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JUNIOR COLLEGE--A REVOLUTION IN EDUCATION, REPORT OF A DIRECTED STUDIES CONFERENCE (CLEARWATER, FLORIDA, APRIL 13-14, 1967).

FLORIDA ST. DEPT. OF EDUCATION, TALLAHASSEE
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THIS CONFERENCE WAS SPONSORED BY THE FLORIDA STATE DEPARTMENT OF EDUCATION, DIVISION OF COMMUNITY JUNIOR COLLEGES, IN COOPERATION WITH THE SOUTHEASTERN EDUCATION LABORATORY. IT COVERED (1) THE JUNIOR COLLEGE PHILOSOPHY OF PROVIDING AN OPPORTUNITY FOR ALL STUDENTS, (2) PROPOSALS TO DEVELOP A JUNIOR COLLEGE CURRICULUM ESPECIALLY FOR THE DISADVANTAGED, (3) A COLLEGE REMEDIAL READING PROGRAM, (4) THE REVOLUTION IN EDUCATION CAUSED BY CURRENT SOCIOLOGICAL AND TECHNOLOGICAL CHANGES, (5) A GUIDED-STUDY PROGRAM WITH GROUP INSTRUCTION, (6) A DIRECTED-STUDY PROGRAM WITH INDIVIDUAL INSTRUCTION, (7) COUNSELING, BOTH GROUP AND INDIVIDUAL, AT MIAMI-DADE JUNIOR COLLEGE, AND (8) THE TOOLS OF COUNSELING IN CURRENT DIRECTED-STUDY PROGRAMS AT ST. PETERSBURG JUNIOR COLLEGE. THE CONFERENCE CONCLUDED WITH A PANEL DISCUSSION THAT TOUCHED BRIEFLY ON SUCH TOPICS AS FOLLOWUP AND EVALUATION DATA, THE GENERAL PROBLEMS OF GUIDED-STUDY PROGRAMS, VOLUNTARY OR REQUIRED DIRECTED-STUDY COURSES, STUDENT MOTIVATION AND LIMITATIONS, AND THE RESPONSIBILITY OF THE JUNIOR COLLEGE TO DO ITS BEST FOR THOSE STUDENTS THAT THE SENIOR COLLEGES CANNOT HANDLE. (HH)

JUNIOR COLLEGE

A Revolution in Education

A Directed Studies Conference
Sponsored by the Florida State
Department of Education, Division
of Community Junior Colleges, in
Cooperation with Southeastern
Education Laboratory

Clearwater, Florida
April, 1967

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FOREWORD

At the request of the conference planning committee, the Southeastern Education Laboratory has compiled the presentations made at a special conference of Florida junior colleges. This conference was held at the Clearwater campus, St. Petersburg Junior College, Clearwater, Florida, on April 13-14, 1967, and was quite properly titled, "Junior College - the Revolution in Education."

A limited number of additional copies are available upon request to Southeastern Education Laboratory, 220 East College Avenue, Tallahassee, Florida.

Appreciation is expressed to Mrs. Helen K. Berg of St. Petersburg, Florida, for the efficient job she performed in recording and transcribing the presentations.

TABLE OF CONTENTS

CONFERENCE WELCOME

Dr. Richard J. Ernst

On behalf of the program committee that has been involved in planning this Directed Studies Conference, let me say, "Welcome". We have attempted to develop a program that we feel meets the expressed desires of the community junior colleges in the state. As you will not by the program, we have included some "nuts and bolts" presentations and discussions, as well as addresses that we feel will set the tone for the conference.

I would like to review very briefly the steps that led to this conference so that you will be aware of the statewide interest and involvement that resulted in our meeting together today and tomorrow. Approximately three years ago, a number of junior colleges expressed a desire to learn more about directed or guided studies programs. When the State Council of Academic Affairs was formed, it was suggested that this council take the leadership in organizing a statewide conference on directed studies. Dr. Dayton Roberts, who chairs the council, asked that I head a committee to formulate the plans for such a conference. The committee was selected in October of 1966, and the planning for the conference was begun immediately. From October to the present, the program committee made every effort to achieve statewide involvement in planning the conference.

As you know, it is one thing for a program committee to decide what should be included in the conference and what should be done in

terms of arrangements, but it is quite another thing to get these things done. The person who has handled all of the details of the conference is Mr. Merle H. Morgan, Chairman of the Department of Directed Studies on the Clearwater Campus, who has served as the conference chairman. Merle and the members of his department have spent many hours in preparation for the conference.

I would also like to recognize Mr. Rex C. Toothman who represents the Southeastern Education Laboratory. The Southeastern Education Laboratory provided funds to bring Mr. Kenneth G. Skaggs from Washington to speak to us this evening, funds to publish the proceedings of the conference, and has made its printing facilities available to print the conference program. We certainly appreciate this expressed interest in the conference on the part of Southeastern Education Laboratory.

Each public junior college in the state was provided funds to defray part of the travel expenses of individuals who are attending this conference. These funds were made available through the special NDEA Project on Ideation at Lake City Junior College. The suggestion that these funds be used in this manner was made by Mrs. Marsha Raulerson. We made an agreement with Marsha that if she would allow us to use some of her funds, we would allow her time at the conference to discuss her NDEA-supported program at Lake City Junior College. Besides taking Marsha's money, we have also used a considerable amount of her time in assisting us in the development of the program.

Let me again say that we appreciate your coming to the conference. Your presence today is an expression of statewide interest in providing programs to serve the needs of all students who enter the open doors of the community junior colleges in the state of Florida.

THE JUNIOR COLLEGE PHILOSOPHY AND THE NEED FOR PROGRAMS DESIGNED TO ENSURE EDUCATIONAL OPPORTUNITIES FOR ALL

Michael M. Bennett

Some of you who drove in from the south may have noticed a sign at one of the motels down the street. It reads, "Welcome SPJC Latin Convention". Where they got the idea this was a Latin convention I do not know. But it is a good example of the position in which junior colleges often find themselves--unable to communicate to the general public that which we are attempting to do. Anyway, the example leads me into my assigned topic, "The Junior College Philosophy and the Need for Programs Designed to Ensure Educational Opportunities for All".

Last month the Council of Florida Public Junior College Presidents were called upon to answer several questions posed by state leaders. Among these were such questions as, "Would you rather be under the State Board of Regents?" Negative. Another question was, "Should the junior college salaries be the same as those of the lower division of the state universities?" Again, our answer was a unanimous "No" since we did not feel that the faculty would appreciate having the salaries of graduate assistants. Another question was, "Do you think you have as much status in the junior college in the eyes of the public as do the state universities?" Again, the answer was "No". We believe we have more.

These questions, nonetheless, are examples of the lack of knowledge regarding the objectives of our modern junior colleges possessed by people who are influential in shaping our future.

I realize this is carrying coals to Newcastle, but I cannot develop my assigned topic without reviewing briefly with you the background as I know it of the junior college movement. When you look at this background you are better able to appreciate why our lay leadership considers the junior college to be a sawed-off version of a university and why we are finding it difficult to communicate our more vital mission in today's world.

William Rainey Harper, generally conceded to be the father of the junior college movement, around the turn of this century attempted to correct a bad educational situation of his day. It seems there were many small four-year liberal arts colleges then operating on a financial shoestring. Their quality was questionable. His solution was to consolidate the four years to two. His contention was that they could do a much better quality job by devoting their resources to a two-year "junior college" program rather than over-extending them on a four-year program. You can imagine the enthusiasm that proposal generated among those four-year institutions. He did manage to persuade a couple of them actually to change their status. Then in 1902 the first public junior college came into being. It was organized, as were all from that day until at least 1920, with the view that the junior college resembled the four-year institution in every respect except that it

did not have the junior and senior years. Educators in the movement were highly defensive regarding their status and were very sensitive to the term "academic respectability".

After World War I "terminal" programs began to develop in the junior colleges. These came about because it became obvious that a single track program in the junior college was leaving far too many unmet true needs of students in its wake. We can quibble over semantics. "Terminal" is probably a poor designation for vocational-technical-occupational two-year programs. We have the same problem regarding a name for these new programs we are here to consider today. Directed? Guided? Tutorial? What <u>is</u> a good name? Perhaps you can make a contribution during this conference. Occupationally oriented programs in junior colleges are here to stay. They, on the whole, are helping to meet some needs in today's world. Thus, the junior college became dual-tracked.

The end of World War II marked the beginning of a new and excitingly different concept of the junior college. You know what happened when the G. I. came to college. You know that our tempo of living has changed. You know that our ways of making a living are changing. You know that our social order is in the process of turmoil and change. In fact, you can look almost anywhere and see change.

The planners of this program, and I had nothing to do with it, were indeed up with the times when they chose as their theme "Junior College, the Revolution in Education". Ladies and gentlemen, whether

you recognize it or not, and I believe you do, we <u>are</u> in a period of revolution in the junior college movement. I have no intention of minimizing the importance of the university parallel program in the junior college movement. We are, however, in the process of developing multi-track institutions willing and capable of meeting our post-high school needs today--not yesterday or a decade from now, but <u>today</u>. This concept is exciting, demanding, dynamic.

Naturally, we have extremists in our revolution. There are those on one side dedicated to the concept of academic respectability. On the other side are those who honestly believe the junior college should abandon all vestiges of collegiate procedure and become anything and everything anybody wants. The exciting factor in this revolution is to observe the reconciliation of these extremes into a movement related to serving human needs in a meaningful way.

Modern research has fairly well disproven the contention, taught in my student days as "fact", that there is a single intelligence. Furthermore, that you are born with this intelligence which would not change. Those with 115 I. Q. or better belonged in college. Those below 90 were relegated to menial labor. Modern research has pretty well proven that there are many intelligences and that these can change when the environment is changed. Furthermore, it is fairly well agreed that there are clusters of intelligences, just as there are clusters of endeavors. There is not just one thing that a person can do best. There are many things he can do well. We

have also learned that you can improve academic intelligence. This, you recall, was at one time thought to be fixed. It can actually be improved significantly.

We would be derelict in our revolution if we ignored the results of modern research. What does it mean to us? What does it mean to our way of life? How can we apply it to our educative efforts?

First and foremost, we can now do away with the idea that if a student comes to us lacking the "proper" background that he is destined to fail. By background I mean a combination of academic, social, and personal factors. Four years of English, three of mathematics, two of science, and several in social science with better than average grades are still the best preparation for college, but those without these qualifications no longer need be summarily relegated to the trades. Please do not conclude by that statement that I consider the trades inferior. My theme is that we will have better professional practitioners, technicians, and tradesmen when the persons involved are truly satisfied that what they are doing is best for them.

Today, we have a wonderful opportunity to help every student who comes to us, knowing what we know. The crux of the revolution is to apply that which we know. The student who presents himself to us with a disadvantaged background, either academically, socially, personally, or with a combination of deficiencies, need not be cast aside. I am not speaking of Negroes in particular--although many of this race are included among the disadvantaged. However, some

of the most disadvantaged students I have known have been from, white, affluent homes. We cannot afford under any circustances to assume that because a student displays the characteristics of the disadvantaged that he is stupid. His backgrcund, his frame of reference, is a result of forces which he can be taught to change. Such students are where they are for any number of reasons, many of them not of their own making.

Something good begins to happen to the student's maturity level when he reaches the junior college. Especially something good begins to happen when the student feels he has a chance. How do we give him this chance? We first of all give him a careful individual analysis. We find out where his deficiencies are. We write a prescription. We provide the means of fulfilling that prescription. In other words, we start him where he is with comprehensible material. We forget about blocks of time, academic respectability, traditional methods. We give the student a <u>real</u> chance. We instill into him some ambition. Now, if he muffs his chance, and many will, the hostility he once felt because the <u>system</u> was rigged against him will have a much better opportunity to be dissolved. So many students today feel that they are fighting the system. They are, to some extent, so long as we continue on our traditional way, ignoring the new research, methods and materials which are available.

I believe that the frame of reference for the philosophy of the directed studies program (or any other name by which it is called) is an extremely important part of the junior college revolution in

education. From this revolution I predict we will emerge much stronger. Our true purpose--to serve humanity--will become more attainable. We can do this, ladies and gentlemen, with the help of the directed studies program, with a basic foundation program, with dedication. If we need anything, it is an honest to God belief that we can serve better than we have served in the past.

As I said, I am carrying coals to Newcastle. Obviously, you are here because you are dedicated to the proposition that many of our people need help--that they are capable of receiving help. Together we believe that when we do give them the help they need--when we learn what it is they need--when we provide this help for them--when we permit them to progress on their own and achieve for themselves--then I think we will have made a significant constructive contribution to the purpose of the junior college in today's world.

PROPOSED CONSORTIUM
FOR THE
DEVELOPMENT OF A CURRICULUM FOR DISADVANTAGED STUDENTS
AT THE
JUNIOR COLLEGE LEVEL

Johnnie Ruth Clarke

Dr. Roberts has mentioned that this is a directed studies, basic studies, guided studies and tutorial studies conference. I would like to add one other description: it is also a compensatory studies conference.

We here at St. Petersburg Junior College believe that the junior colleges of the state of Florida are the one hope for higher education for many, many students of Florida. Students come to us from all groups, which may include Latins, Negroes, Whites, and be of all colors, even purple or green. The opportunity for post high school education for some of these people will come to them only through the junior colleges of Florida. Therefore, we are convinced that providing this opportunity is the task of the junior colleges. We are further convinced that only the junior colleges can provide the type of program that will best fit the needs of these people. We know that they can be helped. Surely, they come to use with many inadequacies, but we know now what the inadequacies are, and we know some means by which we can help them. We believe that it should be the role of the junior college to provide a program which can keep the door an "open door" for all who desire higher education in Florida.

Many of you have heard me preach the compensatory education gospel, and I am going to say the same thing over again. We believe

that these students whose scores are low on the traditional, standardized tests and whose high school transcripts sometimes look like what we call in good old ghetto "fiddo", come to us at the junior college because the door is open. We look at them and exclaim, "These people are not of college calibre! What are they doing here?" Well, who are we to say where they belong? They are here; they are with us. We may wish them away, but they will be coming in larger and larger numbers. If we are sincerely dedicated to the task that we have decided is the task of junior colleges, then it is our duty to provide some means of helping them.

In an effort to get something that we feel is a little different from our traditional guided studies or directed studies, we are considering the compensatory studies approach. We believe that the guided studies and the directed studies programs are doing a very good job of what they planned to do, that is to meet the needs of students who are already mobile. However, we feel that we have a large number of students in the junior colleges of Florida who need more than a directed studies program. They need a compensatory program. This is not intended as a criticism of the directed studies program.

A group of us from a few junior colleges has been working since October on a plan for developing a compensatory program for the disadvantaged students of Florida's junior colleges. This proposal requires that at least five junior colleges form a consortium

to carry out an experimental program which can be replicated by other junior colleges. We plan to be the testing group to see what will work, what is successful, and what can be useful at other junior colleges.

The project is a developmental one designed to produce a curriculum suited to the academic and social needs of disadvantaged students of the community junior college. A proposal for developing a measuring equation for the identification of the disadvantaged students and for the diagnosis of their needs has already been made. So this curriculum logically follows the development of some means of identifying and of diagnosing needs. It is proposed that this program of studies will enhance the self-concept, increase academic efficiency, and enrich the value system of disadvantaged junior college students.

The compensatory studies project emphasizes three important aspects of student development. The first is that disadvantaged students need to know something about themselves and their own potentialities; they should have good feelings about what they know about themselves and what they can do. The second is that we believe these students need to develop a value system which will sustain their educational growth but which does not necessarily mean that they will continue in a junior college. The third aspect is that we believe these students should have adequate knowledge of the various occupational fields in order to help them make choices

concerning their careers.

We are placing emphasis in this program on the ability of the student to make realistic choices. We feel that disadvantaged students have limited choices, and we want these students to be able to make realistic choices in terms of what they know about themselves, and of what they know about their situations. This is very important to us because once these students are able to make realistic choices, they can plan a sustaining program toward the realization of their goals. We believe that many disadvantaged students do not remain at the junior college because their goals are unrealistic, and in pursuing these goals they have too many barriers to overcome. On the other hand, these students may have attainable goals but may lack a value system that will sustain the type of deferred gratification which is necessary to achieve their goals.

Undergirding any attempt to help the disadvantaged student is the necessity of helping him to develop self-confidence. As a result of a recent survery he conducted, James Coleman has stated that one of the greastest barriers to school success for disadvantaged youth is their feeling of a lack of control of their own destiny. They do not think that they can manipulate the factors in their environment and so they drift along with the tide. The program we are suggesting will provide them with the knowledge and the skills which will enable them to alter their environment.

This proposed curriculum is designed to compensate for the inadequacies which hinder educational progress and to prepare deserving

students to enter into a college transfer program, or into a vocational or technical program which may be outside of the realm of the present junior college. Further, the student may even choose to enter the world of work as an alternative at this moment. No matter what the choice is, the emphasis is upon equipping these students with the type of background which will help them to make realistic career choices and which will furnish them a motivational and academic basis for the realization of these choices.

The five community junior colleges in this consortium are planning to develop curriculum content, curriculum materials, and curriculum organization which will implement the objectives delineated in the previous sections. These colleges will engage in a year-long study of course content and curriculum materials. The next phase will deal with what we term "reality testing". That is, various content and materials will be tested in the classrooms of the junior colleges involved. This testing will be followed by implementation of the entire program.

As a result of this program and of the process of initiating it we are hoping to develop a scheme or schemata which can be used by other junior colleges as they plan innovative curriculums. At the present time, we are in the process of planning. We are still dreaming. It is not yet a reality, but we hope it will very soon be one.

DIRECTED STUDIES
AND THE
COLLEGE READING PROGRAM

Marsha D. Raulerson

According to the program, my topic for today is directed studies and the college reading program. However, I would like to follow Dr. Clarke's talk by saying that we need the kind of comprehensive program that she has just been telling you about.

Ten months ago I became Director of Project Ideation, a special NDEA reading project. At that time I read the project, studied it, and determined three goals that I would like to achieve while I directed the project. The first was to find out about the reading problems of students at Lake City Junior College. What were their reading problems? Did they really have problems in reading? The second goal was to study the educational environment from which these students had come, the five counties which our junior college serves, to try to determine why these students have problems in reading. The third goal was to make suggestions for possible steps to alleviate those factors which had contributed, kindergarten through grade 14, to low achievement in reading at the community junior college.

As I accepted this challenge a year ago, I realized that it was probably impossible, but each time I have met with the NDEA committee, they have all smiled and given me more money, so I feel that maybe it <u>is</u> possible. And I think that another thing that

might come from this is more support for the kind of program that Dr. Clarke has talked about. So I want to tell you what I found as I began my investigations last summer.

The first thing I did was to survey the achievement scores of students at Lake City Junior College. I found that the median score for a nationally known reading test given to all freshmen was the 37yh percentile. This meant that over half of our students should be classified as remedial readers.

With the help of the school nurse we gave vision and hearing tests to all of the students referred to the reading clinic, with the result that over 50 percent of them failed the vision test. Most of these students had never had their vision tested before except by the Snellen wall chart which most schools still use and which is adequate for testing vision for "playing baseball". but not for testing reading and study skills.

The second thing we found was that 21 percent of these students failed a hearing test using the audiometer according to standards set by the American Academy of Ophthalmologists. These students had never had any kind of hearing test. So I discovered that our studnets did have problems--half scoring below the 37th percentile, and many with vision and hearing problems, as well as other problems of similar nature.

To find out why so many students at the junior college level had such problems, I investigated reading insturction practices in the largest of the counties served by the junior college. These

are some of the things I found.

A great deal of money has come into the state of Florida in the last few years through the Elementary and Secondary Education Act. Most of this money has been spent on reading programs. However, the emphasis has been on reaching students severely retarded in reading achievement, those who supposedly were scoring at least two years below grade level. In the area where I work, I have heard teachers say, "We have a reading program. There are 30 students in our school who work with a reading specialist. We have 700 students in our school, and 30 of them work with the reading specialist every week". In such schools, only the worst reading problems were being recognized.

I found that testing was inadequate throughout the five counties. The children were not given reading tests. No one seemed to know exactly where the students were reading. One teacher, asked to tell us the reading grade levels for her students said, "Well, I teach sixth grade. I have a few students on fifth grade level, some on sixth grade level, and some on seventh grade level." When asked how she determined the level, she replied, "We have three books we use in our classroom. One third of the students are in one book, one third in the second book, and the other third in the third book--so I <u>know</u> they are reading on these levels."

I also found that there was no provision for in-service

training so that teachers such as this one could learn how to determine reading levels of the students. How do you find out about the materials that are now being written for children who have problems in learning to read? I found several principals who said, "My teachers learned all of this when they went to college. They don't need to learn. They already know how to teach reading." Yet throughout the nation, 95 percent of first grade teachers have been using basal readers primarily in the teaching of reading--basal readers which have not changed since 1930.

In fact, little of the research that has been done in the field of reading has reached the classroom teachers. There are few in-service programs in the state. There are no vision and hearing testing programs going on in any of these five counties. There were reading specialists who had had no training. There was money for hiring reading specialists because of ESEA, and the people were hired because they couldn't find reading specialists. They became reading specialists merely because they were hired to be reading specialists.

I found that there was no written policy for the teaching of reading, with the result that a teacher usually says, "Well, I think it is the responsibility of the second grade teacher to do that, and I am a fourth grade teacher." Or, "I think it is the responsibility of our reading teacher who teaches those 30 students that nobody else can help. It is not my responsibility." There

The teachers' society had no policy to help clarify the problem of responsibility for the teachers.

I think the saddest discovery of all, though, was the lack of material in the classrooms which matched the reading level of the students. I found in one 700-pupil school where the mean score on the senior placement test was 58 out of a possible 495, that all of the materials in the classrooms were written on assigned grade level. If the teacher taught eleventh grade history, he used only eleventh grade history books. "That is what the state says to use," the teacher says, not realizing that there are so many materials available today to use in teaching children where they are instead of at some imaginary place many of them will never reach.

I also found teachers who felt that reading was a subject to be learned in the first three grades of school, and that if a student had not learned it then, it was the primary grade teachers' fault. At the college where I teach the teachers say, "What are we, a glorified high school? Do we want to help these children? Do we want to help these young people? They ought to have learned that in high school."

The high school teachers say, "Reading's not my job. I don't know how to teach reading. The elementary teachers are the ones who ought to be teaching reading." And the elementary teachers say, "Well, really, it is the responsibility of the first, second, and third grade teachers. They are the ones you need to point the

finger to." And these teachers say, "We don't have a kindergarten in our county. If we had a kindergarten, that would solve all the problems." It seems no one really feels responsible for the problem.

We did do one thing in the counties that I work with that really shocked the whole faculty. At a school where the teachers said poor reading ability was the fault of those darned elementary school teachers who don't do anything but play games, we gave a test to all the high school students in grades 7 - 12. We found that on the reading test we used, seventh grade students scored slightly above average for national norms-- not southeastern norms, but national norms. We found that as they proceeded through 7th to 12th grade, the students steadily lost ground so that only eight of 72 seniors scored above the fifteenth percentile, the rest below. This indicated that the students were getting lost not during the elementary grades, but after leaving elementary school.

I think the explanation is that reading is not a subject, but a tool. Reading is a tool that college students use 95 percent of their study time. It is a skill we develop over a period of years--a developmental skill. For instance, I am presently learning to read statistics. I don't yet do it very well, but slowly I am learning. This is a new kind of reading skill for me. When students reach seventh grade there are many reading skills they could not possibly have learned in elementary school. In

high school there are new skills and new words for students to learn, new words for teachers to learn, because reading is a cumulative skill we all go on developing throughout our lives.

These were some of the things I found were affecting students who came to our junior college: lack of materials; lack of understanding that reading is a skill that develops over many years; lack of training for teachers; and, lack of professional material for teachers to use. They account, I think, for many of the problems we have encountered at the junior college level.

And what did we have at our college for these students? When I first came, we had required reading for all students scoring below the twenty-fifth percentile on the Iowa silent reading test. But from reading research materials at Applachian State Teachers College, I found that students at that college who benefited most from required reading courses were those who had scored in the eightieth and ninetieth percentiles. They made the greatest gains, while students in the lower quartile made the smallest gains, particularly when they had been forced to take the course. It seemed to put a stigma on them. They <u>were</u> the poorest group because we said they were. And if they were that poor they didn't stay at college.

In fact, most of the students I taught last semester are now either on probation or no longer at the junior college. Why? The reading lab could not possibly do all that was needed. These students were limited in the number of courses they could take.

They could not take the normal 12 hours. They could take only six hours, plus reading and physical education and art. Well, instead of failing 12 hours they failed six, and passed reading, physical education and art.

A student must begin to learn where he is. Working in the reading lab three days a week, reading materials that often were superficial as far as subject matter was concerned really didn't help these students perform better in college English and math. I tried to teach some students to read algebra problems, but I was a miserable failure because I know very little about math.

What else did our college do for such students? Well, in talking with our instructors I found that most of them had one or the other of two philosophies: "These kids don't belong here so we will flunk them out. We have got to make our courses real college courses, so we will flunk them out." Or, "Well, I like these kids and I want to help them learn, so I will make my course a little bit easier for them." Watering it down the first group calls it, and it amounts to giving college credit for courses that are not really on the college level.

There was also a third attitude among the teachers: "He does not belong in the transfer division. We will send him to nursing or automobile mechanics or the business school we have here." Often, however, these courses were even harder for the student than the ones in the transfer division.

I suggest to you today that none of these approaches works.

It is not right to flunk some students out if we have the philosophy that we will accept all high school graduates, and this is our stated policy. It is not right to water down our courses and then give college transfer credit for them. It is not right for us to make a decision that a 17 or 18 year old is going to be an automobile mechanic because he came from the kind of school I have been describing to you today.

What are we going to do about it? I think the answer lies in what Dr. Clarke presented to you a few moments ago. We need a total approach. I was interested also in what Dr. Bennett had to say about the intelligence of his students because I realize that many of you are asking, "Why do they come to college at all if they score so low on these tests?"

Two weeks ago I read a publication put out by the National Council of Teachers of English on language arts for the culturally disadvantaged. This report said that we could no longer speak of a set IQ of 80 or 90 or 100, but must say that a student's IQ is 80 in a poor environment, perhaps 115 in a good environment. That is if he has the kind of material that he can work with on his level. Or the student's IQ is not necessarily 100. It may be 100 in a poor environment, perhaps 145 in a good environment.

What kind of environment are we going to give our junior college students? I think that each of us, no matter what we teach, must be involved in a total program designed to meet the needs of our junior college students.

REVOLUTION IN EDUCATION

K. G. Skaggs

The title that has been given to my remarks this evening implies, of course, that there is a current revolution in education, that education long steeped in tradition and in convention has at last begun a move toward re-evaluating its role for the latter part of the twentieth century and the beginning of the twenty-first. The revolution in education is not as dramatic and spectacular as some would wish, but if we view this great social movement in direct perspective, we can see the play of drama, the flash of brilliant fires of genius, and hear the thunder of an onward movement in the classroom.

In the deliberations of this conference concerned with the kinds and levels and quality of education that must be developed to touch the minds and awareness of all our people, it is necessary that we understand some of the causes of the revolution in education as well as its character and its forward movement.

Education had either to change or to die as we have known it. The education many of us here in this room received as children is no longer significant or useful to the world or to the society in which we are living out the rest of our lives. Certainly education as known in the teens and twenties of this century can hold no challenge, no interest, and no vital element for most children and young people going to our schools today. Thus one of the reasons

and one of the causes of the revolution in education is the revolution we know and experience in human life and in our society.

Alfred North Whitehead, looking about him at the crumbling supports of the society into which he was born and in which he had lived a part of his life, and contemplating the rise of a new society and a new breed of man, made these remarks:

> "In the conditions of modern life, the rule is absolute: The race which does not value trained intelligence is doomed. Not all your heroism, not all your social charm, not all your victories on land or at sea, can move back the finger of fate. Today we maintain ourselves. Tomorrow science will have moved forward yet one more step, and there will be no appeal from the judgment which will be then pronounced on the uneducated."

As man casts off the bonds of earthbound knowledge and soars into intellectual realms heretofore envisioned only in science fiction, his problem will be to "unlearn" as much as to acquire new understandings. Only yesterday, the atom was thought to be the immutable unit of matter; now it has been split, with consequences both fearful and wonderful. And our most learned scholars, looking to strange rays of light, again dispute a question once believed settled--the very origin of the universe. In the laboratory, life can be created in a test tube.

Not only in nuclear physics and mathematics, but also in biology, in chemistry, and in the social sciences are we witnessing breathtaking advances. One revelation leads swiftly to a dozen others, in irreversible geometric progression.

The new perspective this upheaval of knowledge requires, the mental revisions it demands, and its implications for immediate social and cultural change place an almost unbearable responsibility upon this generation of students--and upon their teachers. We must somehow cope with a population explosion that will double the human race by the year 2000. We face a technological revolution in which importance of the individual is pitted against the benefits of automation and cybernetics. And we face a death struggle between the "haves" and the "have-nots" of this world, with all the kaleidoscopic political and economic alignments such a struggle implies.

Increasing urbanization of the United States and other industrial nations is inevitable. There are three billion people on this planet today, but by the year 2000 there will be six billion. And for these six billion people, if they are to survive, the world supply of food must be tripled during the next 35 years.

In Asia, in Africa, in South America, and even on our own prosperous continent, human appetites and aspirations demand long-denied satisfaction. Impatient hands reach out not only for food, but also for dignity and freedom and, most eagerly of all, for knowledge--that "open sesame" to the better life.

Against this stark backdrop, the drama of the late twentieth and early twenty-first century will be enacted. The denouement of the play will be as we write it, for it is primarily to the United

States that the disadvantaged of all lands look.

It would be folly, then, to peruse United States demographic and economic statistics with the eyes of an isolationist. This country's future must be assayed in the light of world projections, whether we are planning economic growth or educational development. There are no islands left on earth, and no longer can there be any such thing as an insular plan.

In an age when the United States is called to her most arduous world responsibility, her working force--the productive segment of society--will be proportionately smaller than at any time in her whole history. According to the Bureau of the Census, the labor force--persons age 22 to 64--in 1950 constituted 55 percent of the total United States population, with persons from birth to age 21 comprising 36.9 percent of the population and persons 65 and over representing 9.1 percent. By July of 1970, census projections indicate the working group, age 22 to 64, will comprise only 46.9 percent of the total population, a significant drop, while the birth-to-21 segment will have grown to 43.7 percent and the over-65 group will be 9.4 percent of the population.

It is valid to assume this pattern will persist to the end of the century. The post World War II baby boom has reached college and the crest of that postwar birth wave will enter the labor force during the next five years. But if present trends of early marriage

and child bearing are sustained, there will be an almost simultaneous increase in the birth-to-five year age group as postwar "babies" produce a new crop of infants. Meanwhile, at the other end of the scale, life expectancy increases, swelling the ranks of senior citizens.

Most vexing of all may be the frustrations encountered by educators when they try to cope with internal migration and the pattern of population distribution in this country. Census figures indicate that we are a nation of high mobility. Each year in the past decade, 30 millon persons have moved from one house to another. Every year about 20 millon of them moved to a new location in the same county, but five millon crossed the county line and five millon crossed state lines. There is every reason to believe this mobility will accelerate as new industries spring up attracting workers and professionals from points all across the land. The trend to the cities will also persist: The population of urban areas increased from 64 per cent of the total population in 1950 to 69.9 per cent in 1960. But there is a paradox here. While movement to the cities continues, many central cities are declining as families move to satellite suburbs. Eight of the ten largest cities in this country lost population between 1950 and 1960. Where young, prosperous families have fled, less privileged groups, racial or ethnic minorities, have crowded into city quarters, creating a new set of problems and conflicts which all too often have remained unsolved and

unresolved by city school systems caught in the cross currents of social change.

Theodore H. White, in The Making Of The President, 1964, took note of the implications of this social change:

> "Starkly put," he said, "the gross fact is that the great cities of America are becoming Negro cities. Today only one major city--Washington--has a Negro majority. But by 1980--if the arithmetical projections of present population trends come to pass--Negroes will be the majority in Detroit, Cleveland, Baltimore, Chicago, and St. Louis; and in the decade following, in Philadelphia. By 1990, then--which is almost tomorrow in the eyes of history--these trends, if unchanged, will give America a civilization in which seven of her largest cities (all except New York, Los Angeles, and Houston) will have Negro majorities; and the civilization of this country will be one of metropolitan clusters with Negroes congested in turmoil in the central cities and whites defending their ramparts in the suburbs."

And what does this mean to education?

Another factor that is important in the revolution in education is the change in characteristics of the young people we teach. A few moments ago we used the phrase "a new breed of men". In all truth, the young people who are coming into our classrooms and laboratories today are entirely different from the kinds of persons we were at their age. It is an old saw, of course, that "human nature does not change", but it is not an honest one. The basic elements, perhaps, of human nature as expressed in basic emotions, have not changed very much; but human beings change from age to age, from generation to generation, and the change in this twentieth century has been so abrupt that we in all honesty must concede that

human nature has changed--changed, at least, in the way it learns. What are some of the characteristics of the students that we teach? What are the characteristics of college age youth today?

For one thing, these young people today have begun to resolve their basic feelings concerning authority at an earlier age than any generation preceding them. Thus they do not look upon us, their elders. with the same awe that we looked in our day upon our elders. Today in the classrooms, on the campus, we must win their respect and their acceptance, not by virtue of the position we hold or our place on the faculty or on the staff, but as people having something important to impart to these young people.

The college age youth of today lacks deep commitments to adult values and adult roles, very largely because these values and roles which we ourselves have established have been brought with us from an earlier time and a world now dead, which is not at all understood or even accepted by these youth. How can they have faith in our values and how can they accept our roles as adults when they feel that these are not at all related to the present, the contemporary?

They have grown up almost completely alienated from their parents' concepts of adulthood and they are very little concerned with the mainstreams of public life. I think that their rejection of public life as we know it today is because they have been almost completely disaffiliated with any historical greatness except the violent sort. These young people were born at a time either of

great military holocaust, at a time when the world as we knew it was being destroyed and when no new structure was being erected to give us new hope and new faith. Perhaps they were born during the Korean Conflict, a nasty and violent little war that had in it all the elements for faithlessness and discontent. History to them has not been a glory and a greatness but has been largely violence, holocaust, destruction, deprivation.

These young people view the world they are entering with deep mistrust. To them it is a cold, mechanical, and emotionally meaningless place. They really want no part of it, and therefore, they believe that the only way for them to get along is to be aloof and detached from it. Thus they continually seek for something that to them has meaning, has warmth, that offers life and worthwhile values. They find these qualities in the support of cults based upon beauty and sunlight and love and warmth. The beatnik generation was founded in complete rebellion from the artificial values of current society. Other young people have found meaning in the Peace Corps, in such organizations as CORE and tn the Mississippi Freedom Teams, or experimenting with the new hallucinogens.

Let no man mistake the real basic qualities of these young people. They are surprisingly sane, realistic, and level-headed. Any person in the field of education who fails to recognize these qualities in our students fails to understand any part of them. That they are seldom given to great enthusiasm is quite true, but on the

other hand--and I know I shall surprise you with this statement--they do not often indulge in fanaticisms. If you are thinking of the Berkeley incidents, the draft-card burnings, the odd clothing and grooming that some exhibit, I would tell you very quickly that these are not really fanaticisms with these young people--they are rather mutinies against the order that, we must realize, you and I helped create. I would also tell you that these young people are well-read and well-informed. Perhaps they do exhibit the usual results of immaturity in their interpretations of what they read and what they learn, but generally speaking they know much more than most of us did at their age and know it so much better. If you would have doubt of this characteristic, then come with me to the little restaurant on Connecticut Avenue in Washington where I eat most of my meals and that is also a favorite gathering place for students from Georgetown, George Washington, and American universities, and just listen quietly to the conversations going on around you. Then go home as I do sometimes and look in the mirror and say, "How can you be so dumb and all these young people know so much?"

Perhaps what I have been saying is that these young people that we have been teaching have a greater potential for intelligence than any generation yet produced; yet they are less able to organize and discipline their potentialities. Interestingly enough, the majority of these college students of ours disapprove of the kind of living their parents are experiencing, and therefore, parents are less and

less important as models for the lives that <u>they</u> want to live. Too, they believe that much of what we adults do is irrational and invalid in view of the new world, and that what we do has no real purpose in life other than to meet an expedient need.

These, then, are the students we are attempting to teach--to teach with minds and hearts molded in a world that is gone--to teach by traditional and conventional techniques and methods fashioned for a world that is no more--to teach influenced by values and judgments that can no longer apply to the new society--to teach using materials and instructional products that have no real relation to the problems and issues at hand. Here, then, with our students, is one of the great factors in this revolution in education.

Another part of this great revolution in education is in the field of curriculum. Sometime if you really want to be startled, pick up a catalog of an institution of some 25 years ago, before most of the students whom you are teaching were born. Compare it with the most recent catalog of the institution. How much real change has been made? Now before you start smiling and pointing out to me things that are different in the catalog, ask yourself how much that is different is really change to meet the needs of a new society and a new world, and how much of what is changed is just tinkering and rearranging. You can paint an old Model T with as many colors as you may wish; you can change the upholstery and put on some new lights; you can put on a self-starter and new tires

but the machine that chugs off after you have done all these things is still a Model T. This is the kind of tinkering and face-lifting that many of us have been doing in education under the name of experimentation and innovation. If we would really walk back a little bit from our duties and other chores, whether we be administrators or in the classroom--walk back far enough really to see our students as a cross-section of the society that is before us, ranging all the way from the culturally disadvantaged, the socially disadvantaged, the European-origin worker and laboring class, the solid and the stolid middle class, to those representing the best in culture and education that our society can give--if we could measure such a view of our students against the curriculums which are being offered, we would be appalled and terribly, terribly frightened.

The revolution in education has done much in many areas, but in the area of curriculum itself--that most important, most essential, key and vital area--movement and change have been very, very slow. Let's look for just a moment at this part of the revolution.

May I begin this section by simply stating that the need for research, experimentation, and innovation in college curriculums is so overwhelming and so pressing that unless we in our institutions of higher learning, junior and senior colleges alike, make a true realization of our position, educational disaster faces us. There is today a pressing need for closer articulation and coordination among all segments of education.

We are still, in the organization of our college curriculums, highly compartmentalized. Even the most philosophically glib member of the administration would have difficulty on many campuses showing the direct relationship among the various departments of curriculum or the various courses in the curriculums, much less why some courses are being offered other than "they are required by the University". In curriculum, unfortunately, we are doing so much work and expending so much effort on things that really do not matter, or perhaps, as one "wag" put it, "We wear ourselves out trying to keep the sacred cows of curriculum alive".

Certainly I do not need to say very much at this point for more specialized curriculums and programs in our institutions. The fact that you are in this room this evening and that this conference is being held, demonstrates your awareness of the need for more special programs in our institutions. We have slowly learned that measuring the level of achievement of a student does not determine the worth and value of the student as a productive member of society, provided that we can give him an education and a training appropriate to his abilities and competence. We have just started into this whole area of creating and developing curriculums and programs to fit the needs and abilities of students, and we are beginning to move away from the older, single level curriculum into which we tried to cram all students without much regard to individual and unique differences.

The whole area of occupational education as we know it today

in its broad perspective and in its many facets is actually less than a decade old as an educational trend and philosophy. Directed studies programs such as we are focusing upon during this meeting are not even yet a trend in curriculum and are just beginning to emerge visibly in our thinking. Education for so-called professional personnel has not yet been well enough defined for many of us actually to know what we are talking about when we use the term.

New areas for the education of people are being discovered at regular intervals--note the great new field of public service education just now being identified--the new health and medical areas with names that most people had not even heard of two or three years ago. These are just a few examples of the revolution in curriculum.

Of course, we could go on talking about the various needs still existing as we focus our attention on what we teach. Just what should we teach these young people who will live half their lives in the twenty-first century? How do we devise learning programs that must be a part of their educational experience? How long are we to continue to straight-jacket the curriculum into inflexible minutes, hours, days and months: continue the traditional 50-minute period because in the 1840's a psychologist determined that an interest span could not be maintained for more than 50 minutes; continue accepting that proper spacing of times in the classroom should not be more than three times a week, or every other

day, because the collections of books in the libraries of an earlier day were not sufficient to allow students to get their assignments in less time; continue the restricted measure of learning time into months determined by harvest and growing seasons because once America was an agrarian nation?

I believe as we look at curriculum today, we will also find a need to establish the teacher and the educational worker in new roles with new and differing responsibilities. But across the nation, how many schools of education in our universities and four-year colleges have made any serious attempt to break through the hard shell of traditionalism in the teaching profession to identify these new roles and responsibilities of leadership in the classroom?

I would hope, also, that no discourse on the revolution in education would end before something was said concerning the revolution in today's facilities for education. Speaking from my personal experience in helping to coordinate planning and development of educational facilities, I can say that many of the facets of planning which two or three years ago seemed bold, courageous, and way, way out in the blue yonder now make me wince because I can now see the traditional aspects and traditional skeleton showing through. Quite frankly, visits to many of our new institutions, mostly on the junior college level, but including a few senior colleges and universities, too, indicate to me that this is another of the slow areas in the revolution in education. I suppose we are so visibly dealing with money when it comes to brick and mortar and stone, it

is natural for traditional caution to keep us from being as bold or daring as we would like to be.

To try to describe to you some of the breakthroughs in facilities planning which are giving at least a little movement to the revolution in education would be to keep you here much too long. Let me, therefore, just tantalize you. What do you know about the new concept of education as found in the Library School? I am not referring to an institution for educating and training librarians; I am talking about a collegiate institution in which the library as a tremendous learning resource center becomes the core of all activities and everything else is peripheral.

And have you read about the new Oakland Community College just north of Detroit, a new metropolitan institution engaged in building almost $40,000,000 of educational facilities without classrooms, with the entire program based upon the concept of individual study and the audio-tutorial method of learning? Have you become at all involved with the sensory learning capsule? This concept is based on the idea that we do not learn with just two senses in the classroom--sight and hearing--but with all our senses. Thus the new sensory learning capsule makes use of all the senses: of odor, light and color, pain as well as pleasure, hearing, touch--all of them. Student chairs are so constructed that they can be tilted, rocked, jiggled, spun, and formed into bed-like couches. The teaching spaces, or rooms themselves, can also be tilted, rocked, and rotated.

Have you made any study of the developing urban community college campus or of the town concept of the community college where the college itself owns no actual buildings or plot of land, but holds classes in various places in spaces appropriate to the learning that is being done--the whole community thus becoming a learning laboratory? Other specialized instances of facility planning could be cited to emphasize the recognition now being given to the revolution in education, I suppose.

But where does all this finally lead us? What meaning has the revolution in education for us? How much of what I have been saying can be described as really experimental and innovative--how much of it is still tinkering with the old Model T? Well, I do not know and cannot in all honesty tell you. Real growth in education is based upon newly emerging concerns of our society and the roles of people in it. It is based upon the college students of today and their emergence as individuals with needs and ideas and philosophies and approaches to life of their own.

There is a new awareness of the role and the functions of teachers and administrators in the new educational society. There is an awareness that new techniques and devices and materials in teaching make possible new places of learning. The revolution in education starkly presents to us the challenge of change--a challenge to realize that we face the almost unbearable situation of teaching new kinds of people for a new kind of world. But the challenge of change for students is the transition that is being made through

their lifetimes--the revolution that is taking place with them as the soldiers in a revolutionary army.

In summary, I would like to rephrase for you the elements of the revolution in education as I have tried to describe them. Perhaps, both for clarification and for broadening your own concept of what the revolution is really about, I will approach these factors from a slightly different point of view now. Only if we ourselves understand the elements of revolution will we begin to get some idea of what our role will be in the revolution and the form that our planning and development must take in the years to come.

First, then, in the revolution is the crisis of values--values that have been altered and twisted out of shape from our own earlier day and time by uncertainty of the future; by higher mobility of our society; by the instability of information itself which is changing so fast that the fact of today becomes the myth of yesterday; by the shadow of the mushroom cloud; by the changing morality and religion of the time; and, by the increased emphasis upon the individual and decreased emphasis upon the crowd.

A second factor of the revolution is the problem of incorporating youth into the full society. No longer is a youth discounted as a member of society; he is now recognized as a fully participating member.

A third factor of the revolution is the problem of self-realization in a massive and vast society that like some monster

of old is inclined to gobble up the individual and destroy his identity, or relate him completely to a computer number.

Certainly another factor in the revolution is the ever-increasing and desperate necessity of vocational preparation as a part of the fundamental and basic education of every person. To be able to produce in society is now carrying with it many of the same status values that "culture" of the past previously carried. All of these are basic factors of the revolution in education.

There is, however, a special factor that needs to be emphasized, and that is, of course, the emphasis of concern in this conference. What is the problem and the function and the role of education, particularly as we see it in the junior college, for the socially and economically underprivileged; for those persons in our society who have low ability achievement scores; and, for those who are lacking in motivation and drive? In the development of any program for this group, we must keep three facets of realization well in mind. For these, I am quoting from the report of the National Committee on Secondary Education. First, the group we are talking about is moving further and further away from the norms of the society in which they live, falling further and further behind. Tomorrow's poor will stand in a very different relationship to the rest of the people than yesterday's poor did. Second, we no longer live in an economy of scarcity where it is necessary for some not to consume very much so that others can consume more. In cold economic terms, people who do not consume very much are today a

simply a drag on the economy. Third, we now know that most of the group we are talking about were born with the potential to be reasonably able, intelligent, productive citizens. And, finally, the essential of all this is presentation.

What do we do about it? Can the problem now defined by the revolution in education be solved? The question is really whether the revolution in education has a chance to succeed. Given all the other negative factors operating on the lives of youngsters, can we in education make any significant headway in meeting the problems of the revolution? To put the question even more bluntly, can the schools meet the problems of the revolution and still remain faithful to their historic commitment to the organized teaching of intellectual subject matter? Or, let us ask the question in another way: to meet the commitments of the revolution, dare the schools aspire both to that set of personal goals which dominated the progressive era of the 30's and that set of more purely intellectual goals which has dominated the past decade? Can they achieve this?

Well, let me say that the situation looks hopeful, more hopeful than one would have thought a generation ago. All of the evidence points to the fact that we may very well be on the edge of a great breakthrough in education and that we will be able to serve more interests of the revolution. To help us in this breakthrough, to help us in successfully meeting the commitments of the revolution in education, we have a rich variety of curricular resources which have just been developed. We still have the old

background and approach to curriculum which could be used as a medium for producing personal and intellectual traits deemed desirable by society. And in addition to these general factors which will aid and help us, we also have much more.

First, we have newly enriched mathematics and science programs designed to generate freedom of mind and the spirit of inquiry. Second, we have an almost new set of social sciences, as yet barely tapped for their capacity to humanize. Third, we have the fine arts and music with technological resources that make them almost a new medium for the cultivation of the inner man. Fourth, we have the practical arts, used so far almost exclusively for the development of skills, but capable now of much further use. Fifth, we have a nearly new body of knowledge, vaguely described as the behavioral sciences, rich in resources for understanding one's self and others. And sixth, we have physical education, including more than the development of muscles alone.

Well, these are some of the factors that can be used as we try to meet and solve the problems of the revolution in education. The factors of the revolution are, I think, plain for us: values--changing values; young people--a new kind, a new breed; the changing role and function of the teacher; the changing place of the school in society--the new challenge for its educational program.

To serve a new age and to serve the revolution in education, you and I must make the boldest and finest use of all the materials at hand that we have. You and I are part of the revolution in

education. You are here at this meeting to discuss one of the areas of the revolution, but you cannot ignore the implications of the other areas.

A long time ago one of the world's best thinkers, a man called Isaiah, told his people, "Remember ye not the former things; neither consider the things of old. Behold, I will do a new thing now; and it shall spring forth."

THE GUIDED STUDIES PROGRAM: GROUP INSTRUCTION

Frances A. MacLeod

Since this program features the Clearwater Campus of St. Petersburg Junior College and the North Campus of Miami-Dade, and we are in Clearwater, I thought it would be of interest for you to see a few pictures of our campus. We at Miami-Dade, in one way or another, have been involved in guided studies since the second year of our existence. In 1960 and 1961, our campus looked something like this. We called it the "chicken coop" campus for obvious reasons. We have gone through a series of moves and changes. We have lived with construction. We have borrowed high school buildings after hours, and have utilized abandoned army facilities. We have now arrived at the stage where most of the north campus is completed and the south campus well under way with one major building in use.

In 1960-61 we had a total of 1428 students. Presently we have over 20,000 with 2500 in the reading program alone. We serve a large metropolitan area. We have the influx of Cubans that you know about; some South American and other foreign students; and many tourists and other retired people who live here year round. We have complete student and faculty integration. I may say without any exaggeration that whatever problems or challenges you may find or foresee in your guided studies programs, whatever types of students you may encounter that need your help, we have those too and more of them: more people, more problems and situations.

My topic according to this program is to be guided studies:

group instruction. I think I will have to say that this might not fully describe the kinds of things that we do and believe in at Miami-Dade. Let's run through just a few of the pictures that show phases of our instructional program.

Here is a picture of the reading laboratory showing students working with books and various equipment. The second is similar to the first, taken from a slightly different angle. Here we have a student working with a Junior Controlled Reader. The series of films used with this machine are letter coded according to difficulty. The student is a good senior high level reader and is using an LX or high school level E. D. L. film. When he completes the article he will jot down his finishing time, take the comprehensive test, check it, record his score on the chart provided for him; then work out his average word per minute reading rate and record that as well. If he has made errors he usually scans the article to locate the preferred answer and make a correction.

This picture shows an article taken from the HG series, roughly junior high level. This next is a high school level reading student using a Shadowscope to help him improve his skimming and scanning techniques. This is a student using a Craig reader. She is working for increased rate of comprehension on her present level. Programs at various levels from elementary school through college are available.

This student is using a Tachomatic 500. Conventionally this

machine is used for group work, but since this student is knowledgeable about the equipment, we did not suggest that he change.

This slide shows a tape recorder playing Listen and Read tapes. These tapes are used and liked by all of our students since they provide two approaches to learning, listening and seeing. We find them invaluable for students learning English as a second language and with the culturally deprived.

Here is a storage vault where teacher-made materials are kept for use in the reading rooms, as well as the reading laboratories. We have a wide variety of original as well as copied supplementary materials. Also shown here is part of a collection of cut classics which students may check out.

Here are a few pictures of our hearing and speech therapy laboratory. I will have something more to say about speech and hearing therapy in the course of my remarks.

As I mentioned earlier, we started guided studies in the second year of our existence, principally to take care of the Cuban influx in 1962. At that time we admitted many Cuban students who spoke little or no English. As soon as facilities permitted we combined the northwestern campus, the Negro students, and the north campus of Miami-Dade. The role of the junior college to provide the first two years of undergraduate college work inexpensively, close to home, and in many cases adequately, even commendably, was the traditional, best understood, and probably still most commonly

accepted role. There is no doubt that it will continue to expand as the need for higher education increases in proportion to the complexities of our time and the increased crowding of our universities. Lack of understanding of the community college occurs among those who would have this limited role the only role; who resist the realities of present-day social change; who persist in the no longer appropriate conception of a college-educated elite; who cannot embrace the expansive concept to be both/and because they believe that for the sake of standards they must be either/or.

Directed or guided studies at Miami-Dade have changed and varied from year to year according to changes in our student body, growth of the college, and development of the vocational terminal programs. Reading, writing, speech, and mathematics guided studies are presently delegated to the separate departments: we do not have a special administration for the entire guided studies program. So the entire faculty of Miami-Dade is directly or indirectly - most of us very directly - involved with the students in the guided studies programs. In the lower sections of the first year courses that we call guided studies, every student's problem is to him an individual and crucial one. We, the faculty, are constantly looking for new ways to utilize and make more effective small classroom instruction, auditoria programs, and individualized instructional devices, each for the things that it can do best. We do not see the program merely as preparation for the transfer courses, though that is the

case in many instances. In some cases the directed studies may serve as preparation for vocational two-year terminal courses and carry credit as such.

I think I may say that the guided studies math program was the first and the one that has changed least in content and emphasis since its inception. This would naturally be true because math is a universal language, and math deficiencies presumably would be aimed at preparation for more advanced college math or first year algebra, or preparation for the transfer, vocational, and technical programs. The "open-door policy" implies that instruction should be provided on an appropriate level for the student. In accordance with this institutional philosophy the guided studies program in mathematics necessarily evolved in the first and second year of the college's life. Most of the student body of Miami-Dade is made up of graduates of Dade County's secondary schools. They have had opportunities for excellent instruction in mathematics. But many take minimal requirements and arrive requiring instruction in basic arithmetic or beginning algebra. These courses very soon, and I think perhaps in our next catalogue, will drop the remedial connotation and be labeled Math 90 Arithmetic, Math 91 First Algebra, and Math 100 Second Algebra. Remedial math courses in the sense that they are preparation for advanced courses cannot be expected to be a 100% success. Students who have had opportunities to study mathematics for twelve years and who, for whatever reasons, fail to achieve significantly

during those years, seldom find the magic in junior college that will lead them to mathematics, science, or engineering degrees. So the mathematics remedial program is, to a great extent, aimed, through counseling and instruction, to equip these students for preparation leading toward some kind of terminal program. However, there are notable exceptions. At Miami-Dade, particularly in the Cuban population, the low test scores in mathematics are frequently a matter of limited English vocabulary. When this Cuban student improves his English vocabulary, he is ready to go. Other exceptions are some of the retired people who come back and perhaps need some basic review to set them on the way to courses in advanced math or courses which will lead them to a degree involving advanced mathematics.

We are moving more and more into a correlation of efforts in the reading, writing, and speech departments in recognition of the relationship between the way an individual hears, speaks, reads, and writes the language. By familiarizing ourselves with new methods and materials and by trial and error, we feel that we are beginning to learn to make clear distinctions between the things that can be accomplished by programed instruction, by large auditoria sections, by machine teaching and testing, and the things that must be brought back to the small classroom or to the individual counselor.

At every stage we undertake to enlist the student as an active ally by showing him the reasons for the things that he is asked to do-their relevance to the ends he hopes to accomplish. Most teachers

who distrust and fear programed material are those who see it as a crutch similar to the old wornout workbook. Programed material, too, is subject to misuse and so far we have avoided extensive use of it. However we had an experimental class last semester that used the programed material and related the programed instruction to the writing and reading courses. Follow-up this semester on those students who have gone on to freshman English shows that all of them who are still with us are doing as well as the students who have had the regular course in classroom instruction. Many of us feel that the programed material should be assigned by diagnosis for the student to work out his own deficiencies, and that the test of his success should be not the test that comes with the programed material but the paper that he writes in his small class section.

You saw a few pictures of our speech and hearing therapy program. It is connected indirectly with guided studies in that many times speech and hearing deficiencies are related to problems in reading and writing. The program is open to any student who requests it, or faculty members may refer students to the speech and hearing tyerapy service. There the student is evaluated, diagnosed, and appointed for therapy at a time that does not conflict with his regular schedule. This service is free. Therapy is directed toward the needs of the individual student. It may be conducted in individual or group sessions. Lisping, foreign dialect, stuttering, language disorder, residual speech training, as well as speech reading,

are some of the speech and hearing disorders being treated in the speech clinic.

Beginning in January, 1968, we expect to give all incoming freshmen a hearing test (audiometric) and an individual speech evaluation. Such services are made possible by modern sound and audio equipment, available space, and accredited personnel. Comfortable furniture and a relaxed atmosphere, as you may have noticed in the picture, are also a part of effective therapy. Our physical facilities include a sound proof room for hearing tests, a carpeted office with attractive decor for therapy, and an observation room with a two-way mirror.

As far as writing is concerned, I think we English teachers have been guilty of putting too limited a construction on the word. We need to keep reminding ourselves that our function in teaching English is not necessarily the production of more English teachers or, for that matter, not to insist that everybody we teach has to turn out graceful prose. In this sense, writing is a highly specialized skill like any other specialized skill. I hate to think what would have happened to me as an undergraduate if my physics and biology teachers had insisted that I acquire a degree of competency in those subjects that would compare with the objectives some English teachers profess to aim for in freshman and remedial English courses.

English teaching at all levels should serve the educational process. Writing is a means as well as a goal of learning. Whatever a student's abilities may be, whether he plans to prepare for

college transfer or enter a vocational field, he will need to read at some level of understanding and express his thoughts with the maximum degree of clarity. These are the two main objectives I set before my basic English classes. I never let them forget that they are aiming at reading with comprehension and writing with clarity And through these goals I have been able to sustain a high degree of motivation: we all learn with greatest ease the things we really feel a need to know.

Through readings and discussions of readings, I get them interested in having something to say. Then I set them writing. Corrections are made on the basis of either accuracy or clarity. No conclusions about the readings are ever imposed. Since readings are used as an approach to writing, the student is never told anything he should read into the work. His understanding takes place within the classroom, so all are on an equal footing. And I may say here that this is a way that one can haldle students of widely divergent abilities within a single classroom. We are not asking them all to do the same thing. We are asking them all to perform at the level of their own ability, to interpret at their own level of understanding, to have a right to their opinion and to learn to trust their opinion.

When questions are directed at his statement, the student learns to judge for himself whether he has been able to say what he meant to say. Frequently his fuzzy writing comes from fuzzy thinking. When he straightens out his thoughts, he is in a much better position

to straighten out his writing. After he learns to judge whether he has said what he meant to say (and this may take some individual conversation with him --asking that he read the sentence he has written, and tell what it means; showing him what it seems to you to mean) he can be shown how he might have said it better. He learns mechanical devices, without ever naming them, as logical tools for clarifying his thoughts.

Programed materials, I well know, are available for all the writing skills except the one most important skill which actually goes beyond skill; that is the ability to interpret and relate ideas and express them in understandable language. At all levels, even the lowest, I think the student should be challenged to react in writing to something he has read, from the very beginning and through out the course. To try to accomplish everything all at once is discouraging and defeating. Errors in the use of words, either spelling or vocabulary which interfere with meaning, punctuation for meaning, word order and completeness of thought, may be enough to ask of the student who has already resisted any form of verbal competency until his college years. Whatever he does should be a means, the end of which will always be tested in his own writing.

Reading may be only to get the thought of whatever material he can handle at some level. There are also programed materials in reading that are excellent. We have not used them much, but probably we will. We think that the significant advance from this kind of

teaching occurs when the student does not just find the errors on the tests or the word or sentence that answers the question, but when he can state in his own words in language that does not obscure meaning the thought of whatever he is assigned to read. He must understand that any other formal schooling in the academic sense depends on this ability. Most students who want to enough can achieve it. All should be given regular opportunities to attempt it. To measure their achievement there is not now, nor will there ever be, a substitute for the classroom and the teacher.

We have all heard junior college teachers who, as they would put it, "hold the line on standards", boasting a high drop-out rate as proof of their virtue. If the college operates under what is implied to be a quaint and misguided law called an "open-door policy", they accept all entering students into the traditional freshman program and maintain their academic self-respect by discarding those who cannot do the same caliber of work required by the universities who are accepting only the top 20 percent. If queried about what happens to the drop-outs, these proponents of junior colleges as mere adjuncts of higher education would reply that their obligation was discharged in giving the student a chance. If he couldn't make it, the concern was his or that of some other social agency; the college must "hold the line".

The course, if any, that did not meet the real or imagined standard for a regular freshman course would be taught as preparation

for it, with many complaints about the high schools not doing their duty, and would, of course, be non-credit. The crucial question here, I think, is credit for what; towart what? Unless the student is already highly motivated--an unlikely assumption at this level--he is not going to buy strictly non-credit courses. Why should he? To refuse to recognize whatever growth and achievement he is able to accomplish, to refuse him the means of progressing and to demand the impossible in terms of arbitrary and unattainable standards is to refuse him admittance into the mainstream of American life. He has already, in some instances, been barred admittance for over 300 years.

The speaker is indebted to Professor Eunice Kimbrough and Professor Melvin Schwartz for information concerning the Reading and Speech laboratories; to Professor Richard D. Shaffer of the Mathematics department; and, to Professor Audrey Roth who taught the experimental guided studies English course using programed materials.

THE DIRECTED STUDIES PROGRAM-

INDIVIDUALIZED INSTRUCTION

Merle H. Morgan

In directed studies at St. Petersburg Junior College we make every attempt to approach instruction on an individualized basis. To go back, though, and relate some of the history of our program seems necessary. We are fairly new by some standards, and yet we are old, I suppose, by other standards. It depends on when one began his own program.

In the fall of 1964, St. Petersburg Junior College recognized that many students who had ability and high school diplomas were unable to do work at the college level because of academic deficiencies. It seemed then that it would be consistent with our philosophy at St. Petersburg Junior College to establish a program to assist these students in strengthening their weaknesses. A Department of Directed Studies was created on July 1, 1965 on each of the three campuses of the college, with a chairman for each campus who worked independently for some time in making tentative proposals for necessary programs that we might adopt later. In December of 1965, some six months later, the overall proposal as presented by the joint efforts of the three chairmen on the three campuses was presented to the Committee on Curriculum and Instruction and was approved.

The Department of Directed Studies at St. Petersburg Junior

College was created for the primary purpose of providing individualized instruction for students who have ability but who have weaknesses in their academic backgrounds. However, there were other purposes, and these individualized programs are not limited to students with academic deficiencies which would prevent them from attending college, but are available to any student who is enrolled in the college at any level in any academic area for which he has a need and/or an interest.

Beginning with Session II, January, 1966 the Clearwater Campus scheduled one section of each of three approved courses. Some students enrolled during the first week of Session II and others continued to enroll through the eighth week. This is a feature of our program which we like very much. Students may come in at the beginning of the term on counselor referral, or they may come in at any time through progress period on referral of the instructor, the counselor, or the student himself. After the eighth week, which is the end of the first progress report time, no further enrollments are accepted.

We started our program with 67 students who were enrolled in courses and seven students who were doing unit work only. The program continued into Session III, with one section of each course being offered again on the Clearwater Campus.

In Session I of 1966 the courses offered were expanded on the Clearwater Campus to five sections each of the three courses which had been approved. The St. Petersburg Campus then began its

program under the administration of a new department chairman with six sections in language arts and four in mathematics, and the Skyway Campus inaugurated its program with four sections each in language arts and in mathematics. The enrollment in the programs has continued to increase, and we expect approximately 100 percent increase by the fall of 1967.

It seems appropriate at this time to emphasize the fact that these programs not only provide individualized instruction, but also are completely voluntary on the part of the student. There is no requirement at all to go into these programs. Great encouragement, however is given by his counselor and his instructor to each student who needs this kind of help. Our objectives are to provide programs to prepare students for probable success in college, to contribute to the growth and development of individual students, to assist the student in stregthening his academic weaknesses in any area, and to supplement the curriculum at all levels for the student who needs or wants additional instruction in a given discipline.

The core program for directed studies is a Communications Laboratory designed for students whose academic weaknesses are of a general nature. Two additional courses, Contemporary English and Fundamental Mathematics, are designed to strengthen the student's background in these respective areas.

The purpose of the communications laboratory is to assist the student in the development of the basic skills of reading,

listening, speaking, writing, as well as to improve study skills. Individual instruction is provided in appropriate units of study to give increased opportunities for the application of these skills. Individual conferences are scheduled for the purpose of strengthening a student's ability to build self-confidence and to work for personal adjustment in the solution of realistic educational goals.

In the communications laboratory we offer a variety of units. Of course reading skills would be basic to anything we do, but reading skills are developed in a number of ways. We use controlled readers, Craig readers, tape recorders with EDL tapes, programed vocabulary books, and other printed materials that seem appropriate for the given student.

We also work with study skills including such things as the use of a dictionary, the use of an index in a book, and understanding graphs, tables, maps. Knowing where the sources of information are to be found, organizing facts and note-taking, skimming and scanning -- all of these, of course, are interrelated with the reading, but are nonetheless separate as study skills.

Listening skills also are developed through the use of the tape recorder and the various tapes that we use. We try to help the student develop immediate recall, help him learn to follow directions, recognize transitions, recognize word endings, and be able to comprehend lectures.

Of all the communications skills, the one in which we do the least amount of work is speech. We do have work on rate and voice,

such areas as loudness, pitch, quality and diction. We dont really have a progression of units. Instruction depends on the individual student and what he needs in particular.

Another unit with which we do work is critical thinking. In this unit we work on such things as inference, recognition of assumptions, deductions, interpretations--the usual kinds of things that are involved in critical thinking. This is done with printed material that is available to students. One of the basic pieces of material for critical reading is the RFU (Reading for Understanding), a program which has various reading levels. Another way that critical reading is developed is with tapes--we lean heavily on the tape recorder. This laboratory program takes care of those people who are weak in all areas. Some writing is done, but it is basically sentence composition and not much else.

We have another course in the language arts area called Contemporary English. The purpose of this course is to prepare the student for his first transfer course in English composition. However, we always stress to the student that this course, along with any other courses he takes, helps him in all his college work regardless of what it is.

Contemporary English is primarily preparation for English 140, the first composition course. The course outline is flexible enough to allow for the individual abilities and requirements of each student, and we use a linguistic approach to our instruction. To be more accurate, the approach is more transformational than it

truly linguistic, but in any case, it is not the old traditional method. The comprehensive review of grammar and usage is carried out here, along with spelling and vocabulary. Frequent opportunities to develop sentences, paragraphs, outlines and vocabulary are included in this particular course. The development of these skills naturally will lead to an increased ability to write with clarity, conciseness, and effectiveness.

We have had some amount of success in this program. We are always open to change, and we have changed somewhat gradually in these particular programs. They seem, however, to be working fairly well.

The content in this course, as indicated, has to do with grammar, punctuation, capitalization and in writing itself. In preparation for the writing, we use programed materials. We use programed English, programed vocabulary and other programed materials which seem suitable. We have a programed writing book, for instance, which lends itself quite well to a number of the students.

When students are ready to begin writing, we employ a variety of methods, using some material we have prepared ourselves to bridge the gap between programed English and writing. We lean heavily on Peterson's Contemporary English which is a series of lessons made up for use on the overhead projector with transparencies. These are used in small group situations which allow for discussion. Follow-up writing is done with development all the way

from sentences through paragraph writing. We feel that if we can get the student to the point where he can write a good paragraph and understand something about transition from one paragraph to another, he is perhaps ready to go on to freshman composition as normally presented and be able to compete with his classmates.

Our third course is Fundamental Mathematics. Its main purpose is to assist the student who has deficiencies in his mathematical background and who needs additional skills and concepts to prepare him for Mathematics 110, our first transfer mathematics course.

This course is flexible enough to allow the student to begin at the level of learning indicated by an appropriate test at the beginning of the course, and proceed from that point through quadratic equations which is a recommendation for Mathematics 110. The content of the course begins with basic mathematics and beginning algebra. The student begins at whatever point seems appropriate. A limited number start with basic mathematics; most start with beginning algebra. Depending on their aims they proceed as far as they need to go.

We have some guidelines set up for getting into these programs. They are somewhat flexible--a much over-used word here, but one we like and continue to use. You will see what I mean as I describe the guidelines for DS 50, the communications laboratory program.

On the SCAT test a student should be below the 50th percentile in linguistics; on the senior placement, below the 250 score; and,

on the Davis reading test which we use, below the 40th percentile. But the student's past performance in academic areas is also evaluated. And, if specific weaknesses are apparent, we seek the judgment of the student's counselor. In other words, we use test scores as a springboard; then consider other criteria, particularly the individual himself, to try to help each student make the right decision about his program.

In contemporary English, guidelines change just slightly. Students need a SCAT score of 35 to 60 percentile in linguistics; a score of below 250 on senior placement; and, in reading above the 40th percentile. This is required so that the student will have reasonable assurance that he can handle the materials which will be presented to him.

In mathematics, the requirement is below the 50th percentile in quantitative on the SCAT; below 250 again on the senior placement; and, reading above 40. Reading is very important in the math program. Many students who have difficulty in math, as all of you who have taught it know, have difficulty in reading first, difficulty in math second. If a student does not read well, he is not able to comprehend and carry through the functions that the math requires. Additional guidelines include the comprehensive math score below the 30th percentile. In all areas, the judgment of the counselors is important.

It is also important to understand that not every one of these criteria or guidelines needs to be applied to every student. Any

one, or any combination of criteria may be used as the basis for admission to the program. Each student is considered individually and guidelines are not meant to prohibit the student from enrollment in the program.

To be specific, there are three methods by which a student may get into the directed studies program. The one that brings us most of our students is counselor referral. These are the students that we get at the beginning of a given session, people whose deficiencies have been pointed out to them, who have been counseled, and who have been able to see that they really are in no way prepared to begin a full-fledged college program. Many times these students are people who have gone through high school and received a diploma and in homogeneous groupings throughout high school have been in the bottom groups all the way. A person who would receive a D grade, for example, in his senior English class, when he is in the lowest of some 30 groups, would find himself ill-prepared to attempt to do any writing. The counselor referral, then, is the one on which we lean heavily. We like to get these students before they have met failure.

Another method is by instructor referral. Instructors throughout the college refer students to the Directed Studies Department. Just because we limit our courses at the moment to Communications Laboratory, Contemporary English and Mathematics in no way means that instructors in social sciences or in other areas will not recognize a weakness within this student's

background and refer him to directed studies. When a student is referred by an instructor he can be referred either through his counselor or directly to the department. By whichever method, he meets with his counselor to have his record checked and all of his scores evaluated.

When all of these things are done, an agreement is reached between the counselor and the department as to whether or not this student should come in. He always comes in if there is room, regardless of his ability or inability, but this kind of referral takes place any time from the second or third day of the session through the eighth week. We like to get them early, but sometimes students do just enough so that there is a bit of indecision and, occasionally, when these people are not convinced before they enroll in certain courses, it takes a little longer to convince them, but they still have the opportunity of coming in through the eighth week.

One method from which we get a great deal of satisfaction, I think, is the self-referral. We call these students "walk-ins". They simply walk in to the Directed Studies Department and want to know a little bit more about what is going on because they have friends who have been helped or are in the process of being helped. We discuss with each of these students what we have to offer, explaining to him as fully as he requires. Then, if he does have need of the program, we get together with his instructor. If he, for example, is in an English class and wants to come into the lab

or into English, we discuss his situation with his instructor and also with his counselor; and again, if he needs directed studies and wants to come in and there is room, he comes. The enrollment has continued to rise through this method of self-referral.

Many of the students who come into directed studies on their own initiative are persons who, for a number of reasons, have had their education interrupted for an extended period of time. They may be young men who went into the armed services immediately after high school, or they may be older men or women who have decided after lo, these many years, "My family is reared. I have not much to do. I would like to go back and get an education."

When older people come to the college to enroll, they realize, perhaps better than some of the younger students, that they are not quite ready for college work. They know that an English course taken back in 1940, or 1950 or 1960, or a mathematics course taken that long ago, has been pretty well forgotten. They are usually willing to begin with a program which will develop their skills before they attempt to go into the regular program.

In addition to gaining a knowledge of specific academic areas, the directed studies student discovers his own capabilities, we think, and is then able to make an honest decision about his future. Many students, of course, have emotional problems largely caused by the fact that they have never met success at any time. Therefore they might need to develop more positive attitudes toward learning or toward particular subjects they have long

disliked. With some of our students we spend some time, first of all, to help them develop new attitudes about a given subject or, as indicated, about learning itself. When this has been accomplished the student is able to go ahead and perform better in the given subject area.

In addition to regular courses, we do a boom business in unit referral work. Students may be referred by their instructors for unit work only in specific areas of weakness in English, mathematics or other courses offered by the college. Such unit courses carry no kind of credit and receive no particular mark. The unit is not entered on the student's record in the registrar's office. It is just an isolated unit of special help. For example, students in Mathematics 110 who get along well through the first two or three weeks sometimes find themselves at a loss when they reach the unit that deals with geometry. Such students may come to the Directed Studies Department for a unit in coordinate geometry, and with the help of instructors and special material, are able to stay on in their math class, correcting their one area of weakness while they continue further class study. Quite frequently this is all they need to do to complete the course satisfactorily.

Other kinds of unit work are available throughout the math program, from basic math through calculus. We have difficulty keeping our calculus books because we have very few of them and students are always checking them out and tend to keep them out

longer than other materials. These students do not necessarily need to be considered for remedial assignment; they just need some extra help, as most of us do in some areas.

Students also come to us for help in certain units in chemistry and in physical science, but we sometimes discover that their need is not in the science area but in mathematics. In any case, they can get a unit that will help them. Most of these students work pretty much with instructors in the Directed Studies Department, although they are free to take the materials and work with their own instructors if they are staying on in a particular course.

When students are recommended to the Directed Studies Department, and this probably should have been mentioned sooner, they are tested again--not to see if the other tests were valid, by any means, but for placement purposes. Diagnostic testing is done in the areas of language arts and mathematics so that the student can begin at the point which seems appropriate for him. If he is doing well in certain areas, it is perhaps better for him to spend less time in those areas and concentrate on strengthening his weaknesses.

In language arts we give diagnostic tests in vocabulary, in reading, in language abilities and in study skills. Not all students take all of these tests. It depends on the outcome of the tests as we progress. We start, always, with the reading test. If the student performs satisfactorily, we then give him the language abilities test, and so on.

In mathematics, we give two diagnostic tests, one in algebra and another in general mathematics. More unit offerings have been added, including courses in social science and the natural sciences. Our plans also include the development of programs designed for enrichment and advancement in any of the academic areas where the student shows ability and desire to do further study than he would be able to do in a regular classroom.

In addition to the courses which are designed specifically for students with academic deficiencies, the Department of Directed Studies has been charged with the administration and supervision of the Advanced Placement Program at the college, and also with supplementing and complementing the curriculum in all academic areas.

Our advanced placement program is sometimes non-existent. Students who would fit into such a program do not come to us. The point is that the Directed Studies Program is not intended for remedial work only. We started where the need was greatest; we must walk awhile before we begin to run. One day soon, however, we hope to implement these other aspects of the program.

Further responsibilities of the department include the development of in-service training courses for teachers in the public school system. The first of these programs will be offered in Session III, 1967 for elementary school teachers in the area of mathematics.

Through evaluation of our use of programed materials along

we have found through evaluation of our use of programed materials with individualized instruction that the value of individual self-improvement is stressed while the negative motivations of competition are de-emphasized. A student takes a test as he completes a unit. He does not take the test on Friday because everyone in the room is taking it at that time. He takes it on Friday if he is ready. If he is not, he takes it on Monday or when he is ready. We sometimes give as many as ten or fifteen tests during one section of a course, with none of the tests on the same level or on the same general material. Tests are scored and results made known immediately. We think this is an advantage. It allows for a review of particular errors before the student proceeds to a new unit.

Pin-pointing errors and speeding up the process by which errors are brought to the attention of the student helps to direct him to material which needs his concentrated study to re-enforce his learning. With a high level of interest in the material and program format, students work more purposefully and consistently. For example, in our contemporary English class we have one book, a programed spelling book, which our students think is the best book they have read in many years. We have difficulty, sometimes, in getting all these books collected. We also have difficulty, sometimes, in getting the student to budget his time properly so that he does not spend it all on this one spelling book, of all things, which he likes so much. But this kind of material keeps

students interested and going on, apparently.

The problem of loss of instruction during any absences which might have occurred, or the problem of working a new student into a class, is eliminated through the use of programed material. This method presents the student with a good course which he can complete at his own pace. Programed learning also saves time for the individual student.

Now, returning the point about presenting a student with a good course he can complete at his own pace. This is an important factor, I think. At St. Petersburg Junior College our program is set up in such a manner that a student may enroll for three hours' credit in one of the three courses outlined. If, at the end of the session, he has completed his prescribed program satisfactorily he receives an S-satisfactory three terminal credits. This constitutes recommendation that he continue to the next step in his education. If, however, the student is unable to complete all the work by the end of the session, he simply re-enrolls for the next session, receiving an audit grade at the end of the term as opposted to a failing grade. When he re-enrolls, he does not begin the course anew; he continues from the point he had reached at the end of the last session.

These, we think, are some of the advantages of individualized instruction in our directed studies program at St. Petersburg Junior College.

COUNSELING AT MIAMI-DADE JUNIOR COLLEGE

Dr. Mary Jeanette Taylor

Professor MacLeod mentioned that our guided studies program at Miami-Dade Junior College evolves as it is re-focused with the changing needs or the students or with our changing perceptions of what the students need. And I would say that this characterizes most of what we do at Miami-Dade and probably most of what is done in junior colleges across the nation, but especially in Miami-Dade since we grow so rapidly. When someone asks me to describe any particular phase of our program, anything that we do at a given time, I sort of feel like saying, "Well, do you want me to talk about what we did last month; do you want me to talk about what we are doing this month; or, do you want me to talk about what we are going to do next month?" It may be a slight exaggeration, but the truth of the matter is that we do constantly change in a rather desperate attempt to keep up with what is going on, to re-focus as we feel we can better serve our goals and accomplish the purposes we intend for the students.

In talking about counseling as it is related to guided studies programs, I am talking about group counseling as well as individual counseling. I am talking about academic advisement which is done by a group of people who have counseling backgrounds, but whose primary function is the assignment of students to individual courses or to particular curriculums. In the process they do counseling. And then we have counseling done by our guidance personnel which may be vocational and personal as well as academic or, as I am sure

you are aware, in most cases all three. I am including here also the interpretation of test scores, which is done by the counselors in two ways. One is through discussion of the general ways in which test scores can be interpreted, what they mean basically, the whole orientation to how to react to a test score. For example, students are told that low test scores do not mean that they are stupid, nor are test scores absolute truths, and they should not be taken as such. This general counseling is based upon materials which are written by people in our testing center. Incidentally, that material, the written material and the oral discussion of it, is given to all students who take the guidance test battery at the time that they are given their scores in percentiles. The second way test scores are handled is through discussion of test scores from the guidance test battery, as well as any other tests that are administered, with individual students by the counselors in a private conference.

Now to be very specific about what our counselors do in relation to the guided studies program. First of all, our counselors address the students after every guidance test battery, talking about programs in the college in general, and talking quite specifically about the guided studies program, inasmuch as a comparatively high percentage of our students do fall into that program. And so at any particular test session, this is mentioned so that those who are going to be in guided studies will, in some measure, be prepared for it.

The counselors are given a list of those students who are going to be entirely in guided studies and those students are referred specifically to the counselors. Of course they are supposed to come in for conferences, but you know and I know that they don't always do it. Sometimes they show up and sometimes they don't, but we get several additional cracks at them. Even if they do not go to the counselors for individual counseling when they are first asked to, when they go into the academic advisement office to be assigned to their courses, if the academic advisor finds any resistance to their taking these guided studies programs, and if he finds he does not have the time or is unable to explain adequately to the student why he should take these courses, if he finds the student disturbed, he will again suggest that he go to counseling.

After the student has been through the hands of the academic advisor and the counselor, and if he still says he does not want to take guided studies, obviously, he doesn't take them. We don't have too many,though, whom we cannot reach. By and large, they see the wisdom of taking the courses, and we don't find, really, that there is any major resentment on the part of most students.

If the student is not one who is going to take <u>all</u> guided studies courses--if,in other words, he will be in one guided studies course, such as a guided studies mathematics or guided studies writing course, but the rest of his courses will be college level--here again he is referred to a counselor in the hope that the

counselor, in talking to him, can help him explore his educational and vocational or professional goals to determine which college level courses he should take in conjunction with the one or two guided studies courses that he will be carrying.

We have an orientation program at Miami-Dade Junior College which is a one-term, once-a-week course for all incoming freshmen full-time students. In this orientation program, of course, study skills and various programs offered are discussed in quite some detail. The skills required in the vocational, technical, and semi-professional area are discussed along with the aims of those programs, what kinds of positions students may expect to get after they have been through such programs, etc. Here, again, specific reference is made to these programs in the hope, for instance, that some of the guided studies students who are not incapable of achieving but perhaps, in many ways, lack motivation in the university parallel programs, would be more interested and better motivated in one of the technical or semi-professional vocational programs. In these orientation sessions, test scores are also discussed. People who are in guided studies are asked to come into counseling for additional testing if the counselors feel that it is needed.

We did have at Miami-Dade a guided studies planning program which was in conjunction with guided studies writing. It took one hour away from guided studies writing per week. In these planning sessions study skills were explained, group vocational counseling

was done; students wrote autobiographical material concerning their interests, their goals, what they wanted to do in life, what they thought their abilities were; they were given interest inventories as well as additional aptitude tests which were discussed with them; they got individualized counseling; and, at the end of the term, they were quizzed concerning whether or not their goals had changed. In other words, the guided studies planning session was intended to help the students develop some realistic assessments of their own abilities.

We like the program so well we thought it would be good for all students, so we developed an orientation program which, we thought, would also take care of the guided studies students. We don't know that it is not doing the job. We don't have any empirical evidence that it is not, but we feel it is not. And so we are planning, or hoping, to go back to integrating a planning session which will be handled by the counselors into the guided studies reading and writing and speaking course.

I might say that we don't know that it is due to the role of counseling that we seem to be successful in helping such students. There are many, many factors that enter into handling the guidied studies student, probably the most important of which is the counseling that the individual teacher gives in the classroom situation. But whatever it is that we are doing, it interests me a great deal to know that our retention of guided studies students is about the same as it is for the average student population. So we can't be doing too much that is wrong.

COUNSELING AT ST. PETERSBURG JUNIOR COLLEGE

Milton O. Jones

At a recent workshop this statement was made: "One of the greatest problems in education today is that we are attempting to meet tomorrow's needs with yesterday's tools." Whether it is called developmental studies, individualized studies, or directed studies, the program to which we direct our attention in this conference is seemingly a giant step in the direction of updating our tools to meet tomorrow's needs.

The junior college has been called "the institution where students find themselves". Thus it seems most appropriate that programs of specialized, individualized assistance should find their berth in the junior college. So many of our students are seeking to find themselves and their unique place in life; and, in some cases they come with inadequate backgrounds and abilities. My task is to explain "the tools of counseling in current directed studies programs at St. Petersburg Junior College".

First, I would like to make some remarks about philosophy. It seems to me that the general philosophies of the junior college, of counseling, and of directed studies programs are congruent. The printed program for this conference states as a purpose "to accept the challenge of providing educational opportunities for all our youth". Most authorities agree that the role of counseling is to provide assistance to the individual as he considers vocational aspirations, educational abilities, and personal-social values in an effort to

develop a complete and clear picture of himself and his place in society. Thus, as I see it, counseling and directed studies programs must be uniquely married. They are interwoven and complementary efforts which attempt to look at each individual as a total person in search of his own special place in life. I am confident that such is the philosophy under which we work here at St. Petersburg.

As you know, St. Petersburg Junior College has three campuses, and since there are slight variations in procedure in counseling for directed studies programs, I will attempt to discuss, in some detail, the program as we know it on this campus and indicate some variations a little later.

At this point, I'm reminded of the story of a young fellow about five or six years old who was standing on the front seat of the family's car as he waited for his mother to return from a short trip into the store. He stood there with his hands on the steering wheel, making all kinds of motor noises and manipulating the switches on the dashboard. At the same time, on the sidewalk nearby, an elderly gentleman watched, somewhat amused at the scene. He decided to play a little game with the young fellow, remembering how, in his childhood, he had enjoyed pretending to drive the family car. He walked over the the car and leaned down to a partially open window and said, "Listen, Bud, next time you make a left turn without giving the proper hand signal, I'm going to give you a ticket." The young fellow looked back at him with a serious and somewhat bewildered look and said, "Listen, Bud, your arm would be snatched off at the socket if

you put it outside a space capsule.

The man in this story was the victim of outdated information. In a somewhat similar manner, counseling for directed studies is in a constant process of change, even as I speak about it this moment. It is such an individualized effort, responsive to the needs of each student, that it is difficult to pull together an exact process to present to you. In addition, since the program is unfolding and growing at a rapid pace, we have deliberately tried to remain flexible and open to new ideas and approaches as they evolve from our experiences.

On the Clearwater Campus, each new and transfer student is required to see a counselor for a career planning conference. During this interview, the student and counselor discuss educational and career objectives to determine how realistic and confident the student is in his career plans. Several kinds of information are made available to the student. Examples of such sources of information include career information files, college catalogs, appointments and discussions with people successful in careers of interest to the student. The high school record, placement examination results, and various special tests, such as interest inventories and personal preference tests, are examined by the student with his counselor.

It is during this process of choosing a realistic career objective that minor deficiencies in preparation and background for colleg success are noted and discussed. The counselor and student decide

his academic program, sequence of courses, and the level of placement into courses. Many times the student may have excellent background in the necessary skills for college success in most areas but lack confidence and experience in specific areas such as math or English. When such is the case, the counselor discusses the possibility of directed studies with the student, and, if the student is interested, a referral is made to the Department of Directed Studies for further diagnostic testing to isolate the specific areas of need.

This is done on a standard referral form which includes all relevant information and available test results on the student. Afte this process is completed, the Chairman of Directed Studies then discusses with the counselor, usually by phone, the possibilities for the student in directed studies and makes a written recommendation for either unit or course study. For example, a student may need only a short unit in punctuation or spelling which he could complete while enrolled in the freshman English course.

The program has two major emphases--early detection and continuous advisement. These are ever-present objectives as all counselors work with students.

Early detection of those who need directed studies is done in several ways:

1. The directed studies program is explained to high school counselors during an annual articulation conference. Seniors and teachers are made aware of its offerings. Seniors are again reminded of the program at the time of placement testing in the spring.

2. Also during the spring, afternoon career-planning appointments are held with high school seniors. Those who may benefit from directed studies when they get to junior college are referred in the spring for assessment of areas of need in which they may be enrolled in the fall. Presently counselors are working with an average of 20 high school seniors per week. Approximately five of these students are referred for possible entrance to some area of directed studies.

The second emphasis which provides services for students who are already enrolled in college and pursuing a course of study might be called continuous advisement. This effort is accomplished through several means:

1. Failures and drops in English and math courses alert counselors to the possible need for referrals. Students may drop a math course and add directed studies for credit up to the eighth week of the term. Unit and audit work may be taken at any time.

2. Those not spotted in advance may be referred by instructors after classes begin.

3. Students may refer themselves. Self-referrals and instructor referrals usually include, at some time, consultation with a counselor.

Generally the process of counseling for directed studies is the same for all three campuses with several minor exceptions which I shall mention at this point. At St. Petersburg, two counselors have been assigned to work with directed studies students who are

interested in the two communications-oriented courses, while any counselor may refer a student to the math course. Once a student has been referred to directed studies he is transferred to one of the directed studies counselors. Students can, however, remain with the counselor to whom they were originally assigned, if he makes such a request.

A little more emphasis is placed on the test scores received on the entrance test battery. Guidelines such as 20 to 50 percent on the SCAT are used for inital referral; however, it must be stressed that these are only guidelines with the desires and needs of the student a primary consideration.

In conclusion, let me cite two cases which show the value of directed studies to our students:

Sam came to junior college on academic probation as a transfer student. His SCAT scores were: verbal, 33; quantitative, 52; for a total score of 37. Last term Sam received better than a three point average on 14 hours, which included logic, calculus, English composition, and chemical calculations. Also, Sam has raised his college boards score over 120 points.

Another student, Larry, came with a senior placement test total of 99 and a score in English of only five. His SCAT scores revealed: verbal, 8; quantitative, 44; for a total score of 17. He insisted on enrolling in English but, with the assistance of his counselor, changed to directed studies after a few weeks. He continued and completed both communications courses and the special reading courses.

Today he is enrolled in and passing both English and humanities after receiving a special waiver, due to his excellent work in directed studies.

At St. Petersburg Junior College directed studies has proven itself an important, modern, up-to-date tool which is of immeasurable value to counselors, instructors, and students alike. May I extend my word of congratulations and appreciation to our directed studies personnel and to our counseling staffs for the outstanding work which they are doing in this area.

PANEL DISCUSSION

ON

CURRENT PROGRAMS

Participants:

Mrs. Frances A. MacLeod — Dr. Mary Jeanette Taylor
Mr. Merle H. Morgan — Dr. Milton O. Jones

Moderator: Dr. Ambrose Garner

Dr. Garner: Mrs. MacLeod, what statistics or follow-up studies do you have to indicate the success of your guided studies program?

Mrs. MacLeod: We have done some follow-ups with our students. We have some reports. But when you speak of success, I don't know whether you mean success as people, success as transfer vocational students, or success in senior college institutions.

Dr. Garner: Dr. Taylor, could you give us some statistics?

Dr. Taylor: We don't really have the statistics. As usual, we are running to catch up. We hope to have; we want to know; we are in the process of following up the guided studies students who started in the fall of 1965. We know that 45 percent of this group were enrolled in the fall of 1966. We are in the process of seeing whether or not they were doing passing work. We are also trying to find out in which programs the guided studies students have the greatest chance. We want to know where they succeed the best, in which programs they succeed the least.

In the testing department, we are attempting to develop

predictors so that we will be able to say, not just to a guided studies student but hopefully to any student, based upon his test scores, his high school record, and so forth--"These are your chances. You have one out of five chances of succeeding in this program; you have four out of five chances of succeeding in this other program." We hope to be able to do this for all students one of these days, but we are trying particularly to do it for the guided studies students.

Mrs. MacLeod: Of course, when the student comes in he does not know in most cases whether he is a terminal or transfer student. It is part of his education to find out where he fits and what it is that he can do best. It's part of our job to help him find something that is a realistic, attainable and worthwhile goal.

Question: What studies do you have on the student who belongs in directed studies but does not choose to participate?

Mrs. MacLeod: I think that question applies more to St. Petersburg than to Miami-Dade because most of our students do go into guided studies if they are supposed to go. What about the ones who should, but don't?

Mr. Morgan: Well, we don't insist that they go. I don't know whether we will or not.

Mrs. MacLeod: She asked if there were any study of the ones

you have advised to go but who did not go.

Mr. Morgan: We have not yet made a study of this nature.

Dr. Garner: I was about to interject a note and break my commitment as moderator. We at Miami-Dade, I would say, would be very hard pressed to prove that our transfer programs are more difficult than associate science-occupational programs which are also two-year degree programs. I think this is one of the great problems facing junior colleges. The world of work has become so complex so rapidly that occupational programs must perforce be complex. It is difficult to find a place to develop programs in the junior college at which students who have limited potential and limited background can be successful.

Dr. Taylor: In the beginning at Miami-Dade, the guided studies program was completely voluntary. It was a very permissive situation, and not too many students availed themselves of it. Now, it is true that it is not mandatory; if a student does not want to do it, there is no way we can really make him do it. But he doesn't know this, you see. We just say in the catalog that below certain percentile, students are assigned to guided studies. Most of the students accept this, so it is virtually a requirement.

In counseling, we do have the guided studies program. Of course, you can fail it. But if you pass it, regardless of the level, you can then go ahead into other courses and sink or swim. The theory is that if you do the same thing over and over and over

again for 12 years and then another term in college, it gets pretty dull, and limits the chances of improvement beyond a certain point to practically nothing because there is no motivation.

Dr. Jones: I really don't think we have any right to require students to take a course like this. In fact, on this campus we have even shied away from bracketing scores 20 to 50. One of the boys I talked about here had a 5. With such a score, this boy would not have been allowed to take directed studies, and yet it was an excellent opportunity for him, I think. What is the adage, "You can lead a horse to water but you can't make him drink"? I don't think you can make students take these courses.

Dr. Garner: You reported that Manatee has a cut-off point for entrance into the college. In other words, putting it in the language of junior college philosophy, you have the open door open about 80 to 90 percent, but not altogether. I assume it is the feeling at Manatee that this policy is more of a service to students than it would be to let them into the college when they are obviously going to fail.

Mr. Morgan: My reaction to having a cut-off point of 160 or 150 or whatever it was you said is that I am opposed to a cut-off point altogether. So we disagree on that matter. I would think that a number of people who are allowed to enter only in basic studies might be rendered a disservice, in that there might be

certain selective courses in the college curriculum in which they could participate and do average work. I don't know; I say "might". Perhaps if these students were allowed to enter as full-fledged Manatee College students and take one or two regular courses in the curriculum and one or two courses in basic studies, whatever was called for, they might feel more highly motivated in all the courses and perhaps stay longer and perform better.

This is a theory I have. I don't have any facts yet to prove it, except that here at St. Petersburg Junior College our program has more than doubled in less than a year--as a matter of fact, far more than doubled--and it is all voluntary. The only statistic that I could quote, based on not great numbers of figures which are perhaps not so valid as they might be, are these: of students who have been in our directed studies program for one or two courses, we have discovered that about 60 percent stay one session and are able to correct some of their academic deficiencies and go on; of the other 40 percent who remain for another session, about half, again, will go on.

Some have learned that they are not really what we commomly call "college material", but they have also learned that there is a place for them. In addition, they have learned a little more about communication skills; they have learned a little more abour various disciplines; and, they are able to apply what they have learned in the work-a-day world.

I can cite you the case of a young man who had a senior

placement score of 87, which would render him almost impossible to accept. However, we had room, he was admitted, and he took directed studies courses. When he later took Math 110, he was the only student in the class who wrote a perfect paper on the progress grade, and he ended up with a very high B, almost making A. He is now in Math 111, the second math course, and he wrote 96 on the progress grade. We gave him the opportunity, and along with this, I might say, he took some selected college courses--one, I think, the first term he was with us, and two the second term.

This suggests that there are courses in the regular college curriculum that students can perform well despite low entering scores, and still they can be very weak in some other area. That is my point--the total score is not necessarily the main thing.

Man from Manatee: We do admit such students to basic studies at Manatee, but they cannot take regular courses until they have completed all basic studies.

Mr. Morgan: But they have no opportunity to be a part of the main stream of the college life in that they are in all basic studies--right?

Man from Manatee: That is correct: all basic studies, no college courses.

Mr. Morgan: That is what I say. They must be all basic studies. They are not allowed to take anything else along with it.

Dr. Garner: Let me clarify what is now an apparent misunderstanding of what you said. I understand you to say that you do not admit to the college the lower 10 percent. Do you consider the basic studies/directed studies a part of the college?

Man from Manatee: Yes.

Dr. Taylor: I do agree to some extent. I agree that if a student is weak in certain areas, we have an obligation to try to help him strengthen them so that he, hopefully, will succeed. But I am not convinced that failing a course necessarily means that a person did not get anything out of it. This would be my reason for not wanting the door absolutely closed if a student does not want to go into basic studies. Such a student is not disruptive. A class can include some people who cannot do the level of work without ruining the class, and such people may learn something by sitting there.

Mr. Morgan: My feeling, and I don't think I can say "our" feeling, is that a student has a right to fail if he wants to. Let him fail if that is what he wants to do. We might do him a service.

Dr. Jones: I agree that we have an obligation. I think rather than using a cut-off score to determine whether a student goes into basic studies or not, that we should use a professional counselor to work in a one-to-one relationship with the student and arrive at a placement decision.

Dr. Garner: If the moderator can step out of his role for a moment--there seems to me to be a number of things involved in the matter we are discussing here. One is that in any college you would not find the same chances of success in all programs for a given student. So it is possible that it is not an all-or-nothing situation. It is possible to admit people to a college without guaranteeing admission to any specific program. As a matter of fact, I think it is our professional responsibility not to do that. First, I think it is our professional and public responsibility to admit into the college. Second, I think it is our professional responsibility to work with students so that they do not get into a meat grinder out of which they cannot possibly come successfully.

It would be folly for us, for example, to admit certain people to our career pilot program; but that does not mean that they may not be admitted to the college.

I am utterly convinced that we cannot allow ourselves to adopt the philosophy that has characterized much of higher education, namely that students can come in and have a whirl at it; but if they don't make it, it's their own fault. I am convinced that the public in the United States will do as they did in response to this attitude at the four-year institutions. They will create new institutions which will pick up and seriously discharge the responsibilities of post-high school education. I think it is as simple as that. I think if you had to ask for one reason why there are junior colleges, it would be inescapable that this is the reason. And I

am convinced it will be the reason there will be another level of institutions if junior colleges do not pick up this responsibility and discharge it seriously.

Mrs.MacLeod: (In response to question about student population.) I think there may be some misconception in the minds of some of you who haven't worked with these programs that there are two classes of citizens in the junior college--the first-class citizens and the second-class citizens. Naturally, if there are two classes of citizens, the second-class citizens will resent their position. I do not get this feeling at Miami-Dade. Our students do not necessarily know when they come in whether they are terminal program students or transfer students, and sometimes the student who goes into the basic classes is an excellent transfer student at the end of two or possibly three years.

Of course, there must be no stigma attached to the basic studies courses and I don't feel that we have it. I don't feel that our students resent it, and they won't resent it as long as they know it is helping them and that they are getting some place. A great deal depends on the individual instructor.

Is anybody thinking about a type of program where people accumulate something like 60 hours or so based on their interests, rather than on an outlined program in the college?

Dr. Taylor: I think any junior college faculty thinks about

this type of program quite a lot. The percentage of students who enter and ultimately go on to a senior institution is comparatively small. Many do not continue their education for financial reasons; others because they are not interested; and some have other reasons. So I think any faculty of a junior college that fails to recognize that part of our function is simply to give two years of college to people, recognizing that they may not do anything further with it, is overlooking reality. At Miami-Dade, for instance, we have a diploma of graduation which means that 60 hours with a certain grade point average have been completed at the junior college.

APPENDIX

REGISTRATION LIST FOR DIRECTED STUDIES CONFERENCE

Abbott, Frances	Junior College of Broward County
Abraham, Donald L.	St. Petersburg Junior College
Adams, Charles	Chipola Junior College
Adams, Perry	Polk Junior College
Alford, Harold	Lake-Sumter Junior College
Allen, G. W., Jr.	Chipola Junior College
Alwin, Robert, H.	St. Petersburg Junior College
Ammons, Rosemary	St. Petersburg Junior College
Ardiff, William	St. Petersburg Junior College
Arnold, Margaret L.	St. Petersburg Junior College
Ballenger, Florence	St. Petersburg Junior College
Barber, Kathryn	St. Petersburg Junior College
Baumgarten, Gail	Tallahassee Junior College
Bell, William	St. Petersburg Junior College
Bennett, Michael M.	St. Petersburg Junior College
Bently, Naomi E.	Daytona Beach Junior College
Biittner, Eugene	St. Petersburg Junior College
Bisdorf, Donald L.	St. Petersburg Junior College
Bohman, Helen	St. Petersburg Junior College
Brereton, Pierce H.	University of South Florida
Briggs, E. H.	Polk Junior College
Broadfield, Frances	St. Petersburg Junior College
Brosier, Glenn	Indian River Junior College
Burney, Jewell	St. Petersburg Junior College
Camacho, E. Oliver	Miami-Dade Junior College
Carroll, Harold W.	St. Petersburg Junior College
Ceely, William	Lake City Junior College
Cenedella, Edward	St. Petersburg Junior College
Clark, Sally	St. Petersburg Junior College
Clarke, Johnnie Ruth	St. Petersburg Junior College
Coates, L. F.	St. Petersburg Junior College
Colmer, Parker	St. Petersburg Junior College
Comnes, Gregory	St. Petersburg Junior College
Comnes, Mrs. Gregory	Polk Junior College
Cooper, Leland	Brevard Junior College
Corcnsen, Clifford	St. Petersburg Junior College
Cottrell, Edward	St. Petersburg Junior College
Cowen, John	St. Petersburg Junior College
Crouch, Jane	
Dallman, Glenn	St. Petersburg Junior College
Dees, Roberta	Lake City Junior College
DeJoy, Ellen	Daytona Beach Junior College
Dembowski, T. J.	McGraw-Hill Book Co.
DeWitt, Martha	St. Petersburg Junior College
Dodamead, Thomas	Polk Junior College

Dodson, Harriette	Florida Junior College at Jacksonville
Donnell, L. N.	Brevard Junior College
Eiseman, Frank	Gulf Coast Junior College
Ernst, Richard J.	St. Petersburg Junior College
Ettenhadiel, Ferro	Palm Beach Junior College
Follin, Virginia	St. Petersburg Junior College
Fowler, Robert	St. Johns River Junior College
Frantz, Dorothy	St. Petersburg Junior College
Fredrickson, Philip A.	St. Petersburg Junior College
Freeman, Ernest	St. Petersburg Junior College
French, Virginia	St. Petersburg Junior College
Garner, Ambrose	Miami-Dade Junior College
Goffi, Joseph	Palm Beach Junior College
Gollattscheck, James	Valencia Junior College
Good, Herb	Gulf Coast Junior College
Goss, Theresa	St. Petersburg Junior College
Green, J. G.	Daytona Beach Junior College
Green, Mrs. J. G.	St. Petersburg Junior College
Greenberg, Anita	Florida Atlantic University
Guistwhite, Jack C.	St. Petersburg Junior College
Guy, Flora	
Hackworth, Robert	St. Petersburg Junior College
Hale, E. W.	McGraw-Hill Book Co.
Hall, Ilda	St. Petersburg Junior College
Harner, Holt	Junior College of Broward County
Harper, Louis O.	St. Petersburg Junior College
Hawkins, Ethel	St. Johns River Junior College
Higgins, Ann	Gulf Coast Junior College
Hitchcock, George, Jr.	Central Florida Junior College
Hoffman, Ellen	St. Petersburg Junior College
Holladay, Sylvia	St. Petersburg Junior College
Hopper, Harold	Indian River Junior College
Hunt, William S.	St. Petersburg Junior College
Hunter, Lora	St. Petersburg Junior College
Jennings, Emelia	Manatee Junior College
Jones, Milton	St. Petersburg Junior College
Jopling, Homer	St. Petersburg Junior College
Kelley, Roselee	St. Petersburg Junior College
Kingery, Kenneth	Encyclopaedia Brittanica
Klinepeter, Don	Lake City Junior College
Kosiba, Raymond	Brevard Junior College
Kreager, Robert	St. Petersburg Junior College

Lanphear, Lucy	St. Petersburg Junior College
Lasater, Jeanne H.	Polk Junior College
Lee, Owen	Polk Junior College
Linzmayer, Mary	Santa Fe Junior College
McClure, Wesley	St. Petersburg Junior College
McCormick, Marijo	University of South Florida
McCuskey, Elbert S.	St. Petersburg Junior College
McGarry, Nancy	St. Petersburg Junior College
McGough, William	Polk Junior College
McKenzie, Donald	Lake City Junior College
McLean, Helen	St. Petersburg Junior College
McMullen, Elna	Edison Junior College
MacLeod, Frances A.	Miami-Dade Junior College
Madden, Joseph	St. Petersburg Junior College
Manson, Gunhilde J. S.	St. Petersburg Junior College
Martens, Roland	St. Petersburg Junior College
Mathewson, Angelle	Lake Sumter Junior College
Mendoza, Peter	St. Petersburg Junior College
Merrill, E. S.	St. Petersburg Junior College
Miller, Jack	St. Petersburg Junior College
Mitchell, Joy	St. Petersburg Junior College
Moran, Kimber	St. Petersburg Junior College
Morgan, Merle H.	St. Petersburg Junior College
Moskel, Berneece	Edison Junior College
Motley, William	St. Petersburg Junior College
Murphy, Bernard	Central Florida Junior College
Painter, Robert	St. Petersburg Junior College
Peirson, Elizabeth	St. Petersburg Junior College
Peterson, Ellen	Edison Junior College
Pfister, James	St. Petersburg Junior College
Pierce, Frank	St. Petersburg Junior College
Pollock, Arthur D.	St. Petersburg Junior College
Ratti, Emilio P.	Manatee Junior College
Raulerson, Marsha	Lake City Junior College
Reeves, Mildred	St. Petersburg Junior College
Reichert, James	Encyclopaedia Brittanica
Remington, Sylvia	Polk Junior College
Rice, William	St. Petersburg Junior College
Riedelbach, Ruth	St. Petersburg Junior College
Roberts, Dayton Y.	State Department of Education
Rodgers, Clyde A.	Polk Junior College
Roy, Martin	St. Petersburg Junior College
Roys, William	St. Petersburg Junior College

Sands, John	North Florida Junior College
Savige, John L.	St. Petersburg Junior College
Sharp, Dawn	St. Petersburg Junior College
Shelar, Keller, Jr.	Daytona Beach Junior College
Simmons, Stanley	Miami-Dade Junior College
Skaggs, Kenneth G.	American Association of Junior Colleges
Smith, Mary Lee	Florida Memorial College
Smith, William F.	St. Petersburg Junior College
Sowell, James	St. Johns River Junior College
Stewart, Chrystelle	St. Petersburg Junior College
St. Jacques, Ernest	Santa Fe Junior College
Stevenson, Jane	St. Petersburg Junior College
Story, H. K.	St. Petersburg Junior College
Stover, Edwin L.	St. Petersburg Junior College
Sturn, Charles	Polk Junior College
Swarts, Marjorie	St. Petersburg Junior College
Taylor, Douglas C.	St. Petersburg Junior College
Taylor, Mary Jeanette	Miami-Dade Junior College
Tighe, Donald	St. Petersburg Junior College
Toothman, Rex	Southeastern Education Laboratory
Touchton, Lea	Gulf Coast Junior College
Wainman, Charles	St. Petersburg Junior College
Walthall, David	St. Petersburg Junior College
Watson, Robert	St. Petersburg Junior College
Wattenbarger, James	State Department of Education
Whitman, Carl	St. Petersburg Junior College
Whitman, Mrs. Carl	
Williams, Juanita H.	University of South Florida
Williams, P. C.	St. Petersburg Junior College
Woods, Shirley	St. Johns River Junior College
Wright, H. McKennon	St. Petersburg Junior College
Wynn, Garland, Jr.	Lake Sumter Junior College