson's view, all of this decision-making and choosing is going on with almost no effort to help children develop any objective understanding of the world of work while still in school.
Perhaps the most comprehensive research to be reported since the beginning of Super's Career Patterns Study is the work being carried out by Warren Gribbons and Paul Lohnes in Massachusetts (7, 8, 9, 10). It is always hazardous to summarize or generalize about the work of others, but it does seem clear that the longitudinal efforts of these two challenge the belief in the "not ready" syndrome. A number of points from four of their reports relate to the question focussed upon in this paper:

Eighth graders respond with interest to an active group guidance program related to vocational development and begin to show some vocational wisdom (7).

Many eighth graders were more advanced in their vocational development than some tenth graders. For some, the postponement of choices and decisions did not seem necessary (8).

Some tenth graders had developed firm ideas and attitudes about occupations, many of which were based on irrelevant or inaccurate information (8).

School counselors should actively involve themselves in the process of vocational development of their students, while the students are at an early age in order to increase their awareness of value hierarchies, values of occupations, as well as their potentials for aspirations and plans (9).

Much frustration is shown by non-college-bound students in their vocational development because of lack of assistance from schools (i.e., counselors) in exploration of potential talents (10).

Some similar work on developing vocational readiness is reported by Anderson and Heimann (1) and Hessee and Heimann (12). Their work was done in the Phoenix, Arizona, schools and pointed up clearly that measurable readiness could be developed in both boys and girls at the 8th and 9th grade level, through an active program of individual counseling or group guidance. These were not elaborate efforts, just effective materials put together in a challenging way for youth of this age group. Their work could easily be emulated. Interestingly enough, the work of several investigators and the recent "Model of Guidance for Career Decision Making," set forth by Katz (15) fit together very nicely. All encourage a rational, logical, developmental process of assisting youth to choose by actively doing something.

**How Can Youth Be Helped to Choose?**

Several alternatives have previously been suggested involving counseling and group activities. The accumulation of evidence seems to point to the fact that youth can be prepared to choose. It is when they are left without any help that they seem to put into practice the theoretical positions growing out of the work of Ginzberg and Super. The main question that remains is how can a series of experiences from K-14 be developed, in and out of the classroom, directly and indirectly carried out by counselors, that will still protect the right of the individual to choose freely, yet put him in the best position to make vocational decisions and choices.

Borow summed it up well in a recent paper (2) when he alluded to the vocational decision-making process as a process growing out of very complex systems of variables. Borow called for more attention to modification of vocationally relevant behavior than to the prediction of what might happen.
Vocational development, he went on to say, is not static. It can and should be systematically influenced to avoid "occupational foreclosure."

Although much of the effective work in preparation for vocational choice is being done by counselors in individual and group sessions, it is far from sufficient in both quantity and quality and needs much improvement. Beyond this, however, there is much that needs to be done to broaden the curriculum K-14 to provide many of the understandings that students need and can get only in the regular classroom. The counselor, it would seem, must take an active role in curriculum development. Much attention was given to this topic at a recent conference called by the National Vocational Guidance Association (17).

Two examples may serve to illustrate the way the curriculum can be affected to broaden vocational readiness. One is a reading-social studies series produced by Science Research Associates and written by Lawrence Senesh, called "Our Working World" (20). This is a series based on working economic concepts put in the terminology of the primary grades. The focus is on the working family in grade one, the working neighborhood in grade two, and the working metropolitan area in grade three. It would seem that the creative way in which this material is presented to this age group gives promise for more adequate vocational development if continued throughout the grades.

Another related activity, more experimental in nature, was recently completed by John Daily at the George Washington University. In this project, Daily and his associates worked on developing vocational talents with a representative sample of 2,500 ninth grade boys and girls in eight selected school systems. Regular teachers worked with these students over a period of a year on the development of vocational talents. Daily (4) stated in his conclusion:

"This study has demonstrated that important aptitude test skills of vocational talents can be taught to a significant degree with relatively simple materials and procedures with typical public school systems.

"Important vocational talents can be taught in schools or in other training programs using the new curriculum and materials developed for this purpose in this project. These talents include mechanical reasoning, mechanical information, non-verbal abstract reasoning, spatial visualization, physical sciences information, and electrical and electronics information. The increase in level of talent should help the students to learn the specific skills and understandings taught in vocational high schools and other training programs.

"Mechanical talent or aptitude appears to be a skill largely learned through a variety of out-of-school experiences. A rural or small-town environment is particularly rich in such experiences, and mechanical comprehension has been well named "barnyard physics." This study has demonstrated that our schools and other training programs can compensate for the lack of environmental stimulation in mechanics and technology that handicaps most of our young people today.

"Culturally disadvantaged students can be trained to do substantially better on important tests of vocational aptitudes or talents. This could qualify appreciably greater numbers for military, governmental, or industrial training programs where selection is based on aptitude tests."

If Daily can develop vocational talents, why can't vocational readiness also be developed?
Conclusion

There does seem to be another answer to the question posed at the outset of this paper. Yes, youth can choose! But they must have help all along the way of a systematic developmental nature that operates out of a solid theoretic position. Hit-or-miss activities are stopgap or short term, at best. Efforts to help youth to choose must be long term, continual, and developmental. They must also recognize the varying rate of readiness and approach each student on an individual basis. And, finally, all efforts must safeguard the individual's right to make free choices for himself.

References


A Point of View About the Place of Vocational Education in Contemporary Education

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The topic which I was asked to discuss with you today could be approached in a highly academic and objective manner. I have, however, chosen not to approach it in this way but will instead attempt to develop an argument to persuade you that vocational education is not only a basic social expectation of our schools, but more important, that it is a function which at present is not receiving adequate attention. I secondly hope to convince you that as counselors and guidance workers your professional responsibilities are intimately tied to the vocational needs and opportunities available to students and that your understanding and attitude toward vocational education are key factors in determining the impact such programs will have in your community.

What is Meant by the Term, Vocational Education?

If one were to use a dictionary definition of the term vocational education he would arrive at some statement such as the following: "...that education or training which prepares a person for an occupation (employment)."

Although perhaps all education could, technically, be included under this rubric the term in common usage is defined much more narrowly as: "...vocational or technical training...conducted as part of a program designed to fit individuals to gainful employment as semi-skilled workers or technicians in recognized occupations."

Within the "establishment" which assumes primary responsibility for the direction of vocational education in this country, the term has been even further restricted so that the emphasis has been entirely "less than college grade" and in practice confined to a relatively limited number of skilled and semi-skilled trades.

I wish my remarks to take a somewhat controversial point of view with regard to the definition of vocational education and assert that we cannot continue to maintain our limited and parochial perspective on what is or is not vocational education. I will, therefore, take a considerably broader view of what is included in this term than is held by the traditional vocational educator, while at the same time avoiding the all encompassing definition found in the dictionary. Without attempting to be completely specific about what is or is not included in my definition, may I simply state that vocational education, as I will use the term, includes all activities organized by schools, which have as their primary objective, the development of a marketable skill, including extra-class programs coordinated by school personnel. As will be clarified later in my remarks, I do not include in my definition those activities whose primary objective is general social, cultural, or intellectual enrichment or understanding.
The Social Significance of Vocational Education

It is a basic postulate of all societies that each individual will find some useful means of maintaining himself in society, within the limits of his physical, emotional, or intellectual capacity. Although society will tolerate a certain number of indigents (hippies), by and large, most people are expected to find some occupation or vocation which will satisfy their physical and aesthetic needs. In this age of compulsory education and specialization, it is easy to lose track of the fact that most youth end up in unskilled or semi-skilled occupations for which they have had no formal training. Of every ten youngsters in grade school this morning, three will not finish high school. Of the seven who will earn their high school diplomas, three will go directly into society either as workers or as wives and mothers. Only four out of the ten will continue their education beyond high school. Of these four, only two will graduate with a bachelor's degree. This means that of the 26 million youngsters who will be going through our schools in this decade, only about 20 percent will earn college degrees. The remaining 80 percent will receive some lesser amount of education, most of which will be unrelated in any direct way to the means by which they support themselves in society.

Unfortunately, the problem cannot be simply dismissed by saying that it is too bad that not everyone is able to complete a high school education by rationalizing that some of these people "just don't have it." The facts are that a substantial portion of these students who drop out of high school are above average in intellectual ability. A recent study of Pennsylvania dropouts indicates about 11 percent of the pupils who dropped out of school had IQ's of 110 or above. Based on these figures, each year more than 80 thousand youth who have IQ's within the upper quarter of the population, that is IQ's of 110 or above, leave school before graduation. This, coupled with the fact that about 50 percent of the dropouts have IQ's between 90 and 110, indicates that somewhere around 60 percent (almost two-thirds) of the youth who drop out of our secondary schools have average or higher intelligence. Although obviously dropping out of school does not mean that some of these youth do not eventually return to school or obtain other kinds of training, once a student drops out of school the likelihood that he will continue his education on his own or obtain additional special training is considerably reduced. Based on French's study, in Pennsylvania alone we would expect to find about 4,000 intellectually capable high school students withdrawing before graduation.

As I read the implications of the dropout problem, I see it somewhat differently than many. I am sure that you have all seen the TV commercial advising potential dropouts to stay in school and get an education so that they can get a good job. The realities are, however, that most of these kids are not getting anything in school that helps them get a better job and they know it! Obviously certain of the reasons why students, able or otherwise, drop out of school are relatively beyond the control of the school. Approximately two-thirds of the females who withdraw do so either because they are pregnant or intending to be married, or are already married.

Among the males who drop out of school the principal reason given is that they do not like school and that they want to leave school to get a job. It seems to me that these data argue very strongly for the fact that we are not kidding many of these potential dropouts by holding out a general high school
diploma as a key to a better job. Dropping out of school is a symptom of a more basic problem of our schools and cannot be treated by the threat that one must get a high school diploma to become a useful working member of society. Fortunately, the armed services have a much more enlightened view in recent years about the need for providing vocational training to school dropouts, although most of us would agree, this is hardly a rational substitute for systematic vocational training in our public schools.

In general, Pennsylvania has not moved far enough in providing vocational training opportunities (either in high school or post-high school). In a survey of the number and percent of high school age youth in federally supported programs of vocational education, Pennsylvania fell far below the national average. For all 50 states the percentage was 13, but for Pennsylvania the percentage was less than half that number, 6.1. It is ironic in a highly industrialized state such as Pennsylvania, that vocational education programs have moved so slowly in meeting our youth's needs for other than academic training at both the high school and post-high school levels. Apparently Pennsylvanians have taken the position that the youth who chooses not to (or is unable to) profit from an academic high school program, forfeits his rights to any publicly supported education and must shift thereafter for himself. As I pointed out earlier, although this attitude would be denied by many, this is the practical consequence of not providing publicly supported non-academic opportunities for school age youth. We have, in this society, built up the myth that we are only responsible for providing one type of education, general education, which should be appropriate for all youth and that anyone who fails to profit from this social bequest is henceforth outcast economically and socially. Although many of us would deny this point of view, if confronted with it directly, the fact remains that we have moved exceedingly slowly in providing alternatives whereby youth, who for one reason or another do not find it possible to continue in the traditional academic mold, can obtain further instructional training through alternative educational arrangements. The problem is further clouded by moral overtones which still persist in many communities, preventing girls and boys who marry before completing their high school educations to do so, even when it is financially or practically possible. In a similar way, schools have not moved realistically to provide alternatives for youth who wish to combine working experience with their general education. Cooperative work-study, work-experience programs are still far from the norm in Pennsylvania as in other states, thereby forcing many youth, who would find it possible to complete a high school education if allowed to combine work and study, into a choice of dropping out of school completely.

In my opinion and in the opinion of many others, society cannot continue this extravagance, but must realize that each youth has the right to maintain his contact with the educational enterprise for as much of his life as he finds it profitable to do so. We have long since passed the day when society should regard education as a privilege. Education can be shown by almost any criterion as a social investment which pays very handsome dividends in both economic and social currency. This is particularly true of vocational education where the returns to society are much more immediate and obvious than is the case of general education. Numerous studies have shown that the vocational school trainee has a higher standard of living, earns significantly more (some figures suggest up to a thousand dollars a year more) than the non-vocational school trainee who enters an occupation without any special preparation, tends to be more satisfied in his job, perform it more completely, and so on. Society
cannot afford to tie its entire educational emphasis to a single track designed to accommodate the intellectually elite. This point of view was abandoned, in principle, a hundred years ago when we moved from Latin grammar education to free public schools. Unfortunately, many of us in the profession of education still act as though the need to train youth for a gainful employment in society is an option to be exercised by the individual. The fact is that as a society we cannot continue to afford large numbers of undertrained vocational illiterates any more than the society could afford a large number of intellectual illiterates. A democratic society, as is true of more authoritarian societies, is based upon the premise that each individual will be able to make a useful contribution. The difference between a democratic society and a more totalitarian society is that we believe the individual in a democratic society should have the choice of which of the many vocational opportunities available he wishes to pursue. In a totalitarian society one's choice of vocation is determined by social, rather than individual needs. In allowing choice, democratic societies do, however, pay an accompanying price. This takes the form of letting the individual explore various vocational possibilities, including some for which the individual may not be suited. In my opinion, we have in this country made a great "to do" about the variety of educational opportunities which are available for the taking but have been less conscientious about seeing that such opportunities are really made available when and where they are needed. In the study mentioned just a few minutes ago, we find that Pennsylvania has the third largest population between 20-64 years of age, something over 6 million people (exceeded only by New York and California). Of these 6 million people, the proportion of persons enrolled in federally supported vocational education programs is approximately one-third the national average (less than eight persons per one thousand in the age category of 20-64, whereas the national average is over 20). Of the 50 states, only five have lower incidences than Pennsylvania. These are, interestingly enough, Alaska, Maine, New Hampshire, New Jersey, and New Mexico. For whatever reasons, therefore, and I am sure they are diverse, vocational education in Pennsylvania is not having the impact that it can and should have.

What Are the Social Returns for an Investment in Vocational Education?

Since vocational education is ostensibly intended to prepare individuals for gainful employment, one of the criteria by which such a program must be evaluated is the extent to which individuals who have received specialized training actually enter employment related to their training. A number of studies done during the fifties indicate that on the average about 85 percent of the graduates of industrial training programs are employed in occupations of the area for which they were prepared. Generally the unemployment rate of persons having participated in vocational education programs is significantly lower than among general high school graduates; typically, about one-third the rate for high school students with no vocational training. It appears, therefore, that vocationally trained students do enter the occupations for which they were prepared and tend to remain employed more regularly than do non-vocational graduates. Furthermore, those who enter the trade related to their training receive higher initial salaries which persist at least up to five years. Findings of studies comparing vocational education graduates with general graduates of high schools indicate consistently that the vocational education graduates have higher means of income, are more satisfied with their work, have higher job satisfaction ratings by their employers and lower unemployment rates. These
are difficult data to dispute and make it difficult to explain the relatively minor place held by vocational education in contemporary American education. This, coupled with the fact that most students will not even enter college let alone graduate, makes the overwhelming general education emphasis on the American scene today seem somewhat inconsistent with the needs of these youth.

The point I wish to make is not that general education should be replaced by vocational education, but neither can general education completely replace vocational education. What is needed, in my opinion, is a balance between the two, a balance which I believe is now seriously distorted.

The importance of vocational training in contemporary education, in my opinion, has been compounded by our preoccupation with the technological advances made in countries such as Russia. Our strategy in public education has been to face this threat by emphasis on academic programs. Actually, our technological race with Russia is not one of theoretical physics, but is one of building a technology which will allow us to do those things which we have long known were theoretically possible. The experience of countries like England who have been on the frontiers of science theoretically is that by ignoring the middle levels of technology and vocational training, such countries have been regularly outstripped in times of national emergency, economically and even politically, by countries who have maintained a better balance in their human resources between the highest levels of science and the more practical levels of technology and engineering. In my opinion, we have not, in this country, paid sufficient attention to examples of the consequences of imbalanced educational efforts. The rebuilding of Germany and Japan following World War II are excellent examples of the place that a well-trained, middle level of technology can play in the economic and political growth of a society. I repeat, my remarks are not intended as a criticism of the phenomenal growth of interest in academic subjects in this country. Indeed such developments must be applauded. However, in emphasizing this segment of our educational program we have largely ignored the training of persons who will actually translate ideas into reality.

The arguments, therefore, for placing a greater portion of our educational effort toward vocational education can be made on many bases. One can argue on a strictly pragmatic basis that students in vocational education programs tend to remain in school longer, tend to be more satisfactorily employed, tend to be more satisfied with their occupational choice than are similar students who have not gone through vocational programs. One can also argue that it is morally right (philosophically right, if you prefer) to encourage, if not demand, that each person be provided with that type of training which best suits his needs and interests. One can also argue that the growth of a modern industrial society is highly dependent upon the establishment and growth of a well-trained middle level of technology, which is the primary focus of contemporary vocational education.

Why Has Vocational Education Not Maintained Its Place in Today's Schools?

Why is it that vocational education, when it is such an intimate aspect of every one of our lives, has come to be so depreciated as an area of emphasis in American education? "Vocational education has an image problem." According to a study by Kaufman, vocational education is seen as second class education. This is particularly true of attitudes of teachers in academic high schools, but even true to some extent of teachers in vocational high schools. Kaufman's study,
involving attitudes of about 500 vocational high school teachers and almost 800 academic high school teachers, concluded that although most vocational high school teachers had generally favorable attitudes toward vocational education, over one-fourth of these vocational teachers themselves were either neutral about the value of vocational education or saw it unfavorably. When academic high school teachers were surveyed, three out of every five were either indifferent, neutral, or unfavorable toward the inclusion of vocational education in high schools. When the attitudes of vocational and academic high school teachers were compared regarding college preparatory programs, both groups were surprisingly similar, almost three-fourths strongly endorsing the college preparatory program for high school students. It is apparent from these data that either teachers are not apprised of the realities of life, or they have a misguided sense of the importance of academic subjects to the majority of high school youth.

The general impression is that vocational students tend to be at the bottom of the heap, intellectually, and if allowed to, the vocational education program would make inroads into the academic program thus threatening what they perceive as the most valuable aspect of a high school education. The academic teachers apparently do not realize that vocational education returns a substantial portion of its instructional cost and therefore does not infringe on academic budgets. It is apparent from the responses reported by Kaufman that the academic teachers, both in vocational and non-vocational high schools, see vocational education as a competitor for budget and student time. Although to some extent this is undoubtedly the case, the fact remains that the majority of students who enter high school are denied an opportunity to develop a salable skill because the educational establishment is precollege oriented.

Kaufman's study goes on to point out that the attitudes of indifference or lack of understanding of vocational education do not stop with academic teachers, but are also characteristic of guidance counselors. It was pointed out in the Kaufman study that it was the vocational student who was the least likely to have discussed either his course choices or his occupational plans with the guidance counselor, substantially less than the number of academic students who reported discussing their course choice or plans for college. Kaufman points out that the problem does not entirely rest at the feet of the counselor, but is to some extent inherent in the unreasonably heavy advising loads which he found to be in the order of 440 students to one counselor. At best, as he points out (and I am sure as all of us who have been involved in counselor education realize) this ratio makes it extremely difficult to see individual students, and for a variety of reasons when individual students are to be seen, the counselors spend most of their time with the college-bound student. When these two facts were combined, it is easy to understand why the vocational education student typically reported little or no contact with his school counselor. Ironically it is exactly this student, the one who is either less intellectually gifted, or who, for economic or other reasons, does not find it possible to attend college or to take advantage of further education, who really presents the more difficult counseling problem. The gifted student or the one who is economically advantaged has almost unlimited opportunities available to him for advice and counsel.

From one point of view, of course, it is easy to dismiss the noncollege bound student by rationalizing that he really does not have very much opportunity open to him and that since he does not have very many choices, counseling with
him is largely perfunctory if important at all. After all, how much attention
do we have to pay to the vocational preparation of a girl who we are sure is
going to work for only a year or two and then get married and drop out of the
labor market? Aside from the fact that we might make the same case about the
majority of women who go into elementary education, the fact remains that an
increasingly large number of women are returning to work and it is predicted
that by 1970 approximately three million women will change from being housewives
to entry into active employment. There are three million women, who for one
reason or another, have a need for a salable skill, which they may or may not have anticipated at the time they were engaged in formal education. If our
projections are accurate, the number of working wives and mothers is going to steadily increase over the years ahead and it is important for us as educators,
as well as for them as potential employees, to realize this fact. The fact that an
18 year old girl believes at the time she leaves high school that she is
going to be married and never have to enter the labor market is belied by the
fact that an increasingly large number of women do find it necessary or desir-
able to combine a working career with marriage. In my opinion we have done
such people a disservice if we let them ignore an opportunity to develop a
marketable skill on the misguided belief that they are never going to need it.

Although the problem is more obvious with young men, since each of them recognizes that he must earn a living, every year we graduate literally millions
of high school graduates who have gone through a general academic program when
we know perfectly well that only a handful, relatively speaking, will actually use that academic preparation for any further collegiate-level work. What we
have done, in the name of general education, is to withhold from the student an
opportunity to prepare himself for a vocation under the misguided impression
that a high school graduate carries with him the assurance of useful employment.
The fact is, however, that being a high school graduate today, in our era of
massive general education, carries with it little distinction. As a result,
many of these high school graduates find themselves forced to take employment based on fortuitous circumstances rather than conscious choice. Survey after
survey has shown that employees who have had vocational training are more
satisfactory to their employers and are themselves more satisfied with their
jobs than are the nonvocational high school graduates. We are in this country
a nation of optimists who believe all things are possible. The fact remains
that most high school graduates are going to be in service, retailing, secretar-
ial or business occupations and we might as well recognize this and do what we
can to prepare them for these occupations. Being forced to take a job because
it is the only one available to an untrained graduate is hardly what is implied
in free choice.

In addition to what we loosely call "the typical school student" there is
an additional category of students in public schools who have special problems
and special needs for vocational education. I have already alluded to the
potential dropouts, who for a variety of reasons including an inability to
acclimate to the college preparatory orientation in most public high schools,
cut themselves off from all further contact with education. In addition to the
dropout we also find the "amazing" fact that half of the students in many schools
are below average. Why teachers, in particular, should find this fact so dis-
tressing escapes me. Nevertheless, in any school system there are a substantial
number of students for whom the traditional general education curriculum is
largely a waste of time. It is possible in vocational education to be much more
individualistic about the growth and development of a below average student than
is possible in a typical academic classroom. I would hasten to remind you, however, that it is not only the intellectually inept student who may need individualized attention, but that a substantial number of students who cannot acclimate to an academically oriented education are above average in ability.

What Can Counselors and Guidance Workers Do?

Although it is easy to identify the shortcomings of American schools and conclude that they are not meeting the vocational needs of the majority of youth, I would not like this to be interpreted as suggesting that more vocational education is the panacea for all students. In my opinion, we have, in this country in the last 30 years, made a fetish of general education. It is so much a part of our way of thinking about education in America that the virtues of a general education are never even questioned. The fact remains, however, that the growth in emphasis in general education has been accompanied by a corresponding de-emphasis of the practical arts (as they used to be called) to a point where vocational subjects are clearly second class in American schools.

It is pointed out in an article by Dr. David Bushnell, the greatest potential sales force in changing both educational and community attitudes toward vocational education is the counseling department. These people must be aware and informed concerning job classifications and requirements. According to Bushnell, "I think we have missed the boat in education. We are not teaching people to live in a society and we are asking them to bridge the gap with an instant preparation once they leave school."

Unfortunately, the field of vocational education has itself done little to clarify its role in contemporary education in America. For too long vocational education has set itself apart from the other activities which take place in schools, unconsciously but deliberately encouraging academic faculty members to regard it as something separate from the other activities carried on in the school. Furthermore, the profession of vocational education has long been tied to the concept that the vocational educator must first be a tradesman and also, if possible, have some modest skills as an educator. Then too, the field has been split by philosophical indecision about whether it should try to grab onto the academic respectability of general education or to maintain its traditional contacts with the practicing trades. In my opinion, the profession of vocational education should follow neither of these paths but should instead capitalize on the undeniable expectation that every person should be able to maintain himself in some socially useful occupation. The importance of vocational education in society is too great to allow petty differences of opinion within the profession to overcloud its overall mission. I also believe, with Bushnell, that within the school the counselor is the key person who will help clarify the importance of vocational training to American youth. Guidance workers and counselors, in my opinion, cannot continue to take the point of view that the student in most need of their professional service is the student bound for college. Indeed, just the opposite may more probably be the case. In our democratic society, each individual has the right, if not the duty, to prepare himself for useful and gainful employment. Although modern secondary education seems to have depreciated this fundamental purpose of education, the social expectation is still there. In my opinion, the evidence is abundantly clear that in the majority of cases public schools do not prepare the noncollege bound student to make the optimum use of his vocational potential. I believe
this represents a serious challenge to both the field of vocational education and to the profession of counseling and guidance to change both the image and the practice of vocational education in American public schools.

Footnotes

1 Definitions section, Vocational Education Act, 1963.


The Challenge of Vocational Education to Guidance

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Introduction

It has been almost 30 years since Vocational Education first issued a challenge backed by financial assistance to guidance counselors to work cooperatively in the interests of those to be served by vocational education. It was vocational educators who first established Guidance as a branch in the United States Office of Education. Vocational Education funds were instrumental in establishing a nationwide pattern of state supervisors of guidance in state departments of education; The counselor education movement became a common pattern in colleges of education throughout the country largely because of funds made available through vocational education. The establishment of counselor certification patterns in state departments of education throughout the United States occurred primarily as an outgrowth of financial support given guidance through vocational education funds.

Vocational educators have insisted on making some financial provisions for guidance in every piece of vocational education legislation passed since 1938. This support has played a very large and significant role in determining the present existence of the entire guidance and counseling movement. Whether they realize it or not, there is no counselor, guidance supervisor, or counselor educator connected with high school guidance currently employed whose position has not been enhanced because of support given the guidance movement by vocational education. I would like to begin this presentation by recognizing my own deep personal sense of appreciation of vocational education for the many significant kinds of support given to guidance over the years.

With this background, an uninformed observer might logically conclude that the guidance and vocational education movements must be very happy with each other. Unfortunately, this has never been the case. In spite of this, there is more support and more direct support to guidance through the Vocational Education Act of 1963 than in any previous piece of vocational education legislation ever enacted.

It is time both vocational educators and guidance counselors take a long and hard look at themselves and at each other. This dual examination, if it is to be beneficial, must be accomplished from the perspective of those to be served by guidance and vocational education. It must not occur from the standpoint of selfish or personal interests on the part of either guidance or vocational education personnel. The needs of those to be served by vocational education are large and becoming larger all the time. They are based on several factors including: (1) Increasing cultural anxiety about uncertainty of the future growing out of recognition of rapidity of societal change; (2) Increasing recognition of demand for skills and utilization of skills at higher and higher levels of competence; and, (3) Increasing recognition of multiple opportunities for choice facing each individual in these times. Meeting these needs will take
the very best which both guidance and vocational education have to offer. It will demand that we both become better than we are today. It will certainly require that we work cooperatively together.

If we are to work cooperatively, it is imperative that we come to some mutual agreement regarding our current perceptions of ourselves and our functions. It is my intent to present here my perceptions regarding answers to four questions related to the challenge of vocational education to guidance. These questions are: (1) Why has vocational education given support to guidance? (2) What does vocational education expect from guidance? (3) Why haven't the expectations of vocational education been fully met by guidance? and, (4) What must be done now to better meet the challenge of vocational education to guidance?

As I attempt to consider these four questions, I am under no illusion that either guidance or vocational education personnel will agree with me. It is not important that they do. It is important that some starting point for resolving differences in perception be found. If these answers can fulfill that purpose, I will be more than satisfied.

Why Has Vocational Education Supported The Guidance Movement?

There is no more basic point to begin than by asking, why has vocational education supported the guidance movement? In attempting to formulate an answer to this question, it is important that we think in terms of the movements - the vocational education movement and the guidance movement - not about vocational educators and guidance counselors. That is, we must think above and beyond the personal motivations of either and concentrate our attention on the professional rationale for this support.

It is important to recognize that vocational education came into being in American education in response to a demand that educational opportunities take individual student differences into account. If all the children of all the people deserve an education through at least Grade 12, it is obvious that the same education is not equally appropriate for all. It is equally important to note that vocational education, as part of American secondary education, came into being at a point in time when the concept of elective courses in addition to required courses was being championed as an essential educational ingredient. Vocational education has never tried to operate in American education as a required part of the curriculum of all secondary age youth. To understand why vocational education has supported guidance demands that we begin with this kind of basic recognition of facts which are familiar to all of us.

It is an unfortunate truism that the truly significant role of vocational education as part of American education has never been understood operationally by the majority of teachers and administrators in American secondary schools. During the period between 1917 and 1938, vocational education was trying to implement a congressional mandate which was essentially resisted by many other parts of the professional education community. Vocational education was not perceived as an opportunity for students to choose as much as it was perceived as a place for educators to choose for "dumping" students who could not succeed in the academic curriculum. As a consequence, it was not so often regarded by students as something they "chose" as it was something they "settled for". The net result was that vocational education, instead of being viewed as an educational opportunity, was being seen as an educational solution for the problem
of what to do with students who persisted in their attempts to learn in spite of being rejected by the so-called "academic" faculty. Students weren't choosing vocational education - they were being "sentenced" to what was regarded as a "second class" curriculum because they were judged to be "second class" students.

Vocational educators recognized that they could not effectively meet the congressional mandates contained in the Smith-Hughes Act under such arrangements. They saw the guidance movement as one part of education which might better help them do so. They reasoned that counselors, if they believe what they say, are equally interested in all students in the school and, if that is true, counselors should be interested in joining with vocational educators in better meeting the needs of students for whom vocational education courses could be considered appropriate. It was, then, a very logical set of reasons related to what vocational educators considered a reasonable way of helping them better meet their educational responsibilities which culminated in provisions for Occupational Information and Guidance contained in the 1938 version of the George Deen Act. There is no doubt but what their motivation was, in part, personal - that is, a perceived way of helping vocational educators do a better job.

Neither is there any doubt but what the motivations of the vocational education movement ran much deeper than any thoughts of the personal needs of vocational educators. These motivations had, at their base, a concern for what was happening to a large segment of youth attending American secondary schools. Too many youth for whom vocational education might represent a logical choice were failing to choose vocational education. It is of vital importance to note that these youth were not rejecting vocational education so much as they were not given a bona fide opportunity to consider it. Students who were enrolled in vocational education had, in far too many instances, no good knowledge of why they were there other than a general feeling that they had been rejected as unfit for the "best" part of the school. This was grossly unfair both to the students in vocational education and to other students in the school who had not really considered choosing vocational education. The basic reason why vocational education has supported guidance lies in this concern of vocational educators for the well-being of its students and prospective students. It is a highly valid reason and one which all guidance personnel should support and applaud. This reason continues today as the basic rationale behind our need to work together.

There are some who will contend that the basic motivations of vocational educators have not been so noble as I have pictured them. Such persons - including some counselors - will say that vocational educators want the assistance of guidance personnel for purposes of "selling" vocational education to prospective students - of "recruiting" students for vocational education classes. I am sure there are some vocational educators who think in such a shallow and narrow manner. I am equally confident that such thinking did not in the past and does not today lie behind the efforts of the vocational education movement to work cooperatively with the guidance movement. It is important that counselors and vocational educators at the local level either agree on the set of reasons for working together I have outlined here or arrive at some other set of reasons they can both support.
What Does Vocational Education Expect From Guidance?

How do vocational educators expect counselors to work with them in accomplishing the kinds of objectives just outlined? What do they expect counselors to do? As a counselor and counselor educator, I have devoted many conversational hours in attempting to find answers to these questions from vocational educators. While the words used to describe expectations vary considerably, the following set of expectations represents those which I seem to be hearing most clearly and most often.

First, vocational educators expect counselors to support the concept of the key role of public school vocational education in our society. Counselors, of all educators in the school, should certainly understand and appreciate the necessity of providing broadened educational opportunities for students. Similarly, counselors should be among those most aware of the critical need for skill training facing both youth and adults in our society at the present time. Most important, counselors should be eminently aware of current attempts to provide vocational training outside the framework of public education which are primarily based on assumptions of societal rather than individual need. Never has public school vocational education been needed more. Never has public school vocational education needed greater support from other educators. Vocational educators have felt justified in expecting counselors to support such concepts of need as specified here.

Second, vocational educators have expected counselors to assist them in their attempts to have vocational education pictured positively by students, other faculty members, and the general public. They have consistently hoped that counselors will add their voice to that of vocational educators in attempts to help vocational education courses be viewed as positively as any other part of the school curriculum. They have hoped that counselors would resist attempts to "rank order" courses in the total curriculum on any absolute standard of worth and support the concept that the "best" courses for any given individual are those which are most appropriate for meeting his needs. Additionally, they have hoped that counselors would oppose the kind of shallow thinking which leads some to believe the "best" teachers are those who make things most difficult for student and that counselors would support the concept of differential abilities rather than a single unitary concept of ability pictured as ability to master verbal and quantitative content. Since these concepts are generally consistent with certain basic principles of guidance, vocational educators have felt justified in believing that counselors should both voice these concepts themselves and support vocational educators who speak in such terms.

Third, vocational educators have expected counselors to acquire some substantive knowledge regarding both vocational education and occupations for which vocational educators prepare workers. It was this expectation which led to the title of the first guidance branch established in the United States Office of Education. This branch was originally called the "Occupational Information and Guidance Branch." One of the intended functions of the Branch was to engage in and stimulate others to engage in increasing counselor knowledge regarding vocational education opportunities and occupations towards which vocational education students might aim. It was recognized at that time that many counselors, since they came from the college setting and had both their training and experience in settings other than vocational education, were largely uninformed in both of these areas. Vocational educators felt that, if
counselors were to help students decide whether or not they should enter vocational education, it was important that the counselor not be totally ignorant of what vocational education is like. They felt that, when vocational education facilities were established, counselors should visit them and become acquainted with their nature and purpose. Similarly, they considered it reasonable to assume that counselors should have some pertinent occupational information to give students considering certain specific occupations. Some, although not all, vocational educators have felt counselors could better perform the vocational guidance function if the counselor himself had some work experience outside of education. By and large, it has not seemed to vocational educators that they were unreasonable in these expectations that counselors attempting to guide students considering vocational education should have some concrete knowledge of that which the students were considering.

Fourth, vocational educators have expected counselors to regard the task of educational and vocational counseling as one of their primary duties and responsibilities in the school. They, like many other educators, have assumed that the two primary reasons why counselors are employed can be thought of as: (1) Helping students both directly and through teachers make choices and decisions which will result in the school being an optimal learning environment for the student; and (2) Helping each student plan something with respect to what he will do when he leaves the school. I have seldom seen vocational educators who profess to know the exact methods and procedures counselors should use in accomplishing these objectives. Similarly, I have seen few who fail to regard these objectives as of basic importance. Vocational educators, perhaps because of the nature of their own background and training, have had difficulty understanding how some of the more therapeutic activities undertaken by some counselors can be as helpful in accomplishing these two objectives as approaches which appear to be more directly aimed at doing so. They have had even more difficulty in understanding how some counselors can say that the task of educational-vocational guidance is not one of their primary duties. They expect topics of course selection, class adjustment, and vocational planning to occupy a considerable portion of the counseling interview and consider this, too, to be a reasonable expectation.

Fifth, vocational educators have expected counselors to be competent in performing the educational-vocational guidance function with students and prospective students of vocational education. They have assumed it quite likely that a different set of guidance tools and perhaps even different counseling procedures would be necessary in working effectively with these students. They have further assumed that counselors and/or the counseling and guidance movement would determine through their own research the instruments, methods, and procedures which produce optimal results with vocational education students. Finally, they have assumed that counselors would test the efficacy of their approaches through conducting careful followup studies of students they have counseled. When these expectations and assumptions are not borne out by what appear to be observable counselor practices, vocational educators tend to feel and express a sense of disappointment.

Sixth, and finally, vocational educators have expected counselors to be interested in and concerned about students in vocational education and students contemplating entry into this area of education. They have had difficulty understanding why most counselors say repeatedly that guidance is for all students while many act in practice as though it were intended primarily for
students planning to attend college. They have had even more difficulty understanding why vocational education students are referred to by some counselors as the "non-college-bound" - an obviously "second best" term. When they hear counselors say that all honest work is respectable, they find it hard to understand why jobs requiring a college education should be considered by counselors to be more "respectable" than occupations which do not. Many vocational educators understand counselors are busy people, but have difficulty understanding why, when they have to choose which part of their total job must go undone, so many appear to conclude that counseling with vocational education students is picked as the area they must forego. Likewise, vocational educators, perhaps because of their intimate student contacts, often fail to understand why counselors can't take a broader look at the question of educational motivation and work values. It is very obvious to vocational educators that many intellectually able students have educational motivations which differ considerably from those of the liberal arts oriented students. Often, it is their educational motivations which lead them to consider vocational education courses. When counselors regard their task as one of reconstituting these educational motivations so the student will elect to take an academic sequence of courses, many vocational educators feel the student has been effectively deprived of the right to lead his own life. Many feel that to find some intellectually able students who elect to enter such occupations as auto mechanic, electronics technician, or machinist would not, in the long run, constitute what could truly be considered a waste of talent. They have considered it reasonable to expect that the counselor would share their feelings in terms of concern for students in this portion of the total student body.

It is obvious that some vocational educators would add other expectations to the six I have discussed. At the same time, I have a strong feeling that, if vocational educators perceived these six expectations as being met, their attitudes towards counselors and towards the guidance movement would be much more positive than currently appears to be the case. Personally, I find none of these expectations unreasonable in a broad sense although I would disagree to a certain extent with some of the specific applications I have cited as examples. I think it is reasonable to assert that the guidance movement should accept these six expectations as reasonable challenges and strive to meet them.

Why Haven't Expectations Been Met?

If these six expectations are reasonably valid ones, it logically follows that questions should be raised concerning why they have not been fully met before now. The major way I would picture as appropriate for answering this question would be to consider another topic - namely, "The Challenge of Guidance To Vocational Education". Without trying to delve into that topic in detail at this point, perhaps we can still make a beginning with respect to answering this question. What follows here, then, should be regarded as a brief and incomplete answer.

Before launching into a series of explanations with respect to why these expectations have not been met, it seems appropriate to point out that, to some extent, these expectations are being met by counselors in today's schools. There are some schools in which all of these expectations are being fully met. One would be hard pressed to find schools in which none are being satisfied. If vocational educators are less than fully satisfied with counselor efforts, it is not equivalent to saying they are totally dissatisfied. The question more properly put, then, is "Why haven't these expectations been fully met in all schools?"
If causative factors are to be explored, it seems imperative that we begin by recognizing many of the basic causes extend beyond things over which either counselors or vocational educators have had much direct control or influence. For example, the term "college" in our culture has taken on almost mystical connotations of a "good thing". There are many parents who are committed to a goal of college attendance for their children to the point where they resist even carefully reasoned attempts to discuss other alternatives. There are many industrial organizations who have written "college education" in their job specification without any rational basis for doing so. There is a general cultural bias based much more on faith than on facts which tends to make people regard "college" as the ultimately most desirable goal for any person. When counselors have attempted to discuss vocational education opportunities with students, they have sometimes been, in effect, accused by parents and students as being "crusaders against quality." When counselors secure college scholarships for some students, they are often given much credit by a majority of persons in their local community. Counselors, like people in general would rather receive credit than criticism. In part, the explanation is that simple.

A second reason why these expectations have not been fully met lies in the relative competencies possessed by school counselors. People tend to engage most in activities where they feel they can succeed and to avoid activities in which they perceive a high risk of failure. Both because of their academic background and because of the availability of a wide variety of appropriate appraisal, education, and occupational tools, counselors are relatively well equipped to meet the counseling and guidance needs of students contemplating college attendance. Because of a lack of background and a relative scarcity of appropriate tools, many counselors feel less than confident with respect to their ability to meet the needs of prospective vocational education students. Under these circumstances, it is not surprising that, when choices must be made with respect to how counselors spend their time, some elect to spend their time in activities where they believe they have the greatest chances of being successful.

A third reason why these expectations have not been fully met in many schools is related to the nature and quality of vocational education being offered students. The report of the President's Panel of Consultants on Vocational Education which led to the Vocational Education Act of 1963 is a wonderful document which resulted in a law having great potential. One part of that report referred to the current great need for strengthening public school vocational education offerings. The need for realism forces recognition of the fact that this was a very polite and politic way of saying that public school vocational education as it existed had some serious defects. Counselors are not committed to sending students to vocational education classes simply because such classes exist. Vocational educators must earn, not claim, their rights to students. A complete and honest view must, it seems to me, not lay total "blame" for failure to meet expectations of vocational education on persons, events, and organizations outside the field. Vocational education itself must be willing to assume some of the responsibility.

This list of possible explanations could, of course, be greatly expanded. It would not seem appropriate to do so at this point. Rather, it seems more important to conclude this discussion by considering some concrete action steps which might now be taken to better ways in which counselors and vocational educators might work together in meeting student needs.
Meeting Challenges Of Vocational Education To Guidance

It is much easier to pose problems than to solve them. Valid solutions to the kinds of problems posed here can be viewed as both simply profound and as profoundly simple. They cannot validly be viewed as easy by anyone. As with the other topics I have considered, my purpose here is to make suggestions which may stimulate other considerations. I make no claim that these suggestions are all-inclusive but only that they seem of key importance to me at the present time.

The first suggestion I would make has to do with what I regard as the absolute necessity for local action. Progress will never come if we wait for somebody called "other people" to accomplish it for us. It is imperative to recognize that our greatest potential lies within ourselves - within each of us. While it is true that none of us as individuals is capable of making big contributions to the solution of these problems, it is equally true that each of us is capable of taking some positive actions. The concrete, specific things which both vocational educators and counselors do in the local communities throughout this country will, in the long run, have a far greater effect on the total problem than any general directions taken by either the guidance or the vocational education movements. At the local level, counselors and vocational educators can engage in discussions concerning the nature of the challenges, the constellation of forces in the community contributing to adequacy with which challenges are being met, and one or more positive steps which might be taken to better meet the challenges. We must learn to speak to each other, to listen to each other, and to work together at the local level. This implies assumption of a personal responsibility on the part of each of us. Unless such a personal responsibility is assumed, the total problem will never be satisfactorily solved.

Recognizing this necessity for assumption of personal responsibility, let us now turn to broader kinds of action which can be undertaken by our fields - by guidance and by vocational education.

Current actions guidance people should take in meeting challenges of vocational education seem very clear to me. They can be outlined quite simply by listing the following activities: (1) Counselors need to engage in intensive self-examination of their motivations and actions. If they do, it will be obvious that many of the criticisms voiced by vocational educators are valid and well taken. Counselors aren't going to meet these challenges by trying to place the blame on others. While, as we have said, there are other forces at work, it is an undeniable fact that many school counselors have simply failed to accept responsibility for trying to help vocational education students and prospective vocational education students as much as they should. Counselor action can best begin by this kind of painful self-examination.

(2) The guidance movement is in a position where it simply must begin amassing new knowledge at a faster rate than is currently being accomplished. We must develop and test through research appraisal instruments appropriate for use with vocational education students. We must develop new and more dynamic approaches to the problems of educational and occupational information and then apply these new developments to production of a whole new body of information. We must study and research carefully the question of counseling methodology which works best with students who are not highly verbal by nature. There is no point saying the counseling approach should be the same unless we are willing to test such assumptions experimentally. We must engage in a great deal of
followup research with students who have gone through vocational education - research in which we try to change attitudes of parents and others in the community by substituting facts for the unfounded biases they now hold.

(3) Once these kinds of new knowledge are accumulated - and even, of course, as they are being accumulated, we must teach this new knowledge to counselors in training. Counselors haven't known many of these things because they simply haven't been taught. One prerequisite for teaching something is that one has something to teach. I see no point in doing anything but admitting that there is a great challenge facing counselor education to obtain and transmit new information needed by counselors to meet the challenges to better counsel and guide students headed towards vocational education.

(4) Fourth, the guidance movement must continue to strive to increase the number of counselors in the schools of this country. We need more counselors in the secondary schools. At this point, there is a great need for counselors in elementary schools. One of our greatest needs is for bona fide counselors in the area vocational schools at the post high school level being established under the Vocational Education Act of 1963. I think these counselors are essential if the goals of vocational education are to be fully met.

I could, of course, develop here a companion list of activities which the vocational education field should undertake to help guidance better meet the challenges posed by vocational education. At this point, I would choose to ignore that topic. To consider it adequately would require more time than is available now and to consider it in rough outline would almost surely create false impressions.

Summary

I have attempted in this presentation to give a rationale supporting the necessity for guidance and vocational education to work together in the interests of students, to outline six expectations vocational educators have for counselors, to discuss briefly some broad reasons why these expectations have not been fully met, and, finally, to comment briefly on actions which could be taken at the present time. My purpose has been to present one point of view - namely, mine - in hopes that it will help each of you develop a better point of view - namely, yours.
The Challenge of Guidance to Vocational Education

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Introduction

My purpose today is to present in as clear a fashion as I can my perceptions of the basic kinds of misunderstandings which I feel have contributed to less than optimal working relationships between counselors and vocational educators. Some of these relate to students directly. Others relate to our approach to helping students. Still others relate to counselor perceptions of the role and function of vocational education as a part of education. I would anticipate it is particularly the last of these perceptions which could most nearly be regarded as "the challenge of guidance to vocational education."

Therefore, I want to organize each major point in such a way that some discussion of counselor perception regarding vocational education is included. I will do so by discussing briefly five major kinds of understandings which counselors would like to make clear. I would hope that you will perceive your function as one of listening for counselor perceptions regarding vocational education related to that understanding, and then deciding how much variation exists between your perceptions regarding vocational education and that held by counselors.

There is one further point to be made before I begin listing understandings. The so-called "counselor perceptions" I present here are mine. There are undoubtedly many counselors who would disagree. I make no pretense of reflecting the views of all counselors. I do claim mine will be presented as clearly as I can state them.

Understandings Regarding Choice

The first set of understandings I wish vocational educators and others would recognize is the center importance of the concept of choice in the thinking of guidance personnel. We in guidance consider our function to be essentially one of helping people choose wisely from among the alternatives available to them. We do this by encouraging the counselee to learn, think, consider, and decide about himself and his opportunities. We don't consider it nearly so important what people choose as we do that they choose from the widest possible range of opportunities. We aren't as concerned about what the counselee decides about his opportunities as we are what he decides about himself in relation to these opportunities. We don't want to make people do things—we want to let them find ways of doing things. We aren't as interested in the something they become as the someone they become.

In taking this point of view, we have assumed that the counselees with whom we work are, by and large, rational individuals who, based on the understandings they develop, will be making rational decisions. Our concern is not, then, with trying to get more students in vocational education classes. Rather, our primary concern is with having individuals make choices based on increased self and
environmental understandings. If guidance is working properly, the students who are in vocational education should be ones who decided to enroll and who know the bases on which these decisions were made. This is one criterion which can be used in evaluating effectiveness of guidance services. Moreover, on the whole, students enrolled in vocational education should be persons having reasonable chances for success in the programs for which they are enrolled. That is, if people make rational choices, most of these choices will take realities of probabilities of success into account. This, then, constitutes a second criterion on which effectiveness of guidance can be evaluated.

The challenge of guidance to vocational education with respect to this set of understandings is clear-cut. It is a challenge to support guidance knowing that the primary allegiance of the counselor must be to his counselees—not to vocational education. It is a challenge to join with guidance people in having confidence that, given adequate information and time to choose from among alternatives, most people will choose wisely and sensibly. It is a challenge to uphold the right of the individual to lead his own life and to believe that most individuals can and will accept the responsibilities which accompany this right.

**Understandings Regarding Utilization of Talent**

A second set of understandings about guidance which combine to form a challenge to vocational education is concerned with utilization of talent in our society. The kinds of understandings involved here are not simple to comprehend but they are essential to the entire guidance and counseling approach. They must be discussed.

The understandings grow out of a commitment of helping each individual develop and utilize his talents in such a way as to produce maximal benefit to society and maximal personal satisfaction to the individual. They are based essentially on an understanding of the risk function in decision making. One way of viewing what is involved here would be to consider the commonly held perception that an individual should choose to do that in which he can be most successful. While this perception is held by many people, it is essentially rejected by guidance personnel.

Guidance personnel reject this assumption because to accept it would be to accept a continuing state of affairs resulting in under-development and under-utilization of talent in our society. Everyone can't "play it safe" in these times—and not everyone wants to. Some students will elect the almost sure route to success while others will elect the route involving the greater risk of failure. The function of the counselor is not to picture one decision as more desirable or more worthwhile than the other. Rather, the counselor's function is to help the individual understand fully and completely the alternatives with which he is faced.

This means that, if the guidance function is working well, there will be some students in vocational education classes who are capable of successfully completing the most difficult academic sequence the school has to offer. There will be some students in vocational education classes whose chances for successfully completing the course are very small. Most individuals enrolled will have very reasonable chances for success in vocational education and would have considerably less chance for success were they to elect a highly academic curriculum.
If the only measure used to compare students in the college preparatory curriculum with those in the vocational education curricula is one which best predicts success to undertake college work—i.e., a measure of general intelligence—vocational education students would, on the average, be expected to score lower. If guidance works as it should, this is what will occur. Guidance people make no apologies for this and regard assessment of this occurrence as a legitimate criterion to use in evaluating guidance services.

The challenges of guidance to vocational education growing out of this set of understandings are multiple. First, there is the challenge to accept the notion of a lower average level of academic aptitude for vocational education students without apology. Because these students are, on the average, not as intellectually able as those in the college preparatory curriculum doesn't mean they are not as worthwhile nor that they may not have other abilities in which they surpass students in the college preparatory curriculum. Second, there is the challenge of recognizing individual differences among students in vocational education classes. There will be, if guidance works correctly, some students who will provide vocational education teachers with continuing challenges to teach them the most complex aspects of training—students who may very likely be much better potential performers than their instructors. These students must be motivated constantly or they will lose interest. There will be other students who will require a great deal of individual attention if they are to be minimally successful in the course. These students must be given every chance to succeed. Guidance is not intended to lessen the problems of the vocational education teacher, but it should make both the problems and possible approaches to their solution clearer than would otherwise be the case. It is a challenge to allow the risk function to operate without pre-judging the desirability or lack of desirability of decisions students make with respect to the risks they are willing to take.

Understanding Regarding Goals of Adaptability

Third, counselors would like to communicate to vocational educators understandings with respect to their concern about student adaptability. Of all the understandings discussed here, this is the one most apt to find vocational educators in disagreement. The fact that this is so makes it more, not less, essential that these understandings be discussed. There are two basic factors contributing to counselor concern regarding these understandings. One is the rapidity with which our occupational society is currently changing. The second is the rate at which our occupational society is calling for higher and higher levels of job skills. These two factors combine to make for certain counselor perceptions regarding the role and function of vocational education which must be made clear to vocational educators.

We are experiencing the most rapid rate of occupational change in the history of this country. The rise and fall of specific occupations makes it mandatory that we discard once and for all the notion of vocational guidance as a single event at a certain stage in life. Youth in our secondary schools today cannot "choose, prepare for, enter upon, and progress in an occupation" in the sense that Frank Parsons first defined the guidance function. The biggest challenge facing secondary education today is that of fulfilling the adaptability function—preparing youth for the certainty of uncertainty which they face in these times of rapid change.
Recognition of facts such as these has forced certain counselor perceptions of the changing role of vocational education in secondary education. Most counselors, in my opinion, would currently support a concept of secondary school vocational education which, for the majority of students enrolled in vocational education classes, would concentrate relatively more on development of broad occupational competencies than on the acquisition of specific vocational skills. We would like to see the best students in vocational education give the widest possible exposure to a variety of occupational areas while in the secondary school. We would like to see these students leave the secondary school knowing that the development of specific occupational competencies must be largely acquired at the post-high school level. We would like to see the majority of specific, narrow, one-track vocational education provided in the secondary school given to those students whose abilities, aspirations, and backgrounds make it mandatory that they enter the world of work immediately upon leaving the high school. Training given such youth should be training they can absorb—training which leads primarily to enter into semiskilled occupations in trade, business, and service areas. We foresee a marked expansion of work-study programs in secondary school vocational education for such students and marked decrease in training at the skilled worker level. We feel that specific vocational training at the skilled worker level should be provided to relatively few of the many students enrolled in vocational education.

The increasing technological nature of our occupational society makes it mandatory that public school vocational education provide in its total structure for skill training at the highest possible technician and skilled craft levels. The fact that occupations are changing rapidly doesn't alter the fact that youth must somehow acquire those competencies which will allow them to enter the world of work now. If there ever was a time when vocational education could prepare youngsters for everything in general and nothing in particular, that time is certainly not now. We must train students in those skills and at those levels demanded by our occupational society as it exists at the present time. As we do so, we must recognize the fact that retraining at more than one point in their adult lives will probably be necessary for a majority of these students.

Recognition of these facts has caused most counselors to view public school vocational education at the post-high school level as representing one of the brightest and most encouraging aspects of the Vocational Education Act of 1963. The development and expansion of the area vocational school facilities open to youth who are high school graduates or dropouts, and adult citizens of a wide-age span is one which counselors vigorously support. We would like to see the majority of students enrolled in high school vocational education classes look forward to continuing their education in an area vocational school. We would like to see high school vocational education teachers take as much pride in the post-high school educational accomplishments of their students as do today's teachers of the so-called "college bound."

I am aware of the fact that the challenges to vocational education growing out of this perception are ones which will be rejected and resented by many vocational educators. I do not voice them in an effort to create antagonism or dislike. This is the last thing I have in mind. I am equally aware of the fact that for counselors to assert what they consider to be the role and function of vocational education in these times may be regarded as completely unjustified by vocational educators who feel that policy decisions regarding the nature of vocational education are outside the province of the guidance movement. Perhaps
they are. Even if this is so, I feel that these perceptions must be voiced at this time. If we disagree violently on these points, at least we will know what we disagree about. If these perceptions of counselors are wrong, the challenge to vocational education is one of teaching counselors how they are wrong and why they are wrong. I would hope and sincerely believe that most of us in counseling and guidance are flexible enough to change our minds if we are shown where our perceptions are in error. If, on the other hand, these perceptions are correct, the challenge to vocational education is one of implementing changes in the older patterns of vocational education which will allow these kinds of student needs to be met.

Understandings Regarding Breadth of Opportunities

A fourth set of understandings relates to breadth of opportunities from which youth can choose. While concepts involved here have been alluded to earlier, they are important enough and basic enough to deserve special discussion. While we will try to discuss applications of these concepts particularly from the view of vocational education, the concepts themselves have more general applicability to many with whom counselors deal.

Information about vocational education opportunities must be presented honestly and accurately. If public school vocational education is to have the students it wants, it must present opportunities for students which will lead students to choose this alternative over others available to them. One of the reasons more students haven't elected vocational education courses in the past is that, far too often, what was available to them did not in fact represent a very attractive opportunity. Recognition of this basic truth was largely responsible for enactment of the Vocational Education Act of 1963. No matter how much it hurts our egos, reality demands, it seems to me, that we accept this statement.

The obvious challenge to public school vocational education here is to provide the kinds of educational opportunities which will cause students to choose this over other alternatives available to them. In posing this challenge, I speak as a counselor. I also speak as an AVA member committed to public school vocational education. This challenge is one which deserves more than the brief discussion I will be able to give it here. In spite of this, some discussion is essential.

It was only a relatively few years ago when the prime operational reasons advanced by public school vocational education for student enrollment were: 
(a) It was available and (b) It was free (or essentially free) education. Neither argument is sufficient today. Today, there are many vocational education opportunities available to students (including some for students still in high school as well as those who have left) in addition to those in public school vocational education. Furthermore, several of these opportunities not only provide training at no cost to the student but, in addition, actually pay him a weekly or monthly stipend during his training period. Two obvious examples are the MDTA and the Economic Opportunity Act. Provisions for increased youth training have been a part of every MDTA amendment since this act was passed in early 1962. The EOA (the so-called "Poverty Act") contains no wording which limits its vocational training provisions to "poor" youth. As a matter of fact, nowhere in that act is the word "poverty" defined in such a way as to exclude any youth between the ages of 16 and 21. Recent information distributed
by the OEO with reference to the Youth Opportunity Centers repeatedly emphasizes the fact that these are, indeed, intended to serve all youth.

Why should a high school student enroll in vocational education courses when he could drop out and join the Job Corps? Why should he plan to attend an area vocational school under provision of the VEA when he can get paid for taking MDTA training? Why should he choose an area vocational school when he could enroll in a terminal vocational training program in a junior college and thereby call himself a "college student"? These are only three of many questions today's high school youth are asking. Questions such as these call for greatly improved school guidance services. We can all see that. They also call for greatly improved public school vocational education. Many people speak of the VEA as though it involves lots of money. I like to speak of it as a piece of legislation which needs much more money than has currently been either authorized or appropriated. We need money for buying expensive equipment with a planned limited period of use, for employing more teachers of vocational education, for physical facilities at both the secondary and post secondary levels, for teacher training, research and guidance. To think of VEA funds as sufficient is to take a very narrow view of the need for greatly expanding this portion of our total educational program.

Money alone won't do the job. We need vocational education courses designed in response to opinions of both industry and students. In our zeal to meet the requirement that new courses have a recognized base in terms of expressed needs for trained manpower, we must not neglect the necessity of also taking expressed student needs into account. We must provide prospective students with facts about placement potential. We must study educational motivations of students and then teach in such a way as to take advantage of these varying motivations. In short, vocational education must support financially and cooperate professionally with counselors in research efforts aimed at accumulating the kinds of essential information counselors need to perform the guidance function. Guidance counselors need more than good intentions if they are to do this job. They need research evidence which the research division of vocational education in the U. S. Office of Education has so far refused to let them collect.

One final set of comments is in order with reference to this challenge. It is essential to recognize that both school counselors and vocational educators are on the same team—the team of professional educators who believe that the American system of public education is by far the best ever designed for meeting the educational needs of citizens in a democratic society. The purposeful efficiency of public education growing out of its commitment to meeting needs of each individual student represents a dedication of goals and objectives not shared by any other educational systems. Other things being equal, there seems little doubt but what public education will attract the highest level vocational students. The challenge is one of making certain that other things are equal.

**Understandings Regarding the Unity of Guidance**

There is talk in some parts of the country of creating two kinds of secondary school counselors—one set of "regular" counselors and one set of "vocational" counselors. Vocational education has nothing to gain and everything to lose if this kind of talk becomes converted into reality. We need to face the issues here squarely and resolve them clearly at the highest level of
professional decision making. If we can do this, I am confident our decision will be to maintain the unity of guidance in our schools. Reasons for this statement will now be given.

At this point in time, there is a crucial need for vocational education to really become a part of education—not apart from the rest of education. It is unfair to students to view "school" as one place and the vocational education shop as another. Too many so-called "academic" teachers feel little, if any, responsibility for vocational education students who spend part of the school day in their classes. This simply cannot continue if public education is to meet the needs of today's youth. The English, science, mathematics, and social studies teachers must share with the vocational education teachers a responsibility for providing educational experiences appropriate for meeting the needs of vocational education students. The changing nature of our increasingly complex occupational society makes it mandatory that today's vocational education students have a good basic grounding in these "academic" subjects. This is not to say they need these subjects taught in the same ways or with the same objectives or with the same texts or at the same levels as are deemed appropriate for students headed toward college. It is to say that these subjects very legitimately can be viewed in a broad sense as part of vocational education just as vocational education in a broad sense can be viewed as part of general education.

If we are to meet the needs of all students, the students must see the whole school—not just vocational education—as existing because of a concern for meeting their needs. This broad view can be given students, in part, by counselors who discuss the entire school program with students as a set of multiple opportunities for student choice. If students see a division of counselors, they will inevitably see a division of the school—a necessity for deciding in which broad "camp" they want to cast their lot. We can never adequately meet the needs of today's vocational education students under such arrangements. We must maintain the unity of guidance, in part, in order to meet this student need for broad perspective.

A second important reason why we must have only one system of counselors is related to the variability we seek in levels of vocational education students. We want students to consider vocational education as an educational opportunity each year they are in school. All students cannot and will not do so if some are classed as "VOCATIONAL EDUCATION" students and others as "non-vocational" in terms of assignments to counselors. To categorize counselors is to categorize students in ways which unfairly restrict and limit their opportunities for growth, development, and change.

A third basic reason for this point of view has to do with counselor role and function. No person deserving the title "school counselor" can abdicate his responsibilities for discussing possible vocational education opportunities with students. Similarly, no real "school counselor" can afford to think only in terms of opportunities in vocational education. To establish a dual system of counselors would be to ask counselors to act in ways inconsistent with their professional role and function.

The challenge to vocational education here is one of being willing to provide some financial support to the total guidance program without trying to establish a dual or separate system of guidance. While, to be sure, vocational
funds expended for guidance must be accounted for in terms of demonstrated guidance services to vocational education and prospective vocational education students, a highly rigid accounting system would be inconsistent with guidance objectives. It would be impossible, for example, to know if a counselor engaged in educational-vocational counseling with any student could legitimately claim or fail to claim to be entitled to use of vocational education funds. Whether or not the topic of possible entry into vocational education classes or adjustment within vocational classes became a part of the interview would depend on factors not necessarily known to the counselor prior to the time counseling begins. In summary, it is essential that clear demonstration of guidance services to vocational education and prospective vocational education students be provided by any school using guidance funds supplied by vocational education. It is equally essential that such guidance funds be provided under arrangements which do not demand an artificial division of counselor function in meeting individual student needs.

Summary and Conclusions

This paper has attempted to specify basic challenges of guidance to vocational education along with a rationale for each challenge. It has done so by speaking of five kinds of understandings which guidance people hope vocational educators either now hold or are willing to develop. The basic approach taken has been one of speaking of challenges in terms of changing needs of students. We cannot possibly hope to meet changing needs of students while resisting change in ourselves. If this paper can stimulate consideration of the need for change, it will have served its basic purpose.
Vocational Aspect of Elementary School Guidance Programs

by

Edward D. Smith

(Excerpts from a paper presented at the Elementary Guidance Workshop, Shippensburg State College, June 12, 1968)

Career development is a process. There have been many phrases generated to describe the longitudinal nature of this process. Perhaps the most vivid one is, "its duration is from womb to tomb." Individuals, as they mature physically, intellectually, and socially receive from all facets of their daily lives input which affects their eventual career pathway. The purpose of the vocational aspect of a comprehensive guidance program is to provide the student assistance in developing a personalized master plan for integrating all the factors impinging on him in his quest for career actualization.

Peters, Shertzer and Van Hoose (1965) state that the major purpose of vocational guidance during the elementary school years should be to help students understand that all legitimate occupations are necessary and worthwhile, and to fan their flames of interest in many occupational fields. Norris (1965) indicates that another focal point in working with elementary aged children relevant to career development should be the changing nature of the world of work.

Career selection is indeed a complex human process involving maturation on the part of the individual in terms of knowledge about self and environment, the integration and internalization of acquired knowledge, and finally some form of occupationally relevant behavior. Young children typically verbalize or act out "I wish I were" careers which are based upon current interests and/or familiarity with a person or job. Such behavior may be labeled fantasy, apparently bearing little relationship to reality. It is, however, a forthright and honest expression of interest, even though it is vulnerable to instantaneous change. This period of random fantasy is the basis of future career exploration; hence, it cannot be ignored by adults who are concerned with the career development of youngsters. Therefore, it is incumbent upon school counselors to capitalize on the inherent eagerness and curiosity of youth by developing sequential experiences designed to mold vocationally mature young adults.

Essentially, the mandates to vocational guidance programs in the elementary grades are to provide experiences by which youngsters can:

1. expand their knowledge concerning the magnitude of the occupational world,
2. appreciate the various dimensions of work, broadly defined,
3. systematically diminish their distortion about various occupations,
4. at the generalization level, understand those factors present in our society which cause change, and in turn directly affect work and workers,
identify, understand and interpret the significance of interests, capacities and values as dominant factors in the career choice process.

establish, to some degree, meaningful relationships between education and future occupational endeavors.

acquire more effective decision-making skills.

Activities designed to enhance the student's skill in each of these areas must be an integral part of each elementary education experience. Nelson has indicated that youngsters start as early as age eight to reject certain occupations because of a lack of interest or distorted information concerning certain occupations. This phenomenon takes on added significance since these rejections tend to solidify as the child grows older. Consequently, what we have are vocationally crippled youngsters who may well be plagued by their handicap for the remainder of their lives. It is becoming increasingly urgent, in light of current and projected societal conditions, for youngsters in the elementary schools to receive a broad, firm base of knowledge upon which to make realistic, individually meaningful educational and vocational decisions.

Before attempting to discuss some parameters of counselor involvement in the vocational aspects of an elementary guidance program, it must be clearly understood that this section will not be a "how-to-do-it-by-the-numbers" routine but essentially an opinion concerning "what to do." It is quite obvious that one cannot do something very well before he is clear on what should be done. We know that pressures are being applied to elementary school counselors to do something fast. You are not miracle makers, but instead trained professionals, possessing certain competencies on which you must capitalize. As pioneers in this area of guidance in Pennsylvania, your charge is to identify the problems (e.g., student needs related to career development) and then go about solving the problems in the best manner you can, utilizing whatever support you can muster.

The Magnitude of the Occupational World

Starting with the familiar (known) and going to unfamiliar (unknown) is a good strategy for building confidence and establishing a success pattern for students. After determining the range of occupations with which the students are familiar and can describe in some manner, the next step is to expose youngsters to adult workers with whom they have had contact but do not recognize as workers. This group could include individuals such as housewives, physicians, professional athletes, entertainers, military men and salesmen. Following a discussion of role and functions peculiar to those occupations with which the students are familiar, the expansion of the children's knowledge of the occupational world can be accomplished by demonstrating or graphically representing the array of related and/or support personnel for those workers originally discussed. For example, the physician is only one member of a much larger medical team (e.g., nurses, physical therapists, medical technicians, pharmacists, nurses aides, medical records librarians, etc.). It is just as easy to develop this "occupational cluster concept" for each of the familiar job titles. The entertainer, as another example, is supported by writers, costumers, sound and lighting technicians, set designers, producers, directors, and so on. Perhaps the newly acquired occupational knowledge could be successfully reinforced by a group art project such as a mural, which would pictorially represent a group of workers at their job stations.
The intent of this activity is not to increase the child's knowledge of job titles per se, but to clearly establish the diversity of work and workers, as well as to provide the student with some simple methods for identifying various occupations.

The Dimensions of Work

In this era of busy schedules, impressive titles, sophisticated products, and massive corporate structures, most youngsters have, at best, only a foggy notion of what people do when at work. In addition, many young people think that work is done only by those persons who are involved in some type of manual endeavor. The task of expanding the child's knowledge of different workers and the type of work in which they are involved is not an impossible one. In an attempt to determine whether primary grade children could gain occupational awareness important to vocational attitude and value formulation, Wellington and Olechowski (1965) found eight year-old youngsters able to:

- Develop a respect for other people, the work they do, and the contributions made by providing production and services for everyone.
- Understand that occupations have advantages and disadvantages for the worker.
- Understand some of the inter-dependent relationships of workers.

The group of students which Wellington and Olechowski studied was first exposed to a unit of study entitled "Shelter." The building industry and the variety of workers related to this industry were explored. Initial indications showed that youngsters, after studying the unit, still did not understand the workers' role and function. Follow-up discussions then focused on methods for increasing the children's understanding. It was decided to have the class interview a variety of workers. With the assistance of the teacher and counselor, the children developed questions they wished to ask people during the interview. The interviews and the resultant class discussions were taped. After the children listened to the tapes and completed their discussions concerning the building industry and its workers, there was a noticeable increase in the students' understanding and awareness of working people and their work. It was concluded that the initial lack of increased student awareness was a result of faulty techniques, not the lack of student ability to grasp the concept.

Student Distortion

When developing activities which are designed to expose young people to various facets of the world of work, counselors must be aware of the distortion of data that takes place in individuals during the learning (i.e., perceiving - internalization - conceptualization) process. The stimuli (various student exposures) which activate the learning process are subject to distortion as a result of being filtered through psychological sets present in each individual. Hence, counselors need to consider the effect of each activity on the individual. As you know, a student's attitudes constitute the framework of his self-concept,
which in turn, is instrumental in career choice. Therefore, the dissemination of educational and occupational information cannot be considered as a sterile, mechanical process. In order to reduce student distortion of information and make it a viable part of the learning process, counselors must have a working knowledge of factors which influence the child such as environmental conditions, parental attitudes, socio-economic conditions and the types of adult worker models available to the youngster. Quite obviously this means that counselors must have frequent contacts with the home and certain segments of the community. Inasmuch as parents appear to exert a powerful influence on students during early stages of the career development process, an excellent investment of your time may be to help parents become positive adult worker models for their children.

The Changing Nature of Our Society

It may well be that the only valid information you can transmit to your students concerning their future is that it will be quite different from life as they are currently experiencing it. As important as it is for individuals to be prepared to face an uncertain future, it is also important to know something about factors causing the changing nature of our society.

Most adults find it easy to examine the past, but they become quite uncomfortable in speculating about the future. All adults must consciously guard against transmitting to children their anxiety about the uncertainty of the future. Young children with their present-time orientation have little or no disturbing concern for their immediate or distant future. Therefore, your task in this area is two-fold: (1) to make students aware of the dynamic and evolving nature of our society as well as the responsible factors, and (2) to dramatize the concept of individual maturation. The point to be made is that both the individual and his environment will change.

The meaningful communication of societal conditions and changes may best be accomplished by a blending of classroom and field trip experiences. For example, a unit on the automobile as a means of transportation would dramatize for students the speed with which changes have taken place in the past few years. Each youngster has a good understanding of the appearance of the family car(s). He also recognizes differences among automobiles seen daily. A study of the development, appearance, speed, cost, numbers, and utilization of the automobile in our society would be a most meaningful method of dramatizing the concept of change. This type of activity would necessitate an exploration of technological, economic, and sociological factors, thus bringing to students' awareness some cause and effect relationships. Field trips to automobile museums, automobile dealerships, or an automobile assembly plant would certainly reinforce the classroom activities as well as continue to expand the students' knowledge of the world of work and workers.

Segments of the in-school activities just discussed could and should be a joint effort of the entire professional staff of the elementary school. The music teacher, for instance, would supply examples of how the auto industry has influenced music in this country (e.g., the songs "In My Merry Oldsmobile" and "Little Deuce Coupe"). Another teacher could demonstrate the style and utility of the costumes worn during the various eras in the development of the auto. You can easily see the mushrooming effect of this approach. The only limiting factor is the creativity of the staff.
Concurrent with this activity, the counselor should be structuring activities by which students could recognize changes in their interests, abilities, and values. It would be a relatively simple task to structure a group activity for "typical" ten year-olds that involve all the conditions and physical surroundings normally provided for kindergarten youngsters. It would not be too long before the group members would verbalize their concerns, maybe complaints, for being treated like babies or about the nature of the activity. One could then initiate discussions concerning other changes that will occur in the individual.

After learning about environmental and individual change, the student should be better able to formulate a healthy attitude toward change as a social phenomenon.

**Interests, Capacities and Values as Dominant Factors in the Career Choice Process**

Most theoreticians agree that interests play a vital role in career development. Verbal and non-verbal behavior manifested by young children concerning work and adult worker role models, regardless of its reality level, must be recognized and nurtured because from this fantasy evolves more realistic educational and vocational planning as the youngster becomes more aware of certain strengths and weaknesses which he possesses. Interests and capacities as career determinants are later tempered by the individual's developing value system. However, as elementary school counselors, you will probably concentrate your energies in assisting children, parents and teachers to better understand the significance of interests and capacities in the career development process.

The information recorded in the pupil's cumulative folder, if properly collected, analyzed and interpreted, should constitute a developmental profile of the individual's interests and capacities. Wise utilization of this data via group and individual sessions with parent and teachers will certainly enhance their understanding of the child. Contacts with the students concerning interest and capacity as factors in their career development must deal with the following attributes of those traits:

1. Meaning and significance
2. Acquisition and development
3. Identification and effect.

Obviously, many approaches could be adopted to achieve the goal of self understanding. A very interesting set of materials, specifically designed for intermediate aged elementary school children were developed by the Abington School District (1968) under a grant from the Pennsylvania Department of Public Instruction. The model they developed, basically heuristic in nature, drew upon the resources of the school, home and community. For example, six sessions were developed for grade five to explore the concept of interests. The sessions were constructed in such a manner that they could become a part of the language arts curriculum and contribute to student development in the area of spoken and written communications as well as to the objectives of the vocational guidance program. The dual objectives were met by developing:

1. a card game for the purpose of demonstrating how interests develop;
2. short stories with characters with whom the students can identify;

3. an interest inventory to obtain a profile of the students' interests;

4. an "open-ended" play showing the influence of interests on personal relationships with the provision for the students to write the second act showing the outcome of the situation;

5. a taped series of role-played interviews with various people in which the students were to determine the occupation from the interests described by the person interviewed.

Meaningful Relationships Between Education and Future Occupational Endeavors

It is generally agreed that when an individual can formulate some meaningful relationship between two worthwhile activities, each activity becomes more significant. The problem is then one of how to help youngsters draw meaningful relationships between educational experiences and work. Prerequisite to achieving any success in this area must be workable knowledge of:

1. the roots of the evolving value system of the youngster and their possible effect on the role of education and work in his life;

2. the significance of the educational program in terms of the individual, and

3. the array of external factors influencing both the individual and the educational program.

The portion of the Abington project dealing with the exploration of student interests via the language arts curriculum is a pioneer effort at developing in youngsters the desirable relationships between learning and work which we are seeking.

Lockwood, Smith and Trezise (1968) recently reported an interesting technique appropriate to this general area. Their approach to occupational guidance was developed for the junior high school, but it could easily be adapted for use in the later elementary grades. The purpose was to expand students' knowledge of available occupational alternatives so the individual would be better prepared to make meaningful vocational decisions at appropriate choice points. This model consisted of systematically transmitting to students occupational information classified according to four worlds: the Natural, the Technological, the Aesthetic, and the Human World which in turn correspond to the elements of a basic educational program. The array of activities that constituted this program were conducted by both teachers and counselors, the results of which may best be summarized by a statement made by one of the participating junior high students: "I, for one, firmly believe in man's ability to cope with the future. As long as there are men making new discoveries to advance the evolution of man, I believe there will also be men capable of applying these discoveries to man's benefit, and in his best interests."
Decision-Making Skill

Decision-making is a learned skill; and, it may well be teachable as a learning task to fairly young individuals. Regardless of the age level and the complexities of the decision, the essential tools for effective decision-making are accurate, understandable information and a plan for using the information. The information must contain data on external factors impinging upon the decision, insights concerning self, and clues to the probable utility for the individual of each option available. Educational and vocational decision-making, then, becomes one of massaging the available information in terms of one's interests, capacities and values. Teaching decision-making skills is a matter of providing the learner a model for the systematic analysis of situational and self-information which, when blended, will trigger some course of action.

One of the major obstacles to achieving the goal of effective student decision-making is the individual's anxiety over making bad and personally harmful decisions or decisions which will be judged inappropriate by peers and/or other significant individuals. Educational games, a recent innovation, tend to reduce the level of anxiety by removing the "real" penalties for errors in judgment. Simulated situations which involve many of the environmental conditions experienced by the individual provide the opportunity for the youngster to test out certain behavior and observe the consequences of his action. Concurrent with his exposure to the reality-oriented, make-believe simulation, the student is being taught the procedural steps of decision-making by the structure (rules) of the game. Although supporting evidence is still slim, it is hypothesized that educational games, correctly constructed and played, are effective teaching devices because of the immediacy of feedback. The San Diego County, California, schools have experimented with a modified form of the Life Career Game developed by John Hopkins University in their sixth grades and have found it to evoke a high degree of pupil interest.

References

Abington School District. Career development activities, grades 5, 6, 7. Report of a project supported by NDEA Title V-A funds and supervised by the Pennsylvania Department of Public Instruction. Abington, Pa., 1968.


Importance

No public school can choose whether or not it wants to have "public relations". It has them at all times. The question rather is whether or not it wishes to give constructive thought to having good relations with the public.

Its decision should be shaped by the fact that much of its support, financial and otherwise, depends upon local, community approval of its purposes, policies, and programs.

And this approval is only gotten when people are kept informed about the school and thereby have a base of knowledge and understanding for formulating their beliefs and opinions and taking action accordingly.

The Area Vocational-Technical Schools

These schools, if my understanding is correct, are being regarded as departments of existing, regular high schools. Though housed in separate buildings, they are merely an extension of the schools from which their pupils come.

Assuming that this concept is understood and accepted by the sending schools, it follows that part of the policies and practices of area vocational-technical schools will be influenced and controlled by each individual sending unit, that they will depend upon the services of personnel in these units for some aspects of their operation, and that the problem of intercommunication and internal relations will be critical to the success of the total vocational-technical enterprise.

In addition to the internal, public relations side of the arrangement, the new area vocational-technical schools will inherit a backlog of feeling, beliefs, opinions, and attitudes built up in the public and professional mind previously by departments and schools of vocational education. This inheritance in some sections of the state may prove awkward and damaging to the success of their programs.

A third consideration of public relations is the manner in which the vocational-technical schools themselves will relate to their several special publics and the extent to which they will understand and become involved in their affairs.

Public Relations Needs

Out of these three fundamental considerations, namely, the influence of sending schools, inherited concepts concerning vocational-technical education,
and how vocational-technical schools will relate to their special publics, there emerges a number of specific needs around which the public relations program for the total organization must be built.

These needs, from my point of view, are as follows:

1. To upgrade the image of vocational-technical schools - an image developed in the past due to poor students, inferior teachers, old buildings, inadequate facilities, weak extra-curricular programs, and lack of academic acceptance of its courses. This image has also been developed by the low social values placed on manual and blue-collar occupations. It will take a considerable period of time and skillful work before a better image is produced.

2. To define and establish the place of vocational-technical education within the public school system. This has never been set forth clearly with the result that vocational offerings have played a secondary role in the educational academic programs.

3. To improve the status of students who attend vocational-technical schools. Too often they are discriminated against by their peers and made to feel inferior by teachers of academic subjects. Students want to be identified with something in which they can take pride and enjoy social approval.

4. To develop a broad popular understanding of vocational education and its value in equipping the young person for future work. This is a basic need and one that has received far too little attention.

5. To show how vocational-technical education is linked closely to the military, economic, and social well-being of this country. This is an important internal need. Unless it is given a priority in your public relations program, you will pay a severe price. Staff members of sending schools represent a special public which demands special treatment in the interpretative process.

6. To induce members of various occupations as well as other citizens to assume more and more responsibility for the quality of your educational offerings and to make them partners in the job of ever-improving vocational-technical schools. The combination of responsibility and involvement on the part of citizens is public relations at its best.

It is against such a background of need that a public relations program for vocational-technical schools should be constructed. Among other provisions contained in the PR program should be those pertaining to the role of the school counselor.

The Role of the Counselor

There are four special publics with whom the counselor has contact. Each public is different and each requires different treatment. These publics are the students, parents, employers, and fellow professional workers.
Let's examine some of the PR opportunities open to the counselor in connection with these respective publics:

1. Students

Educational guidance, occupational guidance, job placement, and follow-up are the main services provided by counselors in the vocational-technical program. The effectiveness with which these services are carried on determines in large measure how students interpret the program to parents, relatives, and friends and the values that are placed on it by them.

In educational counseling, the number of pupils who elect to enter a vocational-technical school, with the thought of a job career in mind, is influenced greatly by the counselor. He or she can help to shape their feelings toward the vocational-technical school and their decisions about going into it. This is a critical point not only in guiding students who can profit from a vocational-technical education but also in creating a climate among the student body that is favorable to this type of education.

Occupational guidance is likewise a key to wholesome relations with students and their subsequent success in the labor market. They need to be helped continuously in the task of understanding occupational requirements and their own competencies for fulfilling them. Youth who can select a field of work and meet its requirements become staunch supporters of a school and earn the praise of their employers as well. Occupational counseling should be made available also to school-leavers on the same basis as to students who continue in school until graduation.

Job placement is another essential part of counseling. Unfortunately, it is a neglected aspect of pupil personnel service in secondary schools. Like occupational counseling, job placement must be a key service for students attending vocational-technical schools - it is an integral part of a vocational program.

Once the student is placed, a close tie should be established with him. He should feel free to return for counseling at any time. He should be alerted to opportunities for continuing education and for up-dating his knowledge and skills. Such continuing contacts and services create a strong bond between the school and the student. They build loyalties and appreciations that play a significant role in school support over the years.

2. Parents

Many opportunities are available for cultivating the good will of parents and for involving them in the work you are doing. Here are some:

a. Review student course selections with parents when there is doubt about their appropriateness.
b. Provide the parent with information about available services within the school and community that are essential for helping a student deal satisfactorily with his problems.

c. Work with parent on a home-school approach to the solution of student adjustment problems.

d. Make occasional telephone calls or write short notes letting the parent know of the progress being made by their son or daughter.

e. Apprise the parent through talks at PTA, through letters and bulletins to the home, and through news stories about available guidance services and their value to students.

f. Keep informed about what is happening in vocational-technical education so that you can answer parent questions correctly and intelligently.

3. Employers

Through placement and follow-up services, the counselor has many contacts with employers. The skill with which these contacts are handled has a strong bearing upon public opinion and support of the vocational-technical program.

a. Impressions are formed and attitudes created through telephone conversations and written correspondence. Telephone efficiency and courtesy as well as effective letter writing are important PR tools.

b. Proper placement of youth in job opportunities produces satisfying outcomes for both the worker and the employer. If those who are placed perform their tasks well, they bring credit to the school.

c. Employers are impressed when counselors follow-up on their placements and offer any assistance that may be needed in facilitating the young worker's adjustment or for increasing his usefulness on the job.

d. Employers are further impressed when counselors make an effort to become fully informed of new occupations and of the changes in occupational requirements.

e. On this point, provision should be made for all counselors to spend some time at regular intervals in business and industry so they can update their knowledge and understanding of work changes.

In addition, counselors are in a strategic position to involve employers in career conferences for students. Most employers are willing to participate and they feel much closer to the school as a result.
Further, better understanding of business and industry as well as of public education is promoted through business-industry-education programs. In these programs, schools are visited by representatives of business and industry and business and industry are visited by members of the school staff. This is a good step in developing a partnership concept between school and community. In many school systems, the planning of these arrangements is undertaken by counseling personnel.

4. Colleagues

The fourth special public is the counselor's colleagues or fellow professional workers in the school system. Unless they have some knowledge of the program - its nature and importance - their attitudes and opinions may have a harmful effect upon the status of the vocational-technical program in the minds of students and deter some from entering it. It has even been a problem in numerous school districts to win staff acceptance of regular guidance services, let alone a vocational-technical type of education. The problem here is more complex and difficult because many colleagues are strongly oriented toward academic preparation for college and hold a dim view of vocational education.

This internal public relations problem can be reduced in size if counselors will do such things as the following:

a. Use informal opportunities for talking about the vocational-technical program with colleagues.

b. Consult with colleagues on matters relating to students who apply for admission to the program or who are in it and need assistance.

c. Request the right to present information about students and the program at one or two faculty meetings a year.

d. Circulate information about student achievement and favorable employer reactions to the program.

e. Prepare copy for any internal publication which helps to disseminate pertinent information about the program.

f. Plan news stories periodically for release to local papers through established channels in the school system.

g. Try to involve colleagues on committees relating to various aspects of vocational-technical education and guidance.

Other Facts

Besides the public relations work that can be done in your contacts with pupils, parents, employers, and fellow teachers, there are other opportunities in the PR program to which you can make a contribution. Let me enumerate some of them:
1. Furnishing photographs and displays for school-sponsored exhibits.

2. Interpreting your services to organized community groups through lectures and discussions.

3. Preparing a script or a scenario for a school-made filmstrip or a motion picture on occupational guidance, placement, and follow-up.

4. Seeing that special events in vocational counseling and guidance receive adequate publicity.

5. Furnishing carefully prepared information to advisory committees established by the vocational-technical school.

6. Reporting current community attitudes and opinions toward the vocational-technical program to the proper school administrators. Interpreting the community to the school is important in steering a straight PR course of action.

7. Preparing human interest material for inclusion in radio and television programs. Counselors, perhaps as much, if not more so than other staff members, have a fund of human interest stories.

8. Assist with assembly programs in which some phase or phases of occupational counseling, placement, and follow-up work can be presented.


10. Interpret your services in the vocational-technical field to parents and other visitors at open house programs.

The effectiveness of our public relations efforts usually turn on: good human relations; knowledge of our community; understanding our public; continuous and honest interpretation of the school system; sensitivity to the concerns and wishes of people in the community; keeping messages simple, interesting, and understandable; building a real sense of partnership with the public.
The Problem of Forms to Gather Follow-Up Data From Early School Leavers and Graduates

Hugh M. Davison
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Data are needed to see, as a matter of intelligent information, what happens to the high school graduate. Data are also needed to find information about the early school leavers. Specifically the purposes of follow-up data are many:

- What are career or life patterns of youth?
- What vocations are attracting youth?
- What curriculum changes may be indicated?
- What accomplishment records can be made?
- What are the percentages of success and failure in different goal areas?
- What from the experience of others can be used in the educational and vocational counseling of others?
- What is the relation of aspiration to placement?

There may be many ramifications of the above questions. Follow-up within school (questions to 9th and 12th graders) may be useful in planning elementary, middle and high school programs.

Once the data desired is determined, the next problem is how to get valid and reliable evidence. Along with this problem is the one of how to get an adequate sample or needed proportion of the whole group. The most common data gathering device for these research purposes is the follow-up questionnaire. It should be designed for a high return for validity and reliability. To accomplish this, the covering letter must be motivational, stating a real purpose for the data. The covering letter should use the "you" approach as to why response is important. The questions on the questionnaire must be objective and fact gathering, and when opinion is desired it should be clearly recognized as such.

Another principle is to ask no questions requiring calculation, impossible interpretation, or extrapolation. Further, if the answer is known, the request should not be made for the same data. An example of this is father's name and occupation. Such data should be presently in the student's folder. You should know a student's birthdate. Further, the school records should contain attendance data and subjects taken. Much of the pupils' occupational data can be gathered in the same form as civil service application forms listing present position and listing previous positions, in order of recency, back to the first employment.

In planning ahead for design of questions, the summation methods and possible table construction should be considered. Much objective data can be coded and directly put on punch cards by digiteck or through the use of sense-marking forms. If the data can be classified as belonging to a continuous series such as dollars, they can be directly punched and later listed with means, medians,
modes, and with variability statistics as desired. If the data are categorical, they can be coded but the numbers cannot be handled as continuous series.

Much of the foregoing has been said too quickly; therefore it is necessary to provide samples of good and poor production.

1. Phrases to avoid in cover letters for questionnaires.

Your replies must be in by October 12th in order to be counted. (demanding)
This report will be summarized for the state. (who cares)
The school is interested in finding out where you failed. (insulting)
The school would like to have its graduates get higher salaries. (suspect)

2. Phrases which might be better in a cover letter. (because of interest)

Because of your interest in our group of new students, your advice to us may help them in better school subject planning or changes in school activities.

In remembering us at ______ high school, please think that you are still one of its students or possibly now as a taxpayer one of its patrons so that your ideas can help to maintain and advance your former school.

Other classes have contributed to the planning of our school. As a responsible member of your class we feel your ideas would be useful in covering the necessary data for future guidance.

In arriving at an answer on effectiveness of subjects experienced by former students, here are some poor and better questions.

Poor:

a. Take a high school subject and tell what you liked about it. (loose)
b. List the high school subjects which were a waste of time. (relative)
c. Why do most students like gym better than chemistry? (speculative)
d. Rank in order from worst to best the high school subjects you remember. (likely to forget some and temporarily misjudge others)

Better:

a. Below is a typical list of high school subjects as found on a transcript. Please place a check mark on those which you feel helped you in your present job. (objective coverage)
b. In the big five academic subjects: Social Studies, English, Mathematics, Sciences, Languages, check for the topics and sub-topics below those which you feel should be added to our school curriculum either as a separate subject or as an addition to an existing subject.
Sample:

English, creative writing ___ poetry ___

debate ___ short story writing ___

public speaking ___ TV production ___ (objectivity)

Guidance area, poor and better questions.

Poor: yes, no, type

a. Was your counselor disinterested? yes ___ no ___ (hard to interpret)
b. Did your school have a personal guidance approach? yes ___ no ___ (hard to interpret)
c. The school was able to handle my problems. yes ___ no ___ (a little better)
d. Did you have senior class advisers? yes ___ no ___ (This should be known by investigator)

Better: (generally these are more important and objective) Note! Need also na for not able to answer.

a. Did your counselor listen to your problems? yes ___ no ___ na ___
b. Did your counselor provide useful information to you? yes ___ no ___ na ___
c. Did your counselor review your high school record with you? yes ___ no ___ na ___
d. Did your counselor welcome your return visit, if you thought it might be helpful? yes ___ no ___ na ___
e. Did your counselor have good knowledge about occupations? yes ___ no ___ na ___
f. Did your counselor have a good understanding of college student academic problems? yes ___ no ___ na ___
g. Did your counselor encourage judgment on your part? yes ___ no ___ na ___

General Comment

The principles of questioning are:

1. Ask a simple question.

Ask one that has only one concept involved. It may be a very important concept but the issue should not be clouded by other concepts.

Sample Concepts:

school, subject, teacher, counselor, job, salary, etc. These can be modified by adjectives or pronouns, best, good, your, etc.

2. Sometimes a check list saves space and makes cross comparisons quickly and objectively.
Example:

From each pair of subjects select the one which helped you most in work after high school. Example, check English if it helps more than Latin.

English X Latin ___

English ___ French ___

Math ___ English ___

Science ___ Math ___

3. In designing questions think of the responder's problem in reply. What evidence is readily available?

Sample Question:

Indicate your years of education beyond high school _________ years. He may wonder what about that 6 week course; what about summer theatre, what about correspondence courses?

If space is available it is better to list the schools of possible attendance since high school and ask for years and months of attendance.

<table>
<thead>
<tr>
<th>Equivalent Major</th>
<th>Years</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 year college</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 year college</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Graduate College</td>
<td></td>
<td></td>
</tr>
<tr>
<td>correspondence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>short courses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SUBJECTS COMPLETED

A better list may be devised than that above.

4. Try to think through the important variables on which to gather data.

In the vocation or education of a student or former student is the question important?
1. Does it fit a critical issue or point in development?
2. Does it pertain to a critical requirement for job placement?
3. Is the question associated with a critical phase in a sequence of development?
4. Is your question based on past research or indicated as important because of previous literature?

At certain stages of early adolescence, mental age (m.a.) and chronological age (c.a.) are very important to guidance considerations. In later ages of youth the I.Q. is of some importance or the percentile rank in grade might be important. But more important in later years is the academic record or work experience record. In later years, adulthood, the history of community activity or hobbies and special talents may be important guidance data.

It is hard to illustrate the critical incident question, but such a question might be related to job requirements. An employer might check as skills necessary for a student to be an assistant to the store manager as follows:

<table>
<thead>
<tr>
<th>Skill Required</th>
<th>yes</th>
<th>no</th>
<th>helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>reading 8th grade level</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>arithmetic through percents</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>making change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>typing letters</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>handwriting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sign printing</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bookkeeping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>courtesy</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>acceptable dress</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>clarity of speech</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>physically fit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>literature</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitudes of promptness</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>attitudes of reliability</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sales course</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Another example might be surveyor's assistant:

<table>
<thead>
<tr>
<th>Skills Required</th>
<th>yes</th>
<th>no</th>
<th>helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>handle these tools:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. axe</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. hatchet</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. hammer</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. saw (hand)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. saw (gasoline)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>handwriting 8th grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reading 8th grade</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dress for out-of-doors</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>engineer's boots or equivalent</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>literature</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Skill Required

<table>
<thead>
<tr>
<th>Skill</th>
<th>yes</th>
<th>no</th>
<th>helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>business education</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>good personal characteristics</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>physical fitness</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>surveying course</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

In female, probably even more so than in male occupations, it is important that the attitude the other females closely associated have toward a prospective employee be one of acceptance. Perhaps in all work situations personality is more important than appearance.