This program was an effort to address some of the salient issues related to the occupational status of women in American society. The keynote address suggested ways in which the professional counselor could personalize occupational freedom for women. For instance, providing a community learning center would encourage the emergence of vocational evaluation in people at their own pace. The speaker employed tape excerpts to analyze the importance of self-concept and self-study to vocational development. She stresses the experiencing of process rather than of content as the key to vocational exploration. Included are the comments of a panel of reactors consisting of a female attorney, housewife, female engineering student, female personnel manager, and a male professor. The proceedings included remarks from the question and answer session following the reactors. (Author/LAA)
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Personalizing Occupational Freedom for Girls and Women

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PERSONALIZING OCCUPATIONAL FREEDOM FOR GIRLS AND WOMEN

by

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INTRODUCTION

Although, over the last half century or so, women have achieved considerable advancement in terms of freedom and opportunity, their sense of dissatisfaction with their status appears to be increasing and efforts of "liberation" are growing. Clearly, true equality with men, respecting occupational status, has not been attained. Progress in that direction has been impeded—in part, because of a prevalence of misinformation; in part, because of widely held negative attitudes.

The 27th Rutgers Guidance Conference attempted to help counselors consider some of the issues related to the occupational status of women.

-- Editor

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PERSONALIZING OCCUPATIONAL FREEDOM FOR GIRLS AND WOMEN

Esther Matthews

It is a privilege and a challenge to be the speaker at your 27th Annual Rutgers Guidance Conference. The challenge is to try to use my time in a way that will result in tangible benefit to you, the counselors in New Jersey. You represent a huge resource of energy and talent for the people of this state. You work in varied settings--employment service, rehabilitation centers, hospitals, industries and every variety and level of educational institution. For this reason, I will suggest some practical ideas that can be adapted to various age groups and to persons facing different vocational decisions. You will find upon experimenting with several of the ideas that they can be utilized in vocational counseling with young people exploring and planning their entry into occupational life; with people searching for a new vocational life-span after serious injury; and even with persons rebuilding their lives after mental illness.

I have taken advantage of the freedom offered by your co-chairmen and committee members, many of whom I had the pleasure of meeting with at the APGA Convention in New Orleans. As you glance back at the brochure for this conference, you will note the kinds of impediments restricting the occupational status of women in the United States. These conditions are only too prevalent. Our energies today need to be directed toward the central concern raised in the brochure, "In what ways can professional counselors help to elevate the occupational status of women?"

I would like to rephrase that question and ask, "In what ways can professional counselors personalize occupational freedom for both men and women?" My examples will be drawn from the lives of girls and women but the application of these ideas to the lives of boys and men will be clear.

Your first task is to calmly assess your deep and perhaps secret feelings about the whole idea of occupational freedom for girls and women. Does this idea worry you in certain ways? Do you feel uneasy about the rapid and profound changes in society that exist now and will continue to result from the changing patterns in the lives of men and women? Do you feel uncertain about the capacity of the new generations to evolve new patterns of family life? If you find yourself responding to these concerns, know that you are in the company of many others. On the other hand, if you find yourself personally and professionally ready to accept the right of all persons to occupational freedom, you will be able to spend your lifetime in such a cause because occupational freedom for girls and women--and for men too--really depends upon significant changes in the entire educational, social, and economic structure of the world.

As a counselor, you may want to define occupational freedom as the right to contemplate any occupation and the opportunity to
become trained and employed in any occupation that one can master. Freedom of occupational choice also insures the right of a person not to select an occupation or to change occupations many times over the life span. We have not begun to confront the issue of allowing supported unemployment as a choice. We are also still unable to provide employment for all of those who need and want jobs. We do know that there is a strong likelihood of a trained and competent worker gaining and holding employment.

How do you, as a counselor, help to create conditions and practice your profession in a way that will result in more people experiencing the personal and material benefits of a secure vocational existence balanced by a satisfying proportion of leisure?

The conditions necessary for insuring occupational freedom are identical with the conditions necessary for all human growth and learning. The conditions are derived from a central premise that people learn in their own ways, at their own pace, according to their own time systems. They learn what they feel they need to learn for their own human needs. We can only imagine away this stubborn truth by pretending that growth and change have taken place through the imposing of mass methods based on coercion and convenient administrative arrangements.

Presently we program onto people at certain ages and stages a confrontation with vocational planning. Remember the old childhood game of hide and seek that ended in, "Ready or not, here I come"? For example, in junior high when peer acceptance, social concerns, and physical identity are of immense concern to students, we impose structured units on occupations and even wonder at the usual disinterest and "tuning out" that often results. This does not mean that the vocational self-concept is unimportant to many junior high school students. It means that we must break the mass lock-step for organizational convenience at that educational stage and at every other life stage. Some junior high school girls may be ready and eager for very advanced vocational exploration. Some junior high school boys may critically need to finish working out physical identity tasks before they can even consider their vocational self-concept.

Now how do we provide a setting that will be continually available for encouraging the emergence of vocational evolution in people at their pace and in their time. The answer for me is not a new one. It is the community learning center--open twenty-four hours a day and twelve months a year. Look at Hofstra College or recall Jane Addams' Hull House of long ago.

The learning center as a social, political, educational, and transitional model of an evolving society could moderate many of our present difficulties and draw us toward a more natural and human social order. People of all ages would shift roles from teacher to student to counselor to worker. Reciprocal interre-
ationships would engender a zest and passion for every conceivable variety of knowledge and skill.

The occupational exploration and experimentation possibilities alone defy categorical description because in truth they would be natural happenings, interwoven within the evolution of personal lives.

Could you try to visit a learning center in New Jersey, or if you ever come to Oregon, experience the Metropolitan Learning Center in Portland?

How can you move your school or institution in the direction of a learning center? Where can you begin tomorrow morning? You are already involved, as a vocational counselor, in bringing the world outside of the school within its walls in the form of guests representing varied occupational fields. Could these occasional guests become permanent resources for students during the whole year? How could this be done? Perhaps tapes, like the ones you will hear, could be made available all year to any person wondering about an occupation.

The tapes you will hear differ in important ways from the usual vocational tapes in that they are student directed. They grow out of student concerns or introspections. These tapes demonstrate the most important point I will make today—all vocational exploration must evolve, wave-like, from the inner concerns of individual people. The content of the tapes is of interest, but the message is more important—that of the individual trying to sort out and make personal sense out of what he perceives in a vocational exploration experience.

The use of live people on the tapes will serve to remind us of the beauty, complexity, variety, individuality, and non-containability of human beings as they develop "personal knowledge" of the world.

The first excerpt is taken from a tape prepared for the National Vocational Guidance Association's Commission on the Occupational Status of Women under the direction of Mrs. Louise Fields, who served last year as Eastern Chairman for the Commission.

Four girls at West Kinney Junior High School in Newark, New Jersey, had the unforgettable experience of interviewing the world-renowned physician, Dr. Lena Edwards. Listen to Deborah Barnes, Annette Benson, Loretta Brown and Facine Crawford as they raise their questions that plunge directly toward the heart of vocational identity.

Q. Dr. Edwards, what inspired you to become a doctor?
A. When I was 12 years old my mother became suddenly ill and a lady doctor happened to be across the street treating one of our friends. When
she came so promptly and did so much for my mother, I looked at her and said "I'd like to be like you." So, at the age of 12, I decided I was going to be a doctor.

Q. Dr. Edwards, most of the doctors I know are men. Is it rare for a woman to become a doctor?
A. According to the Women's Medical Association report, there are about 2200 women doctors in this country. About 7% of the physician population are women.

Q. Dr. Edwards, were there many other women training to become doctors when you were in school?
A. There was one other young lady in medical school with me, and of course, throughout the country there were numerous ones--I couldn't tell you exactly how many.

Q. Dr. Edwards, how many years of college is necessary in order to become a doctor?
A. Well, you have four years of college and then four years of medical school and then you have to do some work when you get out--in an internship--at least a year, or possibly two, of an internship, so past high school, you have ten years of education, formal education.

Q. Dr. Edwards, what kind of courses did you take when you were in high school?
A. Well, I was particularly interested in science and languages. They were very helpful in preparing to take the subjects in college that were necessary.

Q. Is it necessary to be a straight "A" student in order to get into medical school?
A. No, it isn't; but it is necessary to have high grades. Because of the limited number of places in any medical school, they take students with the highest records--a certain proportion of them have to be students with high records.

Q. What are some of the best medical schools in the U.S.?
A. Well, the United States is unique in that just about all of the medical schools are tops, so I think we could say that all the medical schools that have been approved are best.

Q. I have heard that Meharry in Tennessee is an outstanding school.
A. Meharry is a very outstanding school.

Q. Are there any medical schools in or around Newark that are considered outstanding?
A. Yes, the ones that we have here in Newark are...
good medical schools. The State Medical College, I think they call it now, and Rutgers is coming along as a medical school in this immediate community.

Q. Are the costs of medical schools high?
A. Very high. I don't think there's a medical school in the country now that has a tuition of less than $1,000 a year.

Q. Are there many scholarships available?
A. There are scholarships available for students that need help, and fortunately now, with all the poverty programs that our Federal government has become interested in, there are government scholarships that are available. Some of them, I understand from a program I heard last night, are going to be scholarships where there's no immediate necessity for payment back and some of them are student loans.

Q. What are the types of doctors needed today?
A. I should say that the doctor that we are most in need of today is a family doctor. At the present time we have, I think, in this country, more specialists than family doctors. And I'm one who believes that it is very necessary to have a family doctor because of the amount of good a family can derive from feeling that they have at least some one doctor in whom they can put their trust.

Now I think that in order to be sure to get every part of what I wanted to do, we will cut the tape here. I would like to read you just a few of the other sections. But first, as a bit of background information, you may be interested to know that the people of the junior high expected the girls to question Dr. Edwards about her specialty, which is gynecology. One of the really interesting things is that the first question, which you missed because it wasn't clear on the tape, was "How did you know you wanted to be a doctor?" This says a great deal about little seventh-grade girls and their interest in occupations. I wanted to read a few more of the very important parts. They do go through questions about getting into medical school, the kind of courses medical school students take, and others which you would be familiar with students asking. One of the interesting questions asked was, "How do you know what branch of medicine you are suited for?" Dr. Edwards handled this question beautifully, by telling, "You need to have experience, you need to try different parts of medicine before you know." She assures them that all branches of medicine are open to them, even though not highly represented with women. For example, surgery is not highly represented. Now, one of the crucial and passionate questions asked by the little girls at the end of this segment is:
Q. Have you found that being Black has ever been a problem as far as getting into college and later securing a position?
A. Personally, Black has never been a handicap for me. I was brought up to realize that we are people and that if we do a job well, there are doors that are open for us to pursue our education. The important thing is to be respectable and respected, industrious and intelligent.

Q. Are there any problems that Black people have today in trying to become doctors that people in other races don't have?
A. Not today. The door is wide open.

Q. I have heard that you were given the Freedom Award by President Johnson in 1964 for your outstanding activities in medicine and community service.
A. That is true. I received that award at the White House.

Now I want to comment on this very brief tape segment which you have heard, which is part of a longer tape of course.

Who knows what the impact of this great and humane person will be upon the lives of Deborah, Annette, Loretta, and Facine? Perhaps her most profound message may not be about medicine, but about how the presence of or the development of courage, hope, and commitment leads to the quiet confidence that goals are achievable.

What will happen to Facine and Deborah? Will Annette and Loretta receive the strong support, the practical knowledge, the unwavering encouragement to construct their futures? Will they move on to a high school counselor who is aware that they can raise the types of questions and think vocationally as they did at an earlier age of life? Will there be a caring and listening person in their high school to nourish the dream and further the hope of a personally determined life, including occupational choice? Perhaps the quiet listener will be a parent or an older brother or sister, or more than likely, one of you counselors sitting with me today.

How might you, as high school counselors for these lively girls, continue to build on the powerful role-model experience that these girls have had? How do they find themselves? How are they different from each other and from Dr. Edwards? Will medicine continue to interest some of these girls? How does the counselor help a student to effectively relate self and the occupational world?

We have just shared a demonstration of the time-honored role model as a means of sparking vocational involvement. There are several aspects of the use of the role model that make all the
difference in the role model's effectiveness. The person
used as a role model must be selected first and foremost for
certain human qualities and secondly as a successful representa-
tive of a particular occupation. Membership in an occupation
alone does not qualify a person for the complex task of serving
as a highly effective role model. Dr. Edwards was a truly
great model because she was sensitive and aware of the needs of
the girls. She shared herself according to their expressed
concerns and above all she treated them with dignity and respect.

I hope each one of you is rapidly checking over the human
qualities of the people in various occupations with whom you
would like your students to identify. You will also want to
experiment with role models at every stage of any occupation.
For example, our young girls in Newark have been given the in-
spiration of interacting with a woman occupying the pinnacle of
achievement. They now need a whole series of sub-role models--a
high school girl contemplating a medical career; a young pre-
med student; a young woman doctor with children of her own work-
ing out the intricacies of marriage and career. This model can
be followed for any occupation.

Next, I would like to share an idea that can be adapted on
some level to any person of any age or situation. I understand
that Drs. Bingham and House are going to try to have what I
share with you reproduced. I am grateful for this because I
didn't dare ask the University of Oregon to supply me with 700
copies because we are in a slight financial bind. However, it
would probably be more sensible anyway if it is distributed
through your guidance association. I have found that by using
the sort of innocuous little affair you are going to hear about,
I can stimulate enormous introspection in graduate students in
my counseling classes. This came as rather a surprise to me,
because it didn't seem as though it would be that useful. It
is called Self-Study in Vocational Development. The purpose of
the Self-Study in Vocational Development is to trigger internal
responsibility for any commitment to personally directed voca-
tional exploration. By way of introduction, I will tell you
how I would like it to be used. Also, a copy can be found in
the Appendix.

If you work with a counselee without any kind of pre-inter-

nal preparation on their part, you're probably working with the
questions you think you should be working on. In other words,
your interaction will be from your base of professional knowledge
and not from the client's life experience. One of the problems
that all counselors face is the fear that they are not helping
people, and this obscures the real task of helping people help
themselves. You are undoubtedly familiar with this regardless of
your discipline. It's a theme of the times in social work,
medicine, counseling, and all fields.

I brought along with me some copies of the Self-Study in
Vocational Development that were filled out by students. They
range from sophomores in high school to graduate students. They are very highly personal documents. When you look at them it might be interesting to think about how you would have begun vocational exploration with one of these people. One of the sections, for example, is on hopes, wishes, and dreams. One little girl writes, "I want to visit Ireland, and I do not want to die early." Chances are you wouldn't get a response like that if you sat down with her and asked a question like, "would you like to explore your vocational self-concept?" You usually don't get personal knowledge from the formal instruments that are used.

A whole series of questions can be used to stimulate a person to think: How do I know what I want to do with my life? How do I know what I'm really like? How can I tell my abilities and how they will change? Then the person decides on his own whether or not he wants to consider what he has written in more detail. The Self-Study in Vocational Development allows the person to consider important questions in terms of positives and negatives. All of you are familiar with Leona Tyler's rich treatment of negative vocational self-concept. This is an extremely important area for counselors to be concerned with. Also, what about aptitudes and talents? Here, it is important to know if people recognize their own aptitudes and talents.

One of the sections that many counselors have been using, and have found to be very provocative, is that which is concerned with wishes, hopes, and dreams. This gives the person a personal base to build his vocational self-concept on. There are quite a few other sheets to the Self-Study which ask interesting questions. The instructions are designed to trigger all kinds of material that you will then be able to work with.

It is imperative that this stimulus not be imposed upon a person. It is an invitation, not an obligation. Some people will be ready and eager to use it. They will be willing to share their entries with you and with other people. Others will be completely unready, developmentally or psychologically, to tackle such a sensitive introspective task. Some will be eager to do certain sections, but hesitant to even think about other sections.

In any event, you will have demonstrated in a quiet but concrete way that you accept the person as the central force, the planner, the doer, the architect of his own life.

Some people may want to talk over their entries in a small group but others will be much too shy and reserved to do this. During the high school period students may want to look at how their entries change from year to year, or even by the month, or day!

Vocational indecision is a great burden on people, because
in this pushy society people think you should be about your business of choosing an occupation when you are 6 or 7 years old. It's a hold-over from past generations, when people made one vocational decision, and then the test of their character was to stick with it until they were 97. This is not so any more.

You can have blank copies of this vocatir-study stimulus available wherever you are located. If your students in their own time will be drawn toward self-exploration in a trusting relationship with you. You cannot program en masse, in a certain period of the year, at a certain grade, the delicate and vulnerable experience of vocational introspection.

I wish that the young woman scientist from the midwest, in our next tape excerpt, had experienced a high school environment more conducive to the exploration of vocational self-concept. Our tape was provided for the use of the NVGA Commission on the Occupational Status of Women, by Mrs. Lucile N. Hoffman of Kirn Junior High School in Council Bluffs, Iowa. The student on the tape is her niece and not a junior high student. Mrs. Hoffman is the Mid-Western Chairman of the Commission.

On the tape, a young adult woman scientist asks herself such questions as: "How does a career happen? How did my career happen? What forces and influences shaped my life?" We will only be able to summarize a few predominant themes from the tape and hear only a few excerpts. However, each of us can empathize with this young woman and generalize the insights we gain from the influences in her life to our practice as counselors.

I will call her Mary in honor of one of her great role models, Mary Bunting, President of Radcliffe College. More about that later!

Mary grew up in a small town in Ohio. She says, "My parents' personalities and aspirations made it inevitable early in life that a career would be part of life for each of their five children." Both of Mary's parents majored in science in college. They have been employed in the sciences, her father as a chemical engineer and her mother as a meteorologist during World War II, and as a part-time and now full-time high school science teacher. Incidentally, her mother's original ambition was to be a medical doctor.

One of the most striking themes in Mary's retrospection about her life is the continual emergency of women role models at every stage of her life. One of her earliest memories is of bringing a book to her great-grandmother, who sat in her rocking chair, always ready and willing to read to a tiny girl. Mary's love of reading was kindled at the early age of about two.
She could hardly wait to learn to read those books for herself.

Through elementary school, reading was a vital part of her life. Fortunately, the public library was next door to the school and many a noon hour or recess period was spent there in self-selecting a stack of books to take home. She felt that her reading helped to overcome the handicap of attending a poor public school system.

Mary attributes her early love of science to the influence of her grandmother. She says:

"A large factor directing me toward the work I do today is a fascination with living things. I think that this started also at the time when my mother and I were living with my grandparents. My grandmother is an enthusiastic and expert amateur gardener. She had a large yard and garden in which she had planted a large variety of unusual, beautiful, useful trees, fruits, berries, flowers, bulbs, and vegetables. I used to spend much time following her about the garden, watching her work in it, and listening to her tell some interesting anecdotes about some particular plant. She also was knowledgeable about wild plants and flowers. One of my favorite occupations was to walk through a wooded area with her and listen to her point out things of interest about the things that we saw. This interest in living things has stayed with me and grown over the years and quite early in high school led me to think that I wanted to work in biology."

Another very early influence strengthening her interest in a career was the customary responsibilities for housework and child care that are part of life in a large family.

"As the oldest of five children, I had about the closest experience possible to being a housewife. I spent a large amount of time, much more than I wanted to spend, helping care for the younger children and helping around the house with cleaning and cooking. Particularly the household chores I found not interesting. When I became old enough to specifically and consciously consider what I wanted to do, after high school or college, the first conclusion that I came to was that I didn't want to have to be involved in these household chores which I found so dull."

You see, her experience in being the nearest thing to a housewife did not include one other important component which you will see a little bit later on here.

Even in the early and middle years of elementary school,
she began to think of becoming a scientist of some kind. Again she recalls perceiving that her parents valued the world of science over non-science as being more useful and more difficult. This is how she came to respond to the "what will you do when you grow up?" question with "I'll be an ichthyologist."

Mary recalls that:

"This is the first thing I ever remember specifically deciding that I wanted to do. I had read a Book of the Month Club selection called Lady With the Spear, by Eugenie Clark. I was fascinated by the book. Eugenie Clark was an ichthyologist who traveled about the world collecting fish, describing them, dissecting them, preserving them and sending them back to American museums. It seemed like an adventurous and exciting way of doing science. I thought that that was what I would like to do. I was particularly interested in it because at that time I was an enthusiastic keeper of tropical fish. I had several aquariums of fish and very much enjoyed taking care of them and reading about their habits and peculiarities. But after a year or so of wanting to be an ichthyologist, I came to the conclusion that for someone who couldn't swim and who showed no indications of being able to learn to swim, that this was not a good choice."

How did a young girl who had quiet but firm career convictions feel in a community antagonistic toward such plans, particularly for girls?

"There were negative factors that did operate against my choosing a career and particularly an academic career. The town in which I grew up—in fact in which I lived from after the age of about three until I went to college—is a small town in southeastern Ohio. It has a small private college. The town is surrounded by a rural truck farming area and also by a number of heavy industries—plastic and metal industries—along the Ohio Valley, north and south of it. There was, in the town, particularly in the high school which I attended, a very strong anti-intellectualism. It was an assumption of most people that someone who was intelligent and interested in intellectual things was incompetent in all other areas. Such a person, the common image held, would be funny-looking, weak, pale, unathletic, hard to get along with, unpopular, and uninteresting. So with this image always before me, I tried fairly hard—at least unconsciously throughout high school—"
to do well in school and to be interested in academic things without it ever being noticed by anyone else or even explicitly being admitted to myself."

And yet, during this same high school experience two important role models left their imprints upon her life. The first person was a dynamic woman teacher who organized a debating team that was successful locally and throughout the state. Mary learned about how to organize and present an argument, how to thoroughly research a topic, and how to become an effective debater.

Her other role model was a high school physics teacher who strongly encouraged her to carry out science fair projects.

Mary's college planning was accomplished largely on her own because most students were encouraged to attend local or in-state colleges. She was discouraged from even applying to distant colleges. Her mother had heard of Radcliffe and Mary had seen a puzzling reference to that college in Life magazine. In a pictorial essay on the American bachelor, his ideal girl was described as a "chorus girl with a Radcliffe mind!" These two very slim leads caused Mary to organize—for herself—an intensive and careful search for colleges offering good science programs and respected graduate work in science.

To make a long story short, she was accepted at Radcliffe and supplied with sufficient scholarship aid to enable her to attend. She arrived at Cambridge with trepidation and eagerness to try her fortune.

The four stimulating years at Radcliffe were highlighted by her relationship to the President of Radcliffe. Hear her own description of that critical event in her life.

"A month before school started, Radcliffe had sent me much information about the college and this included a description of the freshman seminar program. Harvard had a program in which professors gave ungraded, full-credit seminars for a small number of students on very selected topics. As I read through this book describing these seminars, one in particular struck me as being something I would very much like to be part of.

Dr. Mary Bunting—who was then, and is now, the President of Radcliffe College and who has a Ph.D. in Microbiology and who has done research in bacterial genetics, previous to becoming President of Radcliffe—was offering a seminar for about six or eight students, which involved research in the laboratory in the area of bacterial genetics. The description of the subject matter for the seminar and the opportunity
for actually doing laboratory research and
the opportunity to associate with a woman
who had been successful in a research-
scientific capacity, seemed to be perfectly
tailor-made to my needs. So I applied for
admission to the seminar.

Soon after arriving at Radcliffe, about
50 Harvard and Radcliffe students, who were
applying for admission to this seminar, were
invited to Mrs. Bunting's house. I met there,
for the first time, this very charming,
energetic, intelligent, and thoroughly warm,
friendly— in every way admirable— woman who
was to be so helpful and so kind to me over
the following four years."

Mrs. Bunting was instrumental in helping Mary secure very
important summer jobs in various research laboratories. An
important consequence of the seminar was meeting the man who
would become her husband four years later. Another highlight
of the Radcliffe years was the unforgettable experience of
having Professor Watson as a lecturer, at the time he was a co-
recipient of the Nobel Prize for medicine and physiology.

Another extremely important effect of the college years
was the complete reversal of peer opinion regarding the legit-
imacy of open intellectuality. For part of the Cambridge stu-
dent population, the use of the mind in a scientific career was
expected and not ridiculed or demeaned. It suddenly became
possible for Mary to be her real self and to think for herself.
She almost gives a sigh of relief: "I could be myself and it
was all right."

After graduation, Mary married the man she had first met
in the seminar and joined him at Stanford in her own doctoral
studies in molecular biology and biochemical genetics. She is
now nearing the end of a four or five year program of graduate
studies. Her husband is very enthusiastic about her studies
and about her becoming a research scientist. He never be-
grudges the energy he puts into their joint homemaking. Can
you imagine how useful this couple would be as role models for
grade school and high school students?

How many lessons her life contains for counselors! So
many experiences in her life could have acted to deflect, over-
whelm, and obliterate the pursuit of a complex career. Through
some unusual and very chancy circumstances, the world's scienc-
ific resource has been augmented by a highly trained scientist in
a crucial field of biology. Could she have started this career
at 35 or 40? Will she and her husband—in time— unlock some
of the baffling secrets of life? Are there Marys in your schools?
At what point do we lose potential scientists? Pre-school?
How can counselors help people of any age to make personal, private sense out of the range of occupational choices that should be the right of every child or adult? The world of occupations looks huge, complex, and scary to most people. Think for a moment about your own uneasiness and confusion if you were forced, at this time in your life, to enter a new occupation. Feelings such as this are intensified when one is young, searching, and inexperienced.

As counselors, we could probably all agree that the generating of personal knowledge depends upon some type of sifting device that reduces larger structures of knowledge to personally meaningful dimensions. For example, people can learn how to evoke personal occupational knowledge from the impersonal organized structure of occupational categories. Personal knowledge, in turn, would serve as a stimulus for investigation and experimentation. The emerging tentative personal design or occupational horizon would be subject to change and revision as the person matured. This occupational horizon would also contain some enduring characteristics that bear the seal of the individual’s style of life.

Before demonstrating a practical way to help people create their own occupational horizons, it is important to return to the concept of personal knowledge. All persons must make their sense out of life, not ours. Methods of vocational counseling that neglect to weigh the importance of this fact merely perpetuate adaptive, imitative vocational behavior. Our methods, procedures, and stimuli must be designed to evoke internal needs and internal readiness in wide varieties of people. This means that the right response, the good choice, the suitable adjustment must become meaningless concepts! Right for what person? The counselor or the parent? In the kind of vocational experience I am describing, any stimuli would be capable of accommodating an infinite variety of responses. The responses would vary in content and along many dimensions such as depth, complexity, level of concern, capacity or disposition to deal with such stimuli. Once we can really accept such a premise, our actions become responsive rather than definitive or absolute. The structure of reality (or of personal knowledge) is based in the person with whom we are working. Our collaborative interaction grows from that vital base.

Perhaps our concrete example will help to demonstrate the meaning of personal knowledge. We will use three very familiar categories or divisions that encompass the entire range of occupations.

Let me explain a little bit what I've done. I've taken the three category systems from the Dictionary of Occupational Titles (DOT), and as you remember the first one is the least
complex. You see, this first sorting of the DOT of all the occupations is a manageable organized structure for many people. Now for little children you might have to read words, you might have to change the language. For non-readers you might have to say "well what do you think that word means?"

Here we have prime stimuli of a very complex nature. The mind of the person beams down on it. You will find, if a person is invited to look at this, they will be almost automatically inclined to make choices. They say "Oh that's not for me," or "this is for me," or what's that one all about?" or they will begin to use their minds in a personal way.

Now we can discuss the second sorting of the occupation into a category system. I use this as a second stage because it's quite descriptive. Think of the power consequences of using this with kids who never had power. They can take a great big red pencil and slash out anything they hate to do, or that doesn't interest them. What happens is the vocational horizon leaps out at the person and in a manageable manner.

The next step is to run the third category system. Now, as you come to the third category system, people begin to circle different kinds of occupations that interest them. Then they see the whole thing simultaneously, and they begin to see the different sections in contrast and comparison with each other.

This has proven to be an astounding thing. I would never believe I could use the DOT this way. You really will be very excited about using it. You might hold up a couple of vocational horizons that students let you use (with their names removed) as a stimulus. This can be done in your counseling and guidance offices, in your employment office.

Now, I'm sure that in the question period this afternoon, you are going to ask the old problem, "Well, what if their choices are unrealistic?" The key point is not whether a student's choices are realistic. The important thing is that he learns a system of self-introspection, and makes a personal choice that will then create the conditions in his life to precipitate the kinds of behaviors and learnings that will open up his vocational horizon. That's so important!

The three categories of occupations from the Dictionary of Occupational Titles, (DOT), volume II, 1965 edition are described in Appendix B as one-digit, two-digit, and three-digit occupational groups.

Now, how does a person draw out his own occupational horizon from these materials? Each one is encouraged to move from the least complicated toward the most complicated listing in his own time and in his own way. One person may black out
in heavy strokes all negative choices thus creating a personal occupational structure with which to experiment. Another person may proceed initially with the more complicated of the sortings. There is no doubt that strong personal involvement takes place. People feel a sense of power, of judgment, of choice. They spontaneously begin to suggest their own investigation and actions—again in their own style and tempo. They have been "turned on" to the potential fascination of vocational exploration. The person has been brought into unique relationship with the data available.

As a counselor, you can experiment endlessly with all sorts of simplifications or elaborations of this one idea of occupational horizons. You can have young children sort, by preference, pictures of occupations. You can encourage adults to go on into the more complex usage of the Dictionary of Occupational Titles. Whatever the materials or experiences are, the key is the imprinting of the person into the world of occupational knowledge, in such a way that it becomes manageable and exciting. This condition inevitably results in personally determined investigation; plans and actions take shape and form; personal knowledge generates insight and responsibility. We then have a life in the process of evolving a meaningful design with the acceptance of redesigning already an integral part of the scheme of things. You will hear such comments as "I guess I've got a lot to do with how my life will turn out."

The importance of any of the practical ideas suggested here lies in experiencing the process and not in the content. The variety of responses to any of the devices demonstrated is truly astonishing, even to one accustomed to the rich variety in human nature.

I wonder what kinds of new and different ideas you and your students will create and explore this year? I wish for all of you the quiet security of knowing, as you go about your vital work each day, that you are helping people to gain the courage and vision to build their own lives.
People seeking help in their vocational development often fail to realize how much they really know or can find out about themselves before they even work with a counselor. This personal search for meanings and understandings increases ultimate commitment to responsible decision making and reduces blind dependence upon the authority of others.

Here are some common questions people seeking vocational guidance ask. The questions are followed by a few sample ideas about how to encourage self-study as the vital initial phase of vocational counseling. What kinds of ideas do you have about how to study your own vocational development?

1. How do I know what I want to do with my life?
2. How do I know what I'm really like?
3. How can I tell what my abilities really are? Could they change?
4. Is it wrong for me not to follow my parents' wishes for my occupational field choice?
5. What's the difference between a job, an occupation, and a field?
6. How can I get the money to prepare for an occupation?
7. Where would I go to get information about any particular vocational field?
8. How can I tell if I would like an occupation when I've never been in it?
9. What if I get my training and then hate my occupation?
10. Are there any part-time or summer jobs that could help me decide if I would like occupation?
11. Do any colleges help people to work at an occupation while they study it?
12. Is it better to go to a community college first or to a four-year college?
13. Where would I get information about apprenticeships?
14. How could a state employment service office help me out?

Add your own questions here.
Personality and Character Traits
(As seen by you and other people)

I List the first few positive and negative traits that come to your mind, in describing yourself. Return later and add as many as you want to.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
</table>

II Do the same thing now but imagine that your mother is reacting to you. What traits would she list?

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
</table>

III Now you are trying to imagine your father's list of traits best describing you.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
</table>

IV Your favorite adult (friend, relative, teacher, coach, etc.) would probably list these traits (in your opinion).

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
</table>

V Now try to imagine the list your best friend would write down about you.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
</table>
1. Do some characteristics appear over and over?
2. Did you feel like having any of the other people react to your listings of their presumed views of you?
3. Did you ask anyone to make their own lists before you showed them your list?
4. You could try the same thing for aptitudes and talents; interests and hobbies; and vocational fields, jobs and occupations.
5. Have you ever tried a Q sort? You take a large number of small cards each bearing the name of a trait or characteristic and sort them into piles according to your preferences. For example, most like me, least like me. Then you try to order the piles you have made. You also go through the whole thing again trying to imagine how important people in your life would view you.
6. Perhaps your most important entries may be in the wishes, hopes and daydreams column. Take one of your entries here and set up a series of actions or plans that might be necessary for you to carry out in order to make the dream a reality.
SELF-STUDY IN VOCATIONAL DEVELOPMENT

See what kinds of entries you make on this important page toward your future

<table>
<thead>
<tr>
<th>Interest and Hobbies</th>
<th>Aptitudes and Talents</th>
<th>Vocational Fields</th>
<th>Wishes, Hopes Daydreams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos</td>
<td>Neg*</td>
<td>Pos</td>
<td>Neg**</td>
</tr>
</tbody>
</table>

*Hobbies that other people like that bore you to death
**Negative--jobs or occupations you would hate to go into
APPENDIX B

OCCUPATIONAL CATEGORIES
(One-Digit Occupational Groups)

0-1 Professional, Technical, and Managerial Occupations
2 Clerical and Sales Occupations
3 Service Occupations
4 Farming, Fishery, Forestry and Related Occupations
5 Processing Occupations
6 Machine Trades Occupations
7 Bench Work Occupations
8 Structural Work Occupations
9 Miscellaneous Occupations

0-1 PROFESSIONAL, TECHNICAL AND MANAGERIAL

This category includes occupations concerned with the theoretical or practical aspects of such fields of human endeavor as art, science, engineering, education, medicine, law, business relations, and administrative, managerial and technical work. Most of these occupations require substantial educational preparation (usually at the university, junior college, or technical institute level).

2 CLERICAL AND SALES OCCUPATIONS

This category includes occupations concerned with preparing, transcribing, transferring, systematizing, and preserving written communication and records, collecting accounts, distributing information, and influencing customers in favor of a commodity or service. Includes occupations closely identified with sales transactions even though they do not involve actual participation.

3 SERVICE OCCUPATIONS

This category includes occupations concerned with performing tasks in and around private households; serving individuals in institutions and in commercial and other establishments; and protecting the public against crime, fire, accidents, and acts of war.

4 FARMING, FISHERY, FORESTRY, AND RELATED OCCUPATIONS

This category includes occupations concerned with growing, harvesting, catching, and gathering land and aquatic plant and animal life and the products thereof; and occupations concerned with providing services in support of these activities.
5 PROCESSING OCCUPATIONS

This category includes occupations concerned with refining, mixing, compounding, chemically treating, heat treating or similarly working materials and products. Knowledge of a process and adherence to formulas or other specifications are required in some degree. Vats, stills, ovens, furnaces, mixing machines, crushers, grinders, and related equipment or machines are usually involved.

6 MACHINE TRADES OCCUPATIONS

This category includes occupations concerned with feeding, tending, operating, controlling, and setting up machines to cut, bore, mill, abrade, print, and similarly work such materials as metal, paper, wood, and stone. Throughout this category the overall relationship of the worker to the machine is of prime importance. At the more complex levels, the important aspects of the work include understanding machine functions, reading blueprints, making mathematical computations, and exercising judgment to attain conformance to specifications. Coordination of the eyes and hands is the most significant factor at the lower levels. Disassembly, repair, reassembly, installation, and maintenance of machines and mechanical equipment, and weaving, knitting, spinning, and similarly working textiles are included in this category.

7 BENCH WORK OCCUPATIONS

This category includes occupations concerned with the use of body members, hand tools, and bench machines to fit, curve, grind, carve, mold, paint, sew assemble, inspect, repair and similarly work relatively small objects and materials, such as jewelry, phonographs, light bulbs, musical instruments, tires, footwear, pottery, and garments. The work is usually performed at a set position in a mill, plant, or shop, at a bench, worktable or conveyer. At the more complex levels, workers frequently read blueprints, follow patterns, use a variety of handtools, and assume responsibility for meeting standards. Workers at the less complex levels are required to follow standardized procedures.

8 STRUCTURAL WORK OCCUPATIONS

This category includes occupations concerned with fabricating, erecting, installing, paving, painting, repairing and similarly work structures or structural parts, such as bridges, buildings, roads, motor vehicles, cables, airplane engines, girders, plates and frames. The work generally occurs outside a factory or shop environment, except for factory production line occupations. Tools used are hand
or portable power tools, and such materials as wood, metal, concrete, glass and clay are involved. Workers are frequently required to have a knowledge of the materials with which they work, e.g., stresses, strains, durability, and resistance to weather.

9 MISCELLANEOUS

This category includes occupations concerned with transportation services; packaging and warehousing; utilities; amusement; recreation; and motion picture services; mining and logging; graphic arts; and various miscellaneous activities.

OCCUPATIONAL DIVISIONS
(Two-Digit Occupational Groups)

PROFESSIONAL, TECHNICAL AND MANAGERIAL OCCUPATIONS

00 Occupations in architecture and engineering
01 Occupations in mathematics and physical sciences
02 Occupations in life sciences
04 Occupations in social sciences
05 Occupations in medicine and health
09 Occupations in education
10 Occupations in museum, library, and archival sciences
11 Occupations in law and jurisprudence
12 Occupations in religion and theology
13 Occupations in writing
14 Occupations in art
15 Occupations in entertainment and recreation
16 Occupations in administrative specializations
18 Managers and officials, n.e.c.
19 Miscellaneous professional, technical, and managerial occupations

CLERICAL AND SALES OCCUPATIONS

20 Stenography
21 Computing and account-recording occupations
22 Material and production recording occupations
23 Information and message distribution occupations
24 Miscellaneous clerical occupations
25 Salesmen, services
26 Salesmen and salespersons, commodities
28 Merchandising occupations, except salesmen

SERVICE OCCUPATIONS

30 Domestic service occupations
<table>
<thead>
<tr>
<th>Code</th>
<th>Occupation Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Food and beverage preparation and service occupations</td>
</tr>
<tr>
<td>32</td>
<td>Lodging and related service occupations</td>
</tr>
<tr>
<td>33</td>
<td>Barbering, cosmetology, and related service occupations</td>
</tr>
<tr>
<td>34</td>
<td>Amusement and recreation service occupations</td>
</tr>
<tr>
<td>35</td>
<td>Miscellaneous personal service occupations</td>
</tr>
<tr>
<td>36</td>
<td>Apparel and furnishings service occupations</td>
</tr>
<tr>
<td>37</td>
<td>Protective service occupations</td>
</tr>
<tr>
<td>38</td>
<td>Building and related service occupations</td>
</tr>
<tr>
<td>39</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Farming, fishery, forestry, and related occupations</td>
</tr>
<tr>
<td>41</td>
<td>Plant farming occupations</td>
</tr>
<tr>
<td>42</td>
<td>Animal farming occupations</td>
</tr>
<tr>
<td>43</td>
<td>Miscellaneous farming and related occupations</td>
</tr>
<tr>
<td>44</td>
<td>Fishery occupations</td>
</tr>
<tr>
<td>45</td>
<td>Forestry occupations</td>
</tr>
<tr>
<td>46</td>
<td>Hunting, trapping, and related occupations</td>
</tr>
<tr>
<td>47</td>
<td>Agricultural service occupations</td>
</tr>
<tr>
<td>48</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Processing occupations</td>
</tr>
<tr>
<td>50</td>
<td>Occupations in processing of metal</td>
</tr>
<tr>
<td>51</td>
<td>Ore refining and foundry occupations</td>
</tr>
<tr>
<td>52</td>
<td>Occupations in processing of food, tobacco, and related products</td>
</tr>
<tr>
<td>53</td>
<td>Occupations in processing of paper and related materials</td>
</tr>
<tr>
<td>54</td>
<td>Occupations in processing of petroleum, coal, natural and manufactured gas and related products</td>
</tr>
<tr>
<td>55</td>
<td>Occupations in processing of chemicals, plastics, synthetics rubber, paint, and related products</td>
</tr>
<tr>
<td>56</td>
<td>Occupations in processing of wood and wood products</td>
</tr>
<tr>
<td>57</td>
<td>Occupations in processing of stone, clay, glass and related products</td>
</tr>
<tr>
<td>58</td>
<td>Occupations in processing of leather, textiles, and related products</td>
</tr>
<tr>
<td>59</td>
<td>Processing occupations, n.e.c.</td>
</tr>
<tr>
<td>60</td>
<td>Machine trades occupations</td>
</tr>
<tr>
<td>61</td>
<td>Metal machining occupations</td>
</tr>
<tr>
<td>62</td>
<td>Metalworking occupations, n.e.c.</td>
</tr>
<tr>
<td>63</td>
<td>Mechanics and machinery repairmen</td>
</tr>
<tr>
<td>64</td>
<td>Papermaking occupations</td>
</tr>
<tr>
<td>65</td>
<td>Printing occupations</td>
</tr>
<tr>
<td>66</td>
<td>Wood machining occupations</td>
</tr>
<tr>
<td>67</td>
<td>Occupations in machining stone, clay, glass, and related materials</td>
</tr>
<tr>
<td>68</td>
<td>Textiles occupations</td>
</tr>
<tr>
<td>69</td>
<td>Machine trades occupations, n.e.c.</td>
</tr>
<tr>
<td>70</td>
<td>Bench work occupations</td>
</tr>
<tr>
<td>71</td>
<td>Occupations in fabrication, assembly, and repair of metal products, n.e.c.</td>
</tr>
<tr>
<td>Code</td>
<td>Occupation Description</td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
</tr>
<tr>
<td>71</td>
<td>Occupations in fabrication and repair of scientific and medical apparatus, photographic and optical goods, watches and clocks, and related products</td>
</tr>
<tr>
<td>72</td>
<td>Occupations in assembly and repair of electrical equipment</td>
</tr>
<tr>
<td>73</td>
<td>Occupations in fabrication and repair of products made from assorted materials</td>
</tr>
<tr>
<td>74</td>
<td>Painting, decorating, and related occupations</td>
</tr>
<tr>
<td>75</td>
<td>Occupations in fabrication and repair of plastics, synthetics, rubber, and related products</td>
</tr>
<tr>
<td>76</td>
<td>Occupations in fabrication and repair of wood products</td>
</tr>
<tr>
<td>77</td>
<td>Occupations in fabrication and repair of sand, stone, clay and glass products</td>
</tr>
<tr>
<td>78</td>
<td>Occupations in fabrication and repair of textile, leather, and related products</td>
</tr>
<tr>
<td>79</td>
<td>Bench work occupations, n.e.c.</td>
</tr>
</tbody>
</table>

**STRUCTURAL WORK OCCUPATIONS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Occupation Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>Occupations in metal fabricating, n.e.c.</td>
</tr>
<tr>
<td>81</td>
<td>Welders, flame cutters, and related occupations</td>
</tr>
<tr>
<td>82</td>
<td>Electrical assembling, installing, and repairing occupations</td>
</tr>
<tr>
<td>84</td>
<td>Painting, plastering, waterproofing, cementing and related occupations</td>
</tr>
<tr>
<td>85</td>
<td>Excavating, grading, paving, and related occupations</td>
</tr>
<tr>
<td>86</td>
<td>Construction occupations, n.e.c.</td>
</tr>
<tr>
<td>89</td>
<td>Structural work occupations, n.e.c.</td>
</tr>
</tbody>
</table>

**MISCELLANEOUS OCCUPATIONS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Occupation Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>Motor freight occupations</td>
</tr>
<tr>
<td>91</td>
<td>Transportation occupations, n.e.c.</td>
</tr>
<tr>
<td>92</td>
<td>Packaging and materials handling occupations</td>
</tr>
<tr>
<td>93</td>
<td>Occupations in extraction of minerals</td>
</tr>
<tr>
<td>94</td>
<td>Occupations in logging</td>
</tr>
<tr>
<td>95</td>
<td>Occupations in production and distribution of utilities</td>
</tr>
<tr>
<td>96</td>
<td>Amusement, recreation, and motion picture occupations, n.e.c.</td>
</tr>
<tr>
<td>97</td>
<td>Occupations in graphic art work</td>
</tr>
</tbody>
</table>

**THREE-DIGIT OCCUPATIONAL GROUPS**

Note: On page three of Volume II of DOT the third very detailed breakdown called "Three-Digit Occupational Groups" begins.
PANEL OF REACTORS

Bernardine Marshall
Attorney
Newark, N.J.

Lucile Lichtblau
Housewife
Englewood, N.J.

Catherine Merlino
Student
Newark College of Engineering

Shirley A. Reilly
Personnel Division
E. I. DuPont De Nemours & Co.
Wilmington, Delaware

William C. Bingham
Moderator
Rutgers University
Bernardine Marshall

It is very difficult to disagree with anything that Dr. Matthews presented in her keynote address this morning. She made many suggestions that all guidance counselors should find very useful. I am certain that if you were able to translate her suggestions into practice, then all youngsters would receive better guidance in our public schools.

There are a couple of points, though, that I would like to underscore. The first has to do with Dr. Matthews suggestions about occupational freedom. Unfortunately, there are many things that go on in our schools that do not help young women to find occupational freedom. Guidance counselors ought to be leading the battle for such freedom. And I think that if this kind of position is very thoughtfully accepted and made a part of your mode of operation, then you will have an opportunity to show your students that they are not limited to just traditional pursuits, that they should not seek occupational success only by going to college. I understand from talking among you that your performance in so many instances is evaluated by the number of students that you help to get into college. This is unfortunate! And it isn't necessary. And it certainly does not lead a productive and satisfying life for counselors. In fact, it makes it difficult for them to find satisfaction in helping certain students.

I think another suggestion that Dr. Matthews made to you about the use of the Dictionary of Occupational Titles can make the DOT a much more effective tool than it often has been. Here you'll have an opportunity to expose your students to many vocational areas in which they can earn a living and experience a very gratifying life. In addition, it was pointed out to me, that such a use of the DOT is really a gift that is going to cost the school system absolutely nothing and possibly it will produce great results. In ghetto areas, for instance, where you have students whose parents are of limited financial means and limited education that kind of use of the DOT may be very important because they have had no other opportunity to really see what there is in this world for them to do. And, of course, in this time of great change--when both technological change and social change occur so rapidly--there will be an ever-evolving opportunity for new jobs and new techniques and new skills to emerge. And of course this is something that you counselors have to make known to all of your students. One of the things that really disturbs
me in this area of vocational guidance is that I don't believe (and this is my personal belief) that the school authorities or the authorities who make policies in schools have seriously enough accepted the vocational aspects of guidance. I think that you, the counselors, have the challenge to make these school authorities and administrative officers understand that they cannot "tell" children and young adults what is good for them occupationally. Instead, young people have to be given an opportunity to expand their own experiences and skills so that they will be able to offer something to this new world. And I believe in our life time we'll see a new world. Of course there is great resistance to change based on existing attitudes, but the change will come anyway, and I think ultimately that we will overcome.

Another point made to you by Dr. Matthews which is very valuable is the suggestions she made are useful, not only in counseling girls, but in counseling men and boys as well. So if all young people are counseled as wisely as she has suggested, I think in time that the woman's role as a liberated person will actually come into being.
Lucile Lichtblau

I am the housewife, I am the real live housewife, I'm the pal. And I think it is my job to respond to the question that was just brought up. One of the very complex problems is how do you fit a career into a life as a mother and a wife and the answer is complex.

There are no simple solutions to this problem. A housewife is not a fixed point in time, it's not a profession for ever. This is something you do and you may enter and you leave, and it involves the entire cultural problem of women's liberation. I think it is not so much that men are biased against women or that men are biased against themselves. It is that we are dealing with a severe cultural problem. That is, what do we do with the children? You want to get married; then you want to have children. Then what do you do with them?

If you want to go back to work, you have a couple of solutions that are available to you. One of them today is in the realm of pure fantasy. That is to have a housekeeper, because we have all seen these ads in the paper. "Wanted: woman who loves children, own room and television, air conditioning; salary no object." She loves children but she loves her own and not necessarily yours. And she has her own room and television. And the salary that you considered to be of no object, she considers very much to be an object, and you cannot meet it. And she does not exist any more.

If you try to tell people that they can have careers and they can have children and they can adequately carry on a productive community life, that also, in terms of today, right now, is a little bit of a fantasy. By this I don't mean to be retrogressive or reactionary. We have made it very difficult for ourselves to operate in a liberated fashion. Society has not helped us and we have not, all of us, men or women, have not helped ourselves.

The other thing you always see associated with women's liberation is day care centers. But this is not the answer to our problem. You cannot start sticking children in day care centers and walk out on them, and go off and do brain surgery. You have to come up with answers that are compatible with the way in which you live and with the various life styles that exist in the country today.

Many other problems of employment are also very complex. We have low-middle class and we have upper-middle class; and we have women with great leisure time and a lot of brains playing tennis;
and we have ladies in unemployment offices because they cannot get jobs; and we have people without skills and we have people who are over-skilled. And somehow or other we have to try to come up with a certain kind of flexibility of thinking so that you can utilize this vast work force in some productive creative fashion, because we have vast problems in this country. We have problems of education, of housing, of pollution and somehow or other the women of this country have to be made productive in a meaningful fashion. And I think one of the ways in which we can start thinking about this (we were talking about this at lunch, Dr. Matthews and I) is, of course, the sharing of responsibility between men and women. I think we both have to start switching and changing our ideas of our roles so that men take over some of the jobs usually regarded as a woman's work, and women must take over some of the work generally conceived of as being a man's job. That is, going out into the world. This kind of arrangement will help somewhat.

I think another thing that will help somewhat is having all sorts of places throughout the community to which adults and children can go. I think that when Dr. Matthews spoke of learning centers and many people speak of extended day care centers we're all talking about the same kind of things. I think of places where children can be where they can have good enriching experiences and where adequately trained people can help to look after them. I think this is something that can be worked toward.

I think also we have to think in terms of planning an entire life as a span. In other words, you may work and then you may get married and have children, and you may take care of those children, and then you may go back to work. I think that we have to educate people in this sense that you don't just go out and work and dump your children on somebody else forever or forego having children. Sometimes you have to give up certain things, such as your career for a while then you go back to it because these are the demands that society is realistically making on you. I think that one of the major things that we have to deal with are these realistic demands and the goals that people harbor within them.

I think we have to come to some compromise within ourselves, and if we guide people, we have to guide them towards these compromises, because otherwise we will have head-on collisions which are most unpleasant. I think one of the flexibilities of a housewife is that one needn't sit home and cook and bake and constantly worry about the children. Many of the housewives that I know are doing very important things in the community.
A group of housewives who are on welfare got together and formed a welfare mother's unit in my community and found out that there was money available for free lunch programs. They obtained the program for the children whose parents were on welfare in my community. They did this by themselves. They were not professional, and they did it successfully, and with very little fuss.

Another group of us have been able to get a mental clinic which will be opening shortly in the Englewood-Teaneck area because we found out where money was available. We found out how you go about getting that money. We interested our two communities in contributing some of the funds and the state is contributing the rest. We will have that center somewhere around December. We started this effort last March, so that was done in less than one year. Only housewives could have done this because we had the time and we had the expertise. We had the time, and we knew the community, and we knew the needs of the community.

Another group of housewives started an afterschool enrichment program because they sensed there was the need in their community.

I think housewives are going out into the world and they are finding out what their communities' needs are, and they are finding out how to satisfy them. This is something that we never learned when we went to school. We never knew that housewives could do this. We never knew that people who stayed home and didn't have a profession could affect the lives of people in their communities in a most meaningful fashion and we are doing it. There must be thousands of us, and we are not getting paid for it, but we are doing it. We are having a good time. We are enjoying ourselves, and we are contributing to the life of our community. I think it is important to tell young people these things. I think it is important for them to know that these options are open to them.

I think one last group of things I would like to mention is that I think that guidance can and should fight for a few things for all of us. That is, I think flexibility in scheduling in business and industry would help. If businesses were to make their schedules more varied, more women could take part. This means different shifts such as hospitals have. Many people go into nursing and stay in nursing because there are three or four shifts in the work day. And while the children are in school, they can be doing some very fine work over at the hospital. I think that it is extremely important for industry to enter into this phase also. I think the sponsorship of community centers and the
extended notion of day care centers is something to be fought for because unless we have these things women will never get out of the house while they have young children. And we need these women. And I think this is something that guidance people can help us to fight for.

I think the sponsorship of studies to determine job needs should be encouraged. In other words, what do we need and what don't we need. Dr. Matthews said maybe we have too many teachers. I think we have to know what communities will be needing ten, twenty, thirty years from now. And what they will not be needing. Then we have to try to introduce these ideas to the young people so that they will know about them.

And the fourth thing is this: I think that you have to try to use the people, housewives, mothers, fathers in your community to help you guide your students. There is so much expertise, so many of us have tried different things and have failed and have tried different things and have succeeded. We can talk to young people about our successes and about our failures because they have meaning, because we have gone through them and because we can draw from our experiences something that is meaningful for young people. I think we should be asked.

I also think that we should be asked to help sponsor young people to get them into colleges that they might otherwise not have a chance to get into. There are many young people whose family, mothers, fathers, sisters, brothers never went to college - who don't have any connection with college or any ideas of how one might get a child into one of our professional schools. We have many of these kids in our community. There are a great many of us sitting here on the side lines who have been to these schools who would be very happy to talk to these youngsters, to take them to the schools, to talk to the people in the schools and sponsor these kids. I think we should be asked to do these things, and I think it's another thing that guidance people all over the country could be doing. In other words, while housewives are utilizing the community, I would like the community to utilize the housewives and I think that you can all help us to do that.
The basic topics that I would like to talk about are why I chose engineering and why I feel that there is a place for girls in engineering.

I would like to go back a few years to when I was in grammar school. I was pretty good in science and math and hated English and history. I entered a couple Science Fairs (forced by my Science teacher, of course) and I did pretty well. Then in high school I took the academic curriculum. I went all through algebra, geometry, trigonometry, and physics. The summer between my junior and senior years of high school I was accepted at NYU on a National Science Foundation Grant for computer programming for high school seniors. That was the turning point in my life: I decided to become an engineer.

At this NYU program there were 18 of us who lived there for eight weeks. We were all the same age and from the same general background. One night we were talking and the subject of "what do I want to be" came up. Someone wanted to be an astrophysicist, someone else a mathematician, and then someone mentioned engineering. That sounded like a good idea, so I looked into it.

When I got home that fall, I wrote away to different schools of engineering. I applied to Newark College of Engineering and started application proceedings at New York University and Massachusetts Institute of Technology. I was accepted into NCE right away, so I went there. It was the closest to my home, and I was able to commute quite easily. Three years have gone by, and I'll be graduating in June.

At NCE, it's a unique feeling when you walk into the classroom the first day of school and you are the only girl. The guys don't know what to expect either. They think "there's a girl in the class; what are we going to do?" Some didn't want to be around girls—that's why they went to an engineering school.

During that first semester when I was the only girl in the class, I got along great with the guys. I was one of them in the respect that I was a fellow member of the class and yet, I retained my femininity. I kept wearing skirts, and carrying a pocketbook. However, I did have to carry an attache case because there were so many books.

You have to recognize that you are going to be different in a predominately male society such as engineering. You have to go into that atmosphere with the knowledge that you are going to be stared at. But after a while, you are in class and a secretary
walks down the hall and the boys say, "boy, there is a girl!"
The secretary is a girl, but you're just one of the kids in the class. They won't think of you as a girl all the time.

However, at times you appreciate that they do. When they wanted to tell jokes, they have said, "will you leave the room?" So, I'd get up and leave. Five minutes later when I return, they are happy that they could be their own "masculine" selves and I'm happy that they respect me. They could be as masculine as they wanted as long as they told me ahead of time.

Is there a place for girls in engineering? Of course! Engineering doesn't have to be a dirty field. You don't have to put on coveralls and go out and survey or go down into the sewers. You can do these things if you want, but, you don't have to if you want to be an engineer. It's very possible to do a lot of creative, inventive, and technical things.

Have you ever tried to clean an oven and you can't reach inside to get at the corners? Imagine if a woman had designed it; you know it would be much easier to clean. Or an iron, wouldn't you love to take them apart? Now if women had engineered them, had designed them, you would be able to take the whole thing apart, put it into the sink, and scrub everything off. Don't you think that there is a place for girls in engineering?

Finally, I want to know why you waited so long to realize that there is a place in the technical world for women. Two years ago my sorority sent about two hundred letters to high schools in northeastern New Jersey. In these letters we volunteered to visit the high schools and talk to their junior and senior girls about science and engineering. From two hundred letters we received four replies. Since we got only four replies we thought that you thought that as a sorority we were too social and not serious. Therefore, the next year we tried to get to you through the NCE Chapter of the Society of Women Engineers. We sent out similar letters to the same schools, but, this time no replies.

We sent out all these letters, we are very willing to take a few days off from school, and you are not receptive to the idea. We, the future women engineers, would like to see more girls in engineering. Why aren't you pushing it too?

I would like to tell you about the girls that are at NCE now. Out of about 3000 full time day students, about 80 of those are women. When I was an orientation group leader for 32 new girls, I asked who pushed them into engineering. Each girl said it was her own idea, the guidance counselor never suggests engineering. When I told my high school guidance counselor that I
Because of the nature of our business, the majority of positions with Du Pont at the managerial and professional level are filled by people with Chemical and Engineering backgrounds. Since colleges and universities turn out relatively few women with this type of training, the ratio of male to female college graduates in technical disciplines is reflected annually in our new hires. The United States Department of Labor has reported that 38% of the college degrees conferred on women in one year went to education majors, another 40% covered the Humanities, the Arts and Social Sciences. This same report stated that women account for only 8% of all registered scientists - a total of 20,164. Of the scientists listed, educational attainment was high, 33% were at the doctoral level, 2% had professional medical degrees, 28% had masters degrees, and 26% had bachelors degrees. Fewer than 1% reported less than a bachelor degree. Finding qualified women in technical disciplines is one of our biggest problems in recruiting.

I'm glad Cathy mentioned the lack of encouragement she received when she became interested in an Engineering career because I believe this is the root of the problem - a lot of the responsibility must rest with the guidance office. Guidance people tend to discourage girls who want to enter areas that are just a little bit out of the ordinary. If you have a flair in a certain field, they suggest you teach it girl because that's all you will be able to do.

While Du Pont employs women at all levels, including laborers and skilled operators, only 2 1/2% are in categories listed as officials, managers, and professionals. This figure may seem low but according to the Civil Service Commission, it's a better showing than the Federal Government where less than 2% of the women employed hold managerial positions.

Apparently the problems regarding the position of women are not confined to the United States, or to what we would term the more advanced countries. A recent newspaper article quoted Charan Singh, who is the chief minister of the Uttar Pradesh State in India, as saying that women make good mothers, nurses and doctors, but are wanting as administrators. He has recommended to Prime Minister Indira Gandhi a constitutional amendment barring women from administrative posts in Government.

As to the American Law, the amendment that Congress affectionately terms, "That sex thing," is still kicking around. It was first proposed 47 years ago as the next logical step after giving women the right to vote. Of course using their first vote to elect Warren Harding may have retarded the process.
wanted to go into engineering, she said, "Oh really; are you sure you will be able to make the grade or put up with it?" If a girl is interested in science or math, the counselor tells her to go into teaching. But, will she be happy standing at a blackboard for thirty-five years?

The next time you want to clean some household appliance or take something apart, think of what I have said. If a girl had invented it or designed a renovation, think of how much happier you would be.

I have spoken about women in engineering, but, don't think I want you to stop at engineering. I wish that you would persuade more girls to go into technical fields; it doesn't have to be only engineering.
Surprisingly enough, it may very well be held up by the demonstrations of over-zealous women who have angered many Senators who had intended to vote for it. If the legislation is passed, it will take precedence over state laws protecting women from such things as optional overtime. In only 11 states can a woman choose to work overtime, regardless of her need or desire. In addition to limiting the hours a woman can work, state laws also provide rest periods with chairs available for comfort and specify weight-lifting regulations. Some are explicit about the types of jobs women are not allowed to handle. For example, in 10 states they cannot be employed as bartenders. There are laws that prohibit their working around coke ovens, as bell-hops or as bowling pin-setters, or to drive trucks of over one-ton capacity.

Although it is in the offing, the Federal Government has not as yet issued an order outlining guidelines on the employment and upgrading of women. However, the trend in legislation is changing. Drastic revisions are already under consideration, and they go beyond the labor regulations. Some, for example, will affect marriage and divorce laws. Many states can currently proceed against both parents for child support. Others have laws pending that will provide alimony based on the individuals ability to pay - regardless of sex.

I believe it is possible for a girl to be accomplished, high salaried, and well-motivated in a world completely apart from homemaking and still be all girl. It is not necessary to sacrifice femininity for success. A woman can succeed in a man's world, and we may as well face it - the working world is a man's world. After all, there are mostly men in it. Women constitute 37% of the work force and there is no doubt it would be seriously handicapped without them. But it's important for a woman to succeed, not only as a woman, but as a lady (and I'm aware that in some circles today that's a dirty word).

Let's go back to that "sex thing" for a moment, I mean the law. An article in the August 24, 1970, issue of U.S. News & World Report states that passage of the amendment could invalidate as many as 1,000 state laws. This bill has been introduced in the House of Representatives every year since 1923, but has never come to a vote until August 10 of this year when it passed by a surprising margin of 350 to 15 votes. Democratic Representative Martha W. Griffiths of Michigan, the sponsor of the amendment, is a perfect example of the success of the feminine woman. No less than 341 of those 350 votes came from men. You can't get much more successful than that. Her charm even invaded the House floor where during a debate, an opponent said "the gentle lady from Michigan is delightful, delectable, and dedicated."
There was a time when little boys wanted to grow up to be firemen. Today they want to grow up to be astronauts. But for little girls, the goal has not been changed with the times. Today, as in the past, most of them want to be mommies and their ideas seldom vary. Some may find it necessary to combine this primary goal with a secondary one — success on a job. However, the first ambition remains their paramount consideration.

Some women are career minded. They want and deserve equal pay for equal work. No one would deny that they have been restricted institutionally and economically and in their choice of jobs. The bright ones fully realize that the old cliché about the woman executive is no longer true. The days are long gone when a successful woman disguised herself with a severe hair style, no make-up, metal-rimmed glasses, and man-tailored suits and the only word for her shoes was sensible. Today's successful woman need only be well-informed in her field, secure in her femininity, and at home in a man's world. I guess everybody is entitled to his own idea of Utopia and maybe I'm old fashioned, but I really don't think that's too bad.

The women's liberation movement is receiving wide-spread attention. I've read all kinds of articles on the subject. The diversity in the adjectives used is absolutely amazing. Women are referred to as misunderstood, uninformed, under-valued, under-paid, unstable, incapable, superficial, overbearing, over-indulged. They're also termed intelligent, competent, dedicated, reliable, realistic, adaptable, and professional. One article called them a composite of contradictions and another referred to their "proven intellectual inferiority."

Despite all the publicity, women's lib has to date attracted a relatively small following — total active participation is estimated at approximately 50,000 — with over 29 million women in the labor force.

We must admit some progress has already been made. The woman's role is changing but perhaps not as much as we think. The old attitude is fairly well summed up in the words of Horace Vander Gelder* in explaining why he had decided to remarry. He said, "It takes a woman to bring you the fine things in life." He went into more detail:

* It takes a woman all powdered
  and pink to joyfully clean

* from "Hello Dolly"
  David Merrick Production
out the drains in the sink.
A fair-haired angel with soft golden
lashes and long dresden fingers
to carry the ashes.

And in the winter, she'll shovel the ice
and lovingly set out the traps for the mice.
She's a joy and treasure for practically
speaking.
To whom you can turn when the plumbing is
leaking.

So you see - there is some indication of change. Today
Horace wouldn't have had to resort to something as extreme as
getting married, he could call Josephine.
Bingham  There were a number of questions generated by people around the tables that I think have some general relevance. The one that I would like to raise first focuses on the kind of discrimination that many of you, here in the room, have felt at one time or another. The questioner says, "How can we change the picture or practices in college admissions so that current discrimination against women applicants will be stopped?" Of course, one of the essential features, I suppose, in getting rid of the prevalence of discrimination respecting college admissions, is to get a substantially higher proportion of women on college faculties because discrimination in hiring faculty is probably much more severe than it is with respect to the admission of students.

I think I would like to ask anybody on the panel to respond, not directly to this question, but to respond in terms of some of the experiences that she had in undergraduate school—some of the ways that she felt that she was being discriminated against, both in the application process and throughout college, simply because she was a woman. She might also discuss some of the ways she dealt with the feelings and the problems related to that set of circumstances. Would anybody like to respond to that question and share some experiences with us?

Marshall  When Dr. Bingham asked about discriminatory practices on campus, I thought of the time that I attended college during World War II. We had more women on the campus than we had men. The discrimination, if any, was practiced among us.

Bingham  Not only college attendance, but the entire occupational spectrum, changed dramatically during World War II. There were severe man-power shortages and women were welcome, for example to drive trucks over one ton and so on because men weren't available.

Another question related to some areas of discrimination that people may want to respond to is "Don't you feel that women's liberation will eventually lead to 'excessive' equalization, where women will be expected to participate equally in the draft?" How do you respond to that? Is it possible that attempts at equalization of opportunities will lead to equal sharing of responsibilities relating to military protection, and what if it does?

Matthews  I have thought a great deal about this question, and I want to say something that may sound as though I am not being fair, but I am.
I think one of the most profound movements towards stopping war in the world would be to have just this happen, to have women participate in dying in greater numbers on battle fields of the world as they now do as nurses and in the medical professions in the battle fields.

Now the other reaction I have is, I think every guidance counselor before me must take a very critical look at the so-called liberation movement. First of all, I think it's a gross error in titling. It represents some 40 or 50 distinct types of movements of which only the more (I'll say it the way I feel it) only the more disgusting evidences of extreme and sometimes unbalanced people are presented through the television and news media.

One of the things we can do this afternoon is to take a look, and not be afraid to take a look, for example, at Federal employees groups, at the women's psychologist groups, at the women's sociologist groups, at the women's group of the American Association of University Professors, etc. If we do so we will find that many women are doing quiet and thoughtful kinds of things. Somehow or other, for example, a group like the New Jersey Personnel and Guidance Association might well advise the television stations in the area that when they publicize the kinds of actions and activities related to the debasement of sex, they are doing a great disservice to both men and women. They are not contributing to understanding, they are confusing the coming generation of girls. So I think that there is a great deal of understanding that can be promoted by appropriate professional activity.

The unfortunate habit of American news media is to grab a title and slap it on an extremely complex cultural movement within the whole society then only cover it in part in their news reporting.

Bingham There were several questions dealing with a variety of aspects of guidance programs ranging all the way from elementary school through colleges. Let me try to synthesize some of them and try to get the essence of some of the questions that I think various writers wanted to ask. I wonder if anybody on the panel would respond as to what she thinks might be appropriate ways for counselors to re-examine what happens to young women during the course of formal education: how are stereotypic impressions of occupational behavior encouraged; what kinds of instructional materials do girls remember responding to; what instructional
materials do you remember being influenced by; what kinds of attitudes did you encounter on the part of school personnel beyond the, "Well, if you're interested in math, wouldn't you really rather be a teacher" kind of posture; what other, perhaps more subtle, influences were you exposed to as a woman growing up in an educational system which is largely designed to maintain the status of males?

Lichtblau I think the most important deficiency was that no one ever mentioned to any of us women the many roles that we could play. Nobody ever mentioned the fact that we could be of service or that we could be leaders in our community. (I hate to keep harping on this community thing but I think it's important, and I think nobody ever talks about it, so I will.) The men were always the "doers" of society, and I think it's very important to start pointing out that women have enormous potential to be doers as well. They have so many years in which they can be trained, in which they can work in the community, in which they can then decide on doing something else. They can use all the things that they have gained working in the community to take on a new career. And women can be tremendous leaders and be tremendously meaningful in their society. This is something that was never pointed out to me. People always talked about specific jobs, as stereotypes, such as teaching, nursing, etc. I have nothing against those particular jobs, but nobody ever mentioned the broad picture. The world at large was not seen as our problem, as a woman's realm. And I think that is a terrible mistake.

Bingham Thank you Lucile. We are almost out of time and I will exercise the chairman's prerogative, as I usually do, to have the last word.

I think today, under the circumstances, even talking about the last word evokes some unpleasant stereotypes. (Responding to a raised hand) I'll give you thirty seconds of my time.

From the floor Alright I'll let you have the last word. Since we have so many vocational guidance people here on the high school level, as a happily married woman, I would like to urge them to educate their young men students to accept the right of woman, as a human, for occupational freedom. If we let the young fellows in on it, the future generation of women won't have to depend on making their own ways; their husbands will be part of it with them, and they will know about the changing role of a woman in her life pattern.
I think what has transpired today has placed before you, not only as professional counselors but as human beings, a number of challenges. I'd like to touch on some of the points that I think have been thrown up for you to respond to, not only by what you say today, but what you do for the rest of your lives. I have no intention to be exhaustive, I'm going to hit what I think were some of the highlights.

You've been challenged, for one thing, to ask for help—to ask for help in places where customarily you don't go looking for help, not only of other professionals in the community but of housewives, for example.

You've been challenged to offer to all students opportunities for stimulating experience, not because such experiences seem to be acceptable but because of what they do to the intrapyschic development of individual human beings. Many of the challenges in this area have focused on the mental health of girls, but I think they apply equally to boys, and I think they apply to boys particularly in the context of the comment of the last speaker from the floor that it is at least as important for men to be aware of the fact that women are discriminated against as it is for women to be aware of it.

You've been challenged to exercise your professional skills in a variety of ways in which we often get careless about exercising those skills. You've been challenged to listen carefully to girls (and the pleas they make) to have opportunities to be themselves and to give expression to the impulses that stir within them. Just to help them find the opportunity to experience their own potentiality instead of trying to be something that somebody out there in society defines as acceptable for people who wear skirts offers a challenge that demands all of your adroitness.

You've been challenged to pay particular attention to the little things that are so often taken for granted. You know the kind of things I mean; the awareness that "I'm the only one who carries a pocketbook" or "I'm the only one that wears a skirt." Things that are so easily overlooked but so critical to the self-perceptions that make it possible for any human being to look at himself and to try to be what he would like to realize. You have been challenged to remember that every individual wants to be perceived as important and unique.
You've been challenged in a multitude of ways today, to help people understand themselves. You've been challenged not to wait so long to do some of the things that you know are professionally sound and humanly correct. In effect, you've been challenged not to "cop out" by retreating to the security of your office. You've been challenged not only to listen but to respond appropriately to all of the pleas the students make to you. You have been challenged to stop seeking simplistic solutions to complex problems.

I'd like to add a challenge of my own that I don't think is directly manifested in the things that other people have been saying today. I'm rather stricken by the fact that although a majority of the counselors in New Jersey are male, that the distribution of those in attendance at this meeting is what it is--I would guess just by glancing around the room that about 75% of the people here today are not males. I wonder what it is in our professional behavior that permits counselors, in an economy that is drastically in need of all the help that is available, not to strive for effective use of women's resources and potentials. What is it in our society that permits so many counselors to pretend that the subject matter of today's conference is not of relevance to what they are doing or not important enough for them to leave their job for one day? There's no way to know how much that kind of unconcern accounts for today's attendance, but I would challenge you to find out how much is and to do something about it.
EPILOGUE

The program represented by this publication was an effort to address some of the salient issues related to the occupational status of women in American society. The questions raised on the printed program for the Conference require considerable further attention. Those questions were presented to participants as follows:

"In what ways can professional counselors help to elevate the occupational status of women when:

1. many occupations and jobs, in totally arbitrary fashion are closed to women?
2. serious exclusionary practices are camouflaged by token gestures of equality?
3. social pressures generate distressing role conflicts for career-minded women?
4. all women, irrespective of whether they work outside the home, are expected to be excellent homemakers and mothers?
5. some women feel guilty because implementing career plans means neglecting their families?
6. some men never take women's ambitions seriously; others are threatened by them?
7. young women are cautioned that certain attributes (e.g., intelligence, independence, initiative) make them unattractive to men?"

The challenge was offered to Conference participants to work for solutions to such problems. The same challenge is relevant to the readers of this monograph.

-- Editor.