

DOCUMENT RESUME

ED 078 214

VT 020 441

TITLE Exemplary Vocational Education Program Based on Environmental Studies K-14. Interim Report for the Period June 1, 1972 to May 31, 1973.

INSTITUTION Minnesota Environmental Sciences Foundation, Inc., Minneapolis.

SPONS AGENCY Bureau of Adult, Vocational, and Technical Education (DHEW/OE), Washington, D.C.

PUB DATE May 73

GRANT OEG-0-71-2396 (361)

NOTE 141p.

EDRS PRICE MF-\$0.65 HC-\$6.58

DESCRIPTORS Activity Units; \*Career Education; \*Career Planning; Curriculum Development; \*Developmental Programs; Dropout Programs; Educational Coordination; Environmental Education; Inservice Teacher Education; Job Placement; Occupational Guidance; \*Resource Centers; \*Vocational Education

IDENTIFIERS \*Minnesota

ABSTRACT

The goals of the project described in this interim report were to: (1) develop a systematic manner for delivery of career education relative to environmental education, (2) develop a system to assist high school dropouts and other out-of-school youth in making career decisions, and (3) demonstrate the career education concept to other schools by this system. Procedures followed to implement these goals are detailed for the elementary, junior high, and senior high schools and for the Community Career Center for school dropouts and other out-of-school persons. Accomplishments included in-service programs for teachers, special vocational programs for the secondary grades, and the operation of a drop-in center for dropouts to offer information on educational and occupational planning. Conclusions and recommendations indicated that career education must coordinate with the existing curriculum and that teachers must have participation responsibilities in the development of the program. The evaluation report for this project is available as VT 020 442 in this issue. (MF)

ED 078214

INTERIM REPORT

Project No. 1-361-0171  
Contract No. OEG-0-71-2326 (361)

Exemplary Vocational Education Program  
Based on Environmental Studies K-14

Exemplary Project in Vocational Education  
Conducted Under  
Part D of Public Law 90-576

*Minnesota Environmental Sciences Foundation, Inc.*  
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May, 1973

VT020441

ED 078214

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The project reported herein was performed pursuant to a grant with the Bureau of Adult, Vocational and Technical Education, Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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V. SUMMARY OF REPORT

A. Time period covered by the project: June 1, 1972 to May 31, 1973.

B. Goals and Objectives:

Goals

1. Develop a systematic manner for delivery career education relative to environmental education to students K-14.
2. Develop a system of assisting high school dropouts and other out-of-school-residents in making mature career decisions.
3. Demonstrating the career education concept to other schools by developing a successful working model.

Objectives

Elementary:

1. The principal instructional mode will be experiential.
2. Career education and environmental education concepts will be integrated in the curriculum for the selected schools.
3. Curriculum activities will reflect an emphasis on learning rather than on teaching.

Junior High School:

1. Establish career exploration on one-to-one basis for individual students.
2. Relate career education and environmental problems on personal family and community basis to subject areas.
3. Encourage industrial education teachers to accept career related skills, i.e. the world of work.

Senior High School:

1. a. Provide a ready access to career information.  
b. Active assistance in the assimilation process for making a career decision.
2. Coordinate work experience in the environmental career awareness.
3. Provide job placement information on an entry level and part-time basis.

Community Career Center:

1. Extend career guidance function to out-of-school residents.
2. Offer job placement assistance to dropouts and others.

C. Procedures Followed:

Elementary

1. a. Elementary teachers in in-service workshops which model experiential learning style.  
b. Provide experiential learning activities for teachers in the in-service workshops.
2. Provide experiential environmental career units project teachers to use in their classes.
3. a. Evaluate students' performance with relation to career education and environmental education attitudes and awareness.  
b. Publicize the results of the evaluation.

Junior High School

1. Establish a resource center for career information and assistance in exploration.
2. Incorporate family model simulation into seventh grade curriculum.
3. Establish world of work, i.e. world of instruction and world of manufacturing in junior high school industrial education programs.

Senior High School

1. Establish career resource center at senior high school level.
2. Initiate career environmental relationship with work experience program.

Community Career Center

1. Operate Community Career Center office outside of school building.
2. Develop job placement program.

D. Results and Accomplishments:

1. Conducted summer in-service one-week workshops and one-day school-year in-service workshops for 53 elementary teachers and four selected schools involving indirect experience activities in environmental career education approximately 2,300 students.
2. Conducted in-service program development for ten junior high teachers.
3. Conducted two world of work programs in two junior high schools, using materials from world of manufacturing and world of construction.
4. Organized and operated a junior high career resource center and a senior high career resource center.
5. Organized and operated an unmanned career resource center involving mainly audio-visual materials.
6. Operated two work experience programs emphasizing environmentally related careers.
7. Continued advisory capacity in environmental technician course at area vocational-technical school.
8. Operated Community Career Center for dropouts and other out-of-school youth, offering information on alternative education plans and career decision assistance.
9. Developed three career education environmental units for elementary teachers.
10. Designed in-service work visitation experience for 50 elementary teachers in industry visit.
11. Follow-up study group, including administrators, teachers, and career resource personnel have met several times to design and conduct a follow-up study on career education effectiveness at Armstrong High School.

E. Evaluation:

1. Pre- and post-test career information and attitude surveys have been administered to a random sample of all student participants K-12.

2. Site visits and interviews have been conducted by the third-party evaluator with teachers and students in all participating schools.

F. Conclusions and Recommendations:

1. In order to have high impact and appeal to teachers, career education must coordinate with the existing curriculum and teachers must have participation responsibilities in the development of the program.
2. Teachers need to see a practical application for career education in their classes now. The promise that career education will have great import for their students in years to come has a psychological appeal but does not appeal to the problems that the teacher sees in the immediate situation.

VI. A. Problem area as defined in the original proposal.

It is apparent that American education needs new goals, new objectives and new vitality to meet both the needs of its clientele and of a society in rapid change. While the present system has served many students very well as is evidenced by the increased numbers attending post-secondary schools of any kind, only one student out of every five will graduate from college, yet our school programs are heavily weighted in the direction of college preparation. In view of these figures it seems that we should concern ourselves with dropouts at all levels of education, not simply elementary and high school, because the conditions that produce dropouts are similar to those in our post-secondary units. What about the dropouts who remain in school; those for whom school is an unrewarding series of academic failures and personal defeat? Counted among the graduates they disappear into the labor or unemployed force not to be heard from or counted again.

In short, for many students, school is a tedious and irrelevant period. The sterility of educational programs, the lack of congruence between school and society, and anachronistic educational priorities combine to insure that the rate of dropping out will increase unless the system undergoes a revitalization process. Revitalization would shift the emphasis from program dictates to students' needs, from irrelevant and academic exercises to community based studies, and from knowledge acquisition to competence in confronting both the world of work and society.



The problem defined for investigation within the scope of this project is an acknowledgement of the failure of schools to bring most students to a level of competence needed to cope with career decisions, job acquisition and maintenance and effective citizenship, in particular citizenship related to efforts in community-environmental management.

Historically, schools have borne little responsibility for sound career development or environmental sensitivity, yet both are major societal needs. As environmental problems increase there will be a corresponding increase in demand for citizen awareness and for manpower in environmental control occupations. This suggests that the mission of the schools for now and for the near future could be to provide its clients with a career awareness and with an ecological approach to community environmental problems. When appropriate these two educational foci could be combined. That is the intent of this project.

Therefore, the problem to which project efforts are addressed is "to structure the curricula of the various grades in order to utilize materials which will help students develop an ecological conscience and a positive attitude toward jobs (particularly those) pertaining to the wide utilization and maintenance of the environment"

A focus on the world of work as it relates to the field of environmental services has been chosen for this program for the following reasons:

1. The availability of materials and support in the form of curricular materials, in-service training expertise and community resource utilization from the Minnesota Environmental Sciences Foundation.
2. The interest of youth in programs related to preserving the environment. It is increasingly possible that young people will want to direct their career aspirations in this direction.
3. It is in our national interest to define new jobs or redefine existing ones with a view toward preserving and maintaining the environment. Therefore, new job opportunities will be opening without predetermined standards regarding sex, race, or physical and mental abilities.

4. There is a broad spectrum of job opportunities related to the field of socio-ecology. Such jobs encompass the fields of environmental education, environmental research, legislation, the aesthetic, recreation, management and utilization of resources, urban and rural planning, and technological development.

Certainly, therefore, the environment is a means to a living.

B. Goals and objectives of the project.

Objectives

The overall objectives of the program will be (1) to develop an ecological conscience in all students, kindergarten through high school, and (2) to direct this ecological awareness toward job opportunities related to the environment.

Specific objectives would be directed toward providing a smooth sequence through the grades. These objectives are stated by grade level:

Elementary:

To train teachers in selected elementary school to include a study of the world of work in any and all appropriate areas of the curriculum, particularly in the area of environmental services.

To familiarize children in selected elementary schools with a variety of occupations. Points for consideration would include the demands and benefits of the different jobs, working conditions, availability and the relevance of school subjects to work opportunities.

To draw upon all community resources, particularly those from the Minnesota Environmental Sciences Foundation, and all techniques to make the program vital and interesting.

Junior High School:

To expand the students' knowledge of occupational opportunities.

To add depth to students' ecological awareness and related job opportunities in the community.

Senior High School:

To institute a program of training which will provide exploratory and beginning skills in jobs related to the environment. These programs would serve to:

1. Provide entry-level skills in an occupation, or
2. Serve as transition to post-secondary level occupations, or
3. Serve as exploratory courses for students considering degree programs in environmental services.
4. To provide work experience in actual on-the-job situations. It would be necessary to develop a bridge of understanding and cooperation between educational agencies and the community in order to define those occupations which would be related to the preservation of the environment.
5. To provide placement services for those students who achieve entry-level skills in these occupations.
6. To provide vocational counseling and guidance to all students which would include information on occupations and the administration and interpretation of tests of interest and aptitude.
7. To inform students of what educational patterns are necessary and desirable for any occupation and make them aware of which of these are locally available. Included in this information would be analyses of the probable cost in terms of time, effort, and money. In those cases where desired occupations are not locally available, information would be given on where and how they might best be sought.

Post-Secondary:

To continue and expand the training programs already in effect.

To enable those with socio-economic handicaps to participate in these programs.

To expand the cooperative work experience aspects of the program.

To expand the existing vocational counseling program.

To expand and strengthen the placement services existing within the post-secondary program.

The specific objectives at each level are sequential. The overall single objective might be stated as developing a continuum in which the child, as he grows, learns about many occupations, finds that one for which he is suited and in which he is interested, is shown how to prepare for it and, in many cases, is trained for and placed in it.

C. Description of design and procedures.

Participation

In fulfilling the objectives for a sequential program K-14, it is necessary to implement a design which has scope and sequence for each level of participation. The project has addressed itself to this task by providing phases at each level of the school system. At the same time particular attention needs to be paid to each individual phase for it needs to be able to stand alone in the demonstration of a viable career education program.

We have intentionally limited participation at all levels in order to concentrate on control and quality of operation. It was decided that greater program effectiveness could be obtained by this scheme than by greater expansion. Evaluation and management of teacher in-service is more practical also. Generally the desirability to participate and a willingness to plan an implementation process were prime criteria for involvement.

Students

<u>Total Population</u>	<u>1972 Project Population</u>	<u>1973 Project Population</u>	<u>Projected Population FY 74</u>
Elementary	561	1,430	2,370
Junior High	0	800	1,400
Senior High	1,621	1,922	2,000
Services for dropouts	111	357	unknown
Post-secondary	20	20	20

Instructional Staff

<u>Component</u>	<u>Number</u>
Elementary	53 K-6 classroom teachers
Junior High	11 (planning staff representing all departments) 1 Career Resource Technician 2 Industrial Arts teachers
Senior High	2 Work Experience Coordinators 1 Career Resource Technician
Community Career Center	1 Career Counselor 1 Job Counselor Technician
Post-Secondary	1 Classroom Teacher

Method

Elementary:

In recognition of the need for combined career environmental curriculum materials and for in-service focusing on the modification of teaching attitudes, project staff:

1. Redesigned existing environmental education materials available through the Minnesota Environmental Sciences Foundation, Incorporated (MESFI), building in broader community based experiences, emphasizing observable career resources in the community.
2. Designed and conducted a five-day preschool workshop for elementary teachers incorporating the following goals:
  - a. Provide teachers with the first-hand knowledge through direct experience of materials, tools, equipment, and resources for an actively oriented career development program.

- b. Engage teachers in original problem-solving activity making them directly responsible for planning, designing, executing and completing a project of their own creation.
  - c. Foster needed intergroup relationships which could be transported securely back to the school setting and result in continued horizontal communication which would be supportive of the objectives of the program as well as the individual instructional goals of each participating teacher.
  - d. Display, through involvement in meaningful activity, the interdisciplinary nature of the curriculum to be introduced in the fall.
  - e. Demonstrate that an interdisciplinary career development program based on environmental studies is not only a useful and enjoyable alternative for both teachers and youngsters but may be a superior means of achieving many of the professed goals of general education.
  - f. Express to teachers the importance of incorporating elements of career development philosophy into their own educational philosophy in such a way that it is revealed to youngsters through the instructional program offered them.
  - g. Acquaint teachers with the goals of the project and their role in it; and acquaint ourselves as project staff with the teachers who have the responsibility for implementing the program.
3. Installed program in four elementary schools at seven different grade levels with the following teacher populations:

Grade	Northport		Pilgrim Lane		New Hope		Sunny Hollow	
	Teach.	Stud.	Teach.	Stud.	Teach.	Stud.	Teach.	Stud.
K	2	98	2	90	1	48	0	0
1	1	25	2	55	4	92	0	0
2	1	25	3	78	3	77	1	25
3	5	125	3	65	2	51	0	0
4	2	49	5	120	2	46	2	51
5	0	0	3	88	2	49	1	25
6	1	24	4	99	0	0	1	25
	<u>12</u>	<u>346</u>	<u>22</u>	<u>595</u>	<u>14</u>	<u>363</u>	<u>5</u>	<u>126</u>

4. Monitored program through conferences, continued in-service, student evaluation program and classroom materials evaluation program.
5. Encouraged project related field trips and use of resource people to provide experiential background for environmental study. Below is a chart for four project schools in terms of their use of the District resource facilities.

Community Education Office Data

<u>School</u>	<u>Resource People</u>		<u>Field Trips</u>	
	<u>1972</u>	<u>1973</u>	<u>1972</u>	<u>1973</u>
New Hope*	5	32	4	29
Northport*	18	32	20	35
Pilgrim Lane	46	40	15	30
Sunny Hollow	33	154	36	47

\*not project schools in 1972

It would appear that the career education concept of using outside resources in the classroom and visiting business, industry, and institutions outside the classroom or field trips has become a recognized tool of the classroom teacher. The careers project has encouraged their use of community resources and the school district's Community Education Office has enabled teachers to avail themselves of the community resources with little extra effort on the teachers' part. It would be honest at this point to state that an effective Community Education Office which can call upon a host of volunteer community resources for classroom presentation of field trip sites at the heart of utilizing the community. The district co-sponsoring this project has a fine, well-organized program for this service.

A description of the directions and materials provided for elementary teachers to develop their own individual integrated units is found in Appendix I. An outline for writing a performance based unit with related career elements is connected to a matrix for

selecting appropriate content. This is further detailed in a model of workshop discussion. In addition, in-service workshop techniques included teacher visits to industry with planned experiences and reports prepared and shared with fellow teachers at the following in-service workshop.

Appendix II illustrates the junior high school staff integration material and a summary of Hosterman Junior High Career Education staff involvement with dissemination activities.

Appendix III is a review of the Armstrong Senior High Career Resource Center including a description of function, summary of services, inventory of materials, and copy of a student career planning pamphlet produced and distributed throughout the school.

Appendix IV is a report of one of the units used in a workshop-experience cooperative education class sponsored by the project illustrating career education/environmental education relationship in an involvement activity.

Appendix V is a description of the post-school Community Career Center leaflet distributed at the all-school Career Fair and a yearly report on the Center's activities.

#### D. Results and Accomplishments.

Robbinsdale area schools have had well defined career education plans for years. This interest has produced many career education activities involving teacher attitudes and relevancy of curriculum. This has been true particularly at the secondary level where recent efforts spearheaded by Robbinsdale area school officials have resulted in the establishment of a 13-school-district consortium for vocational education. Careers Project has enabled many District 281 teachers to fulfill ambitions to integrate career education with the regular school program.

Specifically the Careers Project has enabled 53 teachers in four elementary schools to combine career education elements with subject units for a more interesting attractive curriculum. This means opening the classroom doors in a dramatic manner.

The report on resource people and field trip activity in these schools substantiates this claim. While enthusiasm for career education has been high, the actual manner of systematic implementation has not been known to the administrators and schools until



the Careers Project became real. Teachers and administrators were more inclined to look at isolated activities rather than program objectives.

The junior high involvement with career education has spread throughout the school system. Hostrman Junior High is visible as an innovative school and has produced a viable plan to include teachers from subject areas in planning and concentrating on career orientation for subject relevancy. It has been a means of uniting the efforts of the entire school. The industrial arts teachers who have been involved with World of Work programs have been so enthusiastic that in one junior high school the entire industrial arts department course offerings are being revised.

The senior high school Career Resource Centers are considered a strong addition to the guidance department. A recent visit with the Director of Pupil Personnel Services at Armstrong High School said that the Career Resource Center had proved so valuable that he was beginning to make every effort to continue the program through local funding. Other administrators and counselors have repeated that sentiment.

The effect of concentrated career information and active assistance in career decision-making is a long recognized function of counseling; and the Career Resource Center has proved it can fulfil that function most satisfactorily.

The Community Career Center has extended the school counseling function to out-of-school youth where the need for immediate career planning is the greatest. The system of contact with dropouts and the history of success speaks for itself. This function and service is viable. The residents of the district along with the business community have heartily endorsed the work of this Center.

In the fall of 1972, Suburban Hennepin County Area Vocational-Technical School serving the western suburbs of Minneapolis initiated its program for Environmental Technicians. Barbara Clark, Project Co-Director serves on the Advisory Council for this program. Forty students were enrolled, twenty on each of two campuses. Since the major determinant for a program is employability of graduates, mid-year surveys of the market were conducted in accordance with District policy. The survey revealed that, contrary to original beliefs, placement would be exceedingly difficult. A decision was made to reduce the class size and to refrain from accepting further applications for the program. The program is presently in a "hold" position awaiting

national developments in revenue sharing and release of E.P.A. funds which it is thought will make monies available locally for environmental technology jobs. In the meantime the possibility of offering a Career exploration program in environmental technology is being examined. This program would serve junior and senior high school students from the several districts, including Robbinsdale, which make up Intermediate District 287.

E. Evaluation. See Appendix VI.

F. Conclusions, Implications and Recommendations.

The project has become fully operational in all four levels during this year. Each component has an individual goal and separate identity, and yet the entire program has consistency and interrelated flow.

Specifically the elementary teachers and non-vocationally oriented secondary teachers appear to be willing to be involved with career education to the extent of their own personal work experience. It seems reasonable to assume we all view things and understand concepts through the light of our own experience or lack of it. The entree to teachers' acceptance of career education where their own lives have not provided for it seems to be twofold: one, actually provide some experience by way of field trips for teachers with first-hand discussions with workers in a variety of levels of sophistication and then expect a teacher can assimilate the work experience vicariously to cause a change of attitude; and two, by example and demonstration show the teacher that an academic concept can more effectively be learned by students through career education activities employing the career education elements. Teachers, like everyone else, are not going to change their ways unless they feel uncomfortable with those ways and are showed a more promising way. Vocationally oriented teachers are more willing to accept the career education concepts if they can see that it includes all subject areas in a cooperative effort. The dicotomy that has generally existed between vocational and general education need not exist at all. The above observations suggest that the teachers attitudes are crucial to the success of the program. Career education is not going to be successful as an edict handed down. Career education is more process than content.

Teachers are individuals and schools and communities are different. Situations are unique in each classroom. This condition which we have generally encouraged teachers to recognize is at odds with a prescriptive program of any kind. In other words, if a teacher is expected to handle his class in the most effective

manner, relying on his professional judgement to evaluate the pupils and the situation, he is then also capable of choosing the best manner of implementing career education elements in his teaching.

A career education program at the outset must recognize this or else it is dead. A career education program which is prescriptive and tells the teacher what to study and when is going to be rejected at the outset because it in effect becomes a curriculum of subject in competition with the three R's and other traditional subject areas. But the career education program which demonstrates to the teacher that he will be able to be more effective in teaching the three R's and other traditional subjects through career education elements will have won a chance for an even break.

The obvious recommendation is therefore that career education elements be introduced to teachers who are ready for it and who see the need and the manner in which they might individualize the effect.

The project staff found that limiting career education to environmentally related careers caused unwanted limitations. A narrow focus is actually counter to the philosophy of career education which encourages youngsters to explore as widely as possible in the career cluster which interests them. A program which does not provide for this but limits information and exploration to one cluster cannot be true career education. This is not to say that environmental education is not emphasized. It is in the best sense of the word because the environmental cause is highly compatible with career education in the total environment. It is the narrow focus on environmental careers which has been expanded to include all careers in the interest of program effectiveness.

The Community Career Center has proved to be a successful extension of the school district's counseling obligations to youth and others who have left the school system. The manner of operation has been proved effective. The success of the Center has been demonstrated. The only choice left is for the School Board to give budgetary priority to the program which is not revenue producing. State school aids are frequently based on school attendance and/or enrollment in day-school programs. When a youngster drops out of day school the school's interest too frequently drops with him except for an occasional personal contact with an interested teacher or counselor. This

may account for the lack of such programs at present. Some means must be found to encourage districts to finance these centers. Short money supply has become a fearsome foe of non-revenue producing programs. The interest which has been generated in the business community for the CCC may provide incentive for positive School Board action.

APPENDIX I

Elementary Curriculum Development Description

4/5/73

## ENVIRONMENTAL CAREERS PROJECT

### Year Three Program

You are reaching the end of either one or two years in the Environmental Careers Project. Congratulations! We hope that you have found it to be an enjoyable and worthwhile time for both you and your students. So much so, that in fact you will want to continue the program during Year Three and the years to follow as long as you continue to find that it contributes to the achievement of your instructional goals.

As you might imagine we are developing plans for Year Three now. You will find them to be somewhat different from Years One and Two. To explain, we are inviting all teachers to continue participating in the program. However, we are requesting that you develop your own program based on your past experience. What you plan can be supported financially in part by us. Should you choose to participate by planning an environmental-careers mini-program we would like you to describe that program to us in the form of a proposal. If we accept your proposal, you will receive a "grant" from us to carry out your plan.

Why have we shifted gears and gone to participation by proposal? There are several reasons. First, the total number of proposals developed will give us an indication of the success we've had to date in the program. If we receive five proposals out of a potential 53, we will know something is amiss. On the other hand, if we receive 40, how can we help but be pleased! Secondly, after Year Three, everyone will be on their own. To make the transition less abrupt, we chose a program format that will make you semi-independent while we are still on the scene. Our hope is that independence is not a limiting factor in the continuance of the program. If it is, we shall learn this next year (a year before most projects do!). Thirdly, we have fairly strong feelings that teacher-created programs have a better chance of success than do programs imposed from outside. We are therefore testing this lunch by requesting that you design your own program to which you will presumably make a commitment.

Our current estimate of grant size available to each of you is \$66.00 per teacher. This can be used to cover the cost of materials, supplies and transportation. Should fewer participate, then the figure will increase proportionally.

Our role with respect to your program will be one of maintenance. In other words, should you decide to participate, we will help you with your proposal, procure supplies and monitor your progress. We will not be offering more inservice but we will be available as "consultants" as we have been in the past. This is, of course, by design and should promote increasing independence.

Addressing ourselves more specifically to the proposal, we should like to confine it to something relating environmental education and career education as in the past. Within these limits there is a great deal of latitude. You may choose to request support to continue teaching the unit recommended for your grade level. You may create a brand new unit, you may select a new approach to District materials and "program" or propose any variation on these general themes. Whatever you choose to do it should be clearly described in your proposal. Guidelines for proposal development are included here to get you started.

### A Teacher's Guide to Proposal Development

A proposal is simply a request for support. In some cases that request is for direct financial assistance to accomplish some program goal. In other cases, a proposal may be developed for purposes of seeking a written or verbal commitment only to an innovation such as the change in schedules, staffing or policy which would be necessary to accomplish a program goal. Whichever kind of proposal is developed, its purpose and design must be clearly stated leaving no doubt in the mind of the reader that the support requested will enable the writer to accomplish specific program goals.

To assist you in your proposal development task we have prepared the attached "guidelines" and an accompanying set of explanations. Read through the guidelines and explanatory material and if you have further questions, please contact us.

A Guideline for Proposal Development

1. Description of Program
2. Behavioral Objectives
3. Evaluation/Checking Progress
4. Schedule of Activities
5. Budget

\*\*\*\*\*

Each proposal should cover the above items. On the next page are some questions and explanatory notes which will help you complete the items. In addition we will provide you with all the assistance we can to make this an enjoyable and useful experience.



## Explanatory Notes

1. Description of Program:

- A. What is it you want to teach?  
Describe the concepts or skills or both you expect the children to learn.
- B. In what specific activities will children become involved in this program?  
Describe several major instructional activities which you would have your students engaged in as part of this program. If you can, place the activities in sequence as the children might experience them.
- C. What materials and procedures will you select to teach what you plan in your program?  
Describe the resources, field trips, curricula, tools, hardware, etc., that you will need to implement your program. Also try to picture how you will organize and instruct your class and describe that if you can.
- D. Check your above description with another person to see if they understand what you are planning. Often their questions will help you clarify your thinking.

2. Behavioral Objectives

- A. What behavioral changes can you expect to observe in children at the completion of your program or;
- B. What will they be able to do after the program that they could not do before and to what degree?  
Specify some behaviors you could observe if the children learned what you intended them to learn. Remember you or anyone should be able to see this behavior.
- C. As you check your list of behaviors do you find they are important as measured against what you wanted to accomplish?  
Some behavioral objectives are trivial others represent important educational "leaps" for kids. Check yours with another teacher but remember we all have different educational values.....

3. Evaluation/Checking Progress

- A. What measures will you use to find out whether or not what you specified as learning objectives was in fact learned?  
If your objectives were stated in behavioral terms, then you have an evaluation system in hand.
- B. What means will you use to monitor progress throughout the program to ensure that what you planned is what is actually going on?  
logs, books, visits from our staff, student reports of progress are good program monitoring tools or aids. (See following)

4. Schedule of Activities

A. What are the important activities and when will they occur? (See Description of Program)  
If you plot out a time line of events you will have built-in monitoring check points.

B. Who is responsible for completing the identified activities?  
Some activities will be strictly your responsibility (e.g. ordering a bus), others will be the youngsters. Try to assign responsibilities as you develop your time line.

5. Budget

A. What major items must be purchased before the program is implemented?  
Estimate cost or check with us.

B. Will there be transportation costs involved?

SUBJECT AND CAREER EDUCATION MATRIX

SUBJECT AREAS  
 SKILLS/UNITS  
 MATH  
 LANGUAGE ARTS  
 SOCIAL STUDIES  
 SCIENCE  
 ENVIRON. EDUC.  
 ART  
 PHYSICAL EDUC.  
 MUSIC

CAREER  
 ORIENTATION  
 CONCEPTS

Career Awareness  
 Attitude to work  
 Attitude to workers

CAREER ORIENTATION  
 Know. about careers  
 Clusters  
 Interrelatedness  
 Interdependencies

CAREER EXPLORATION  
 Observation  
 Worker interviews  
 Work experience  
 Educational Awareness

CAREER IMPORT  
 Self  
 Psycho. & Econ.  
 Societal  
 Social & Econ.

CAREER PREPARATION  
 Basic skills  
 Specific skills

DECISION-MAKING  
 Personal Valuing


### SUGGESTIONS FOR WRITING A UNIT IN CAREER EDUCATION

In an attempt to anticipate some of the problems a teacher may encounter while writing a unit emphasizing career education, a series of questions has been prepared. It is expected that if a teacher uses his own students as a resource to discovering the answers to these questions, he/she will have generated the major content for a useful unit. No attempt has been made to prescribe a certain teaching style or instructional method which the teacher may find uncomfortable. The imagination and creativity which distinguishes a particular teacher from others is encouraged and this process is not intended to detract from that uniqueness. These suggestions are only presented here to assist in the production of the unit.

1. What activities outside the classroom are many of your kids interested in? You may want to ask the kids. List all the activities and interests that seem generally attractive to your kids.
2. Select one activity or interest and decide which careers, industries, businesses, jobs, services, occupations, crafts, and trades are directly related.
3. Look at the career clusters. Under which cluster would these careers fit? Can you name some additional related careers in that cluster?
4. After you have become acquainted with the career education concepts, think about the interest and experience level of your students and select at least one concept which you consider appropriate to focus on in your unit. It will be necessary for you to decide at this point how you will tie the unit into your own content.
5. Who can best be a resource for this activity or career possessing first-hand experience?
6. Where is the best place for students to obtain some experience with this activity?
7. How can the teacher provide some useful experiences with this activity?
8. What indicators of student involvement will satisfy your standards for successful student participation?

EXAMPLE OF A TEACHER USING THE SUGGESTED QUESTIONS AS A  
GUIDE TO WRITING

1. A fifth grade teacher talked to her class and found that they were interested in the following outside school activities:

skiing	paper routes
slumber parties	skating
camping	hobbies--collecting things
chess	swimming
reading	baby sitting
scouts	dancing lessons
kites	music lessons

2. After thinking about these activities, the teacher decided she would like to do some things with the kids interested in paper routes. It certainly seemed to be related to work, had appeal to many of her kids, and was real because it is often one of the first jobs that kids are able to qualify for while in the elementary school. The teacher thought of all the occupations related to newspaper production--printing, writing, distributing, selling, advertising, communication, etc.

3. After examining the clusters she decided that although a newspaper route could fit easily into the cluster of personal services, communication, media, she would choose marketing and distribution, since she preferred in this unit to concentrate on the delivering of a product and the attendant financially related problems. She added the directly related careers on market survey, delivery systems, and supervisory personnel as well as shipping and delivery, warehousing, inventory control, and assembling and packing.

4. Reviewing the career education concepts she noticed that a paper route carrier might illustrate to her kids the importance of attitudes about work. The job might also be used to show relationships between certain jobs and thus reveal specific pieces of information about the career orientation. Certainly a carrier needs to realize and be competent in specific skills in mathematics needed for handling accounts with customers and the company. Basic skills is social studies information regarding news distribution and information dissemination as well as language arts skills involved in newspaper production. Communication skills are interlaced throughout the distribution process from "selling" a customer to corresponding with the company about business transactions. The job exploration concept may be evident through individual methods of being with youngsters on the job. The concept of work in relation to self-worth and economic value is within the grasp of each kid. Finally each kid will form a personal opinion about paper routes from the unit and could constitute a decision regarding the work.

Because the teacher wanted to take advantage of the strongest area of student interest she decided to utilize the concept of work having value for self. This is a natural for illustrating the rewards of work in both an economic and psychological sense. A boy or girl who earns money performing an important service deserves to experience self worth. The teacher knew she could take this interest and use it to support some subject matter content she thought was important, i.e. some mathematics skills. She could have chosen social studies skills or communication skills with equal ease.

5. The best resource for an in-school interview with someone possessing first-hand information might be a boy or girl who has a paper route. The student might be in another grade. Or the teacher may decide to ask a panel of students with routes to react to questions on the subject. She decided to ask a group of her students to plan ahead of time the kinds of answers they wanted to explore such as values and respect, money handling problems, weather conditions, customer complaints, collecting, accounting, and use made of the profits.

Another resource from the community might be a mother or father of a son or daughter with a route. Problems and benefits could be explored from another angle. A paper route supervisor from the newspaper company might be happy to talk with the class. Spin-off topics could be explored and the teacher will want to make certain the proper emphasis is given to the importance of the skill acquisition she wishes to emphasize.

6. Field trips may be arranged to a newspaper distribution center. It may be that no field trip is considered appropriate to this activity and the concepts for this unit. The best place to get involved with the concepts may be the classroom itself.

7. Filmstrips are available to use with practically any activity. This teacher thought about the math skills suggested by the resource people and incorporated the problems in her math class content. In order to liven the subject a little she encourages the kids to design some or design some role-playing situations using math skills found in a paper route.

8. The teacher checked students' reactions to parts of the unit making notes to change parts in her final written version. In writing the final version the teacher kept in mind:

- A. A unit should be successful with most kids in the class. The teacher decides what constitutes success.
- B. Another teacher in a similar class should be able to pick up the final version of the unit, understand it, try it in class, and expect comparable results.

CAREER EDUCATION CONCEPTS

Awareness of Self through work

Attitude toward work  
Attitude toward workers

Career Orientation

Information about careers  
Clusters--relations through things, ideas, people  
Interrelatedness and interdependencies of work

Job exploration

Observation  
Worker interviews  
Work experience  
Educational avenues

Career Import

Work value for self  
    Psychological  
    Economical  
Work value for society  
    Sociological  
    Economical

Career Preparation

Acquisition of basic skills needed for work  
Acquisition of Specific Skills needed for work

Decision-making

Personal valuing related to current available information,  
attitudes, and abilities.

OCCUPATIONAL CLUSTERS SUGGESTED BY U.S.O.E.

Agri-business and Natural Resources  
Business and Office  
Health  
Public Service  
Environment  
Communication and Media  
Hospitality and Recreation  
Manufacturing  
Marketing and Distribution  
Marine Science  
Personal Services  
Construction  
Transportation  
Consumer and Homemaking Education  
Fine Arts and Humanities

SOME CAREER EDUCATION ACTIVITIES WITH EXAMPLES

1. Field trip                      Veterinarian at an animal clinic.
2. Resource people in            Auto mechanic.  
classroom
3. Work observation              Arrange ahead of time to talk to  
the participants, both those on  
view and those behind the scenes.  
Help a parent at home or at place  
of work, assist the school librarian,  
serve as a candy striper at a local  
hospital, have a paper route, sell  
magazine subscriptions, raise a  
garden.
5. Audiovisual aid                Borrow films, filmstrips, slides,  
tapes, and records through the  
public library. (See bibliography  
that accompanies this guide for  
further audiovisual sources.)
6. Role-playing                    Skit depicting community with a  
storm causing power failure, and  
the jobs which are affected as a  
result.



7. Career games      Class-generated games, i.e. "What's My Line?"; or charades acting out careers; or pinning a job title on each student's back and having each one find out "who he is" by asking each other questions; or a take-off on the "Dating Game" with one student questioning three others about careers they represent but cannot directly divulge, and then choosing which career description is personally most appealing.
8. Presentation      Students may pursue special interests by reading career resource books and/or interviewing people, and then reporting to class.
9. Projects in class      Younger pupils may bring "Daddy Bags" containing tools of fathers' careers. Older pupils may conduct neighborhood surveys concerning what people do or where they work.
10. Interclass projects      Pupils in one grade may help or work with pupils in another grade. Junior high students could run a day-care center one morning a week or interview senior high students about their career choices.
11. Simulated work      Divide the class into two companies that do business with each other. They can do correspondence, telephone communication, and direct sales, while bringing in a variety of careers such as payroll clerk, secretary, public relations, office manager, mail clerk, salesman, and maintenance.
12. Counseling and guidance      Activities to discover one's likes and dislikes and discussions based on why we hold different attitudes.
13. Information Center      Resource materials including books, pamphlets, guides, magazines, newsclippings, and bulletin boards with information about careers.

APPENDIX II

Junior High Integration Material

# ARMSTRONG SENIOR HIGH SCHOOL

## CAREER EDUCATION DEPARTMENT

### CAREER RESOURCE CENTER

The Career Resource Center at Armstrong began functioning on a "full-time" basis in February 1972. At that time a staff member was added under the Federal Grant in Career Education on which the Minnesota Environmental Science Foundation and the Robbinsdale School District are working cooperatively. Prior to that time a limited number of students were able to be served because of a limited staff.

Use of the Resource Center by the students increased gradually, but steadily, as more and more students and faculty became aware of the availability of information and services. Student use went from an average of 8 students per day to the present figure of 30-35 per day. All facets of student career needs are now handled in the Resource Center and the areas covered range from single questions and help in filling out applications to an extensive investigation of an occupation. The latter includes, when possible, time visiting the actual job setting. Students are free to come in on their own Independent Study Time, are reicrred by their homeroom or classroom teachers and counselors, or are given a specific classroom assignment to be completed in the Resource Center. All materials can be checked out for a period of time determined by the student. In addition to "information giving", there have been successful Junior class career groups, a mini-course in Decision Making for Seniors and Job Application Skills groups for Sophomores will be starting in March.

Not only has student use of the Resource Center increased, but faculty use, as well, is increasing rapidly. The past year teachers have made many assignments to the Resource Center as part of their classroom work. As an example, students in the child development area of the home economics course work must research careers in the child development field in the Resource Center; math class students involved in the career units use the Resource Center and must list resources used (at least 3) plus make arrangements for interviews they cannot make on their own; students in the special education classes have done a brief job description. These are only a few of the ways specific assignments were used. In addition, presentations to large and small groups have been made and range from an orientation to the Resource Center to detailed school and job information. Classes have been given the Strong Interest Survey, assistance with class GATB Testing has been furnished, as has help in planning and executing Career Days. New ways of providing services to students and faculty arise regularly and are explored by the Guidance Department.

Needless to say, we are pleased with the individual and group help we have been able to provide our students. To date, neither a student nor faculty evaluation has been made.

ARMSTRONG SENIOR HIGH SCHOOL  
GUIDANCE DEPARTMENT

INVENTORY SPRING 1972-73

2	A Chance To Go To College	1971	College Entrance Examination Board	
1	Accredited Institutions of Higher Education on Education	1970	American Council	\$3.95
1	ACT Financial Aid Services		American College Testing Program	
4	Admissions and Financial Aid Procedures at College Board Member Colleges for Students Planning to Enter in the Fall of 1972		College Entrance Examination Board	
4	Admissions and Financial Aid Requirements and Procedures at College Board Member Colleges--For Students Entering College Fall of 1971		College Examination Board, New York	1970
2	Agricultural, Forestry, and Oceanographic Technicians		Sidnev	\$11.95
	Aim for a Job Series			
1	Aim for a Job as an Electronic Technician			\$3.99
1	" in a Hospital			\$3.99
1	" in Air Conditioning & Refrigeration			\$3.99
1	" in Appliance Service			\$3.99
1	" in Drafting			\$3.99
1	" in Graphic Design/Art			\$3.99
1	" in Restaurants and Food Service			\$3.99
1	" in the Bakery Industry			\$3.99
1	" in the Iron and Steel Industry			\$3.99
1	" in the Pipe Trades			\$3.99
1	" in the Textile Industry			\$4.00
1	" in the Trucking Industry			\$3.99
1	" in Watchmaking			\$3.99
1	" in Welding			\$3.99
1	American Junior Colleges	7th Ed.	Gleazer	American Council on Education 1967 \$14.00
1	American Junior Colleges	8th Ed.	Gleazer	American Council on Education \$18.00
1	American Universities and Colleges on Education	10th Ed.	Singletary	American Council 1968 \$22.00
1	The Annual Guide to Undergraduate Study Guides	1972	1973 Ed. Vol. 11.	Peterson's \$10.00
1	Barron's Guide to the Two-Year Colleges Educational Series, Inc.	1967	Seymour Eskow	Barron's \$3.95
3	Barron's How to Prepare for College Entrance Examination Educational Series	1972		Barron's \$3.95
3	Barron's How to Prepare for the College Testing Program Educational Series	1972		Barron's \$4.95
4	Barron's How to Prepare for the High School Equivalency Educational Series	1971		Barron's \$3.95
2	Barron's Profile of American Colleges	1971-72	Benjamin Fine	
1	Barron's Educational Series, Inc.		Woodbury, NY	
1	Blue Book of Occupational Education		CCM Russell	\$14.00
1	Building a Successful College Career Publishers	4th Ed.	1971	Wm Brown \$2.95
1	Business Career Kit	Careers	Largo, Florida	
3	Career Education in the Environment Office of Education Superintendent of Documents--U.S. Government Printing Office	Washington, D.C.		\$3.95
2	Career Education--What is it and How to do it	1972	Hoyt	Olympus Publishing \$3.95
1	Careers in Biological Science	Sarnoff	Messner	1968 \$3.95

ARMSTRONG SENIOR HIGH SCHOOL  
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- 3 Careers in Graphic Arts  
 1 Careers in Horticultural Sciences Messner 1969 \$4.29  
 1 Careers in Hotel Management McDonnell Messner \$4.50  
 1 Careers in Social Service Messner \$3.64 1969  
 1 Careers in the Legal Profession Messner 1970 \$4.79  
 2 Catholic Colleges and Universities 25th Ed. 1971-72 Directory Catholic  
 College Bureau  
 1 Challenging Careers in the Library World Messner 1970 \$4.29  
 2 A Chance to go to College College Entrance Examination Board 1971 \$3.00  
 2 College Bound Brownstein 4th Ed. Barron's Educational Series 1971  
 \$2.95  
 1 College Charts Chronicle Guidance Publications  
 1 Colleges-Classified A guide for Counselors, Parents and Students  
 Chronicle Guidance Publications, Inc. 4th Ed. 1971 \$2.95  
 14 College Scope First 5pls. Bank 1971 College Scope, Boston, Mass.  
 2 Community Service & Related Specialists Doubleday 1970 \$11.95  
 1 Comparative Guide to American Colleges Cass & Birnbaum 1970-71  
 Harper & Row \$4.95  
 1 Complete Planning for College Sidney Sulkin Harper & Row 1968  
 Revised and Enlarged Edition \$3.95  
 1 Concise Handbook of Occupations Costello & Wolfson J. G. Ferguson  
 1971 \$11.95  
 20 Deciding 1972 College Entrance Examination Board \$2.50  
 2 Deciding: A Leader's Guide College Entrance Examination Board  
 1 Dictionary of Occupational Titles (2 vol.) 3rd Ed. 1965 U.S. Dept. of  
 Labor \$12.00  
 1 Directory of Vocational Training Sources SRA 1964  
 1 Ecology, Conservation, and Environmental Control 1971 Doubleday \$6.95  
 6 Education After High School Tom & Virginia Lycan North Central  
 Publishing Co., St. Paul, Minn. \$2.95  
 1 Educational Scholarships, Loan and Financial Aids Dept. of the Army  
 Pamphlet Headquarters, Dept. of the Army, April 1969 #352-1  
 1 Einstein's College Entrance Guide 7th Revised Ed. Bernice W. Kinstein  
 Grosset & Dunlop, Inc. New York \$3.95  
 1 Encyclopedia of Careers (2 vol.) & Vocational Guidance J. G. Ferguson  
 Publishing Co. 1972  
 1 " "  
 1 " "  
 1 " "  
 Encyclopedia of Careers & Vocational Guidance Supplementary Books  
 1 Health Technician  
 1 Community Service & Related Specialists  
 1 Marketing, Business & Office Specialists  
 1 Agricultural, Forestry & Oceanography Technicians  
 2 Engineering Technicians Brooking \$11.95  
 1 Essential Aspects of Career Planning and Development 1969 Humphrey \$4.00  
 1 Exciting Careers for Home Economists Spencer 1967 \$4.29  
 8 Factual Information on Private Vocational Schools  
 1 Fashion as a Career Heal 1965 \$3.64  
 3 Financial Aid for College American College Testing Program 1972  
 1 Financial Aid for Students Entering College 5th Ed. Keeslar  
 Wm Brown Publishing Co. \$4.95  
 50 Financing Your Higher Education F & M Saving Bank  
 1 Free-access Higher Education Warren W. Willingham 1970 College  
 Entrance Examination Board \$6.50  
 1 Future Goals of Engineering in Biology & Medicine Dickson & Brown  
 Academic Press New York & London  
 1 Guide to College Majors 1971-72 Chronicle Guidance Publications \$3.95

GUIDANCE DEPARTMENT

- 1 A Guide to Professional Careers Duckat 1970 \$5.64
- 1 The Guide to Summer Camps and Summer Schools 17th Ed. Sargent 1971 \$6.95
- 1 Handbook of Job Facts 4th Ed. SRA 1968 \$5.00
- 1 Health Careers Kit Careers Largo, Florida
- 2 Health Technicians Kingsinger 1970 \$11.95
- 2 Horizons Unlimited Medical Career Handbook 8th Ed. 1970 American Medical Association Chicago, Ill.
- 1 How to Beat the High Cost of College Cox 1971 The Dial Press, N.Y.
- 1 How to get into College and Stay There SRA 1970 \$2.95
- 1 How to Prepare for College New Revised Ed. 1968 Abraham H. Lass Pocket Books, N.Y. \$.95
- 1 If You're Not Going to College Spielcer & Hamburger SRA 1959 \$2.95
- 1 Industrial Careers Kit Careers Largo, Florida
- 1 Job Family Series SRA
- 1 #1 Jobs in Science
- 1 #2 Jobs in Mechanical Work
- 1 #4 Jobs in Technical Work
- 1 #5 Jobs in Selling
- 2 #6 Jobs in Clerical Work
- 1 #7 Jobs in Engineering
- 1 #8 Jobs in Mathematics
- 1 #9 Jobs in Building Construction Trades
- 1 #10 Jobs Health
- 2 #11 Jobs in Agriculture
- 3 #12 Jobs in Art
- 2 #13 Jobs in Publishing
- 1 #14 Jobs in the Performing Arts
- 1 #15 Jobs in Psychology
- 1 #16 Jobs in Unusual Occupations
- 1 #17 Jobs in Professional Home Economics
- 9 Living In-University of Minnesota Resident Halls University Housing U of M
- 1 Lovejoy's Career & Vocational School Guide Lovejoy 3rd Revision Simon & Schuster \$3.95
- 1 Lovejoy's College Guide Lovejoy Simon & Schuster \$3.95
- 1 Major Fields of Study 1971-73 Chronicle Guidance Publications \$3.95
- 2 Marketing, Business, and Office Specialists Wiggs & Ferguson 1970 \$11.95
- 250 Money for College College Scholarship Service College Entrance Examinations Board
- 30 More Education More Opportunity Off. of Health, Education & Welfare U.S. Government Printing Office
- 1 The NACAC Handbook of Member Colleges and Universities 1972 NACAC \$15.00
- 19 Need A Lift? American Legion Educational & Scholarship Program Americanism Division, Indianapolis, Ind. 46206 1970
- 1 New York Times 1972 Guide to College Selection 1971 6th Annual Revised Edition Quadrangle Book \$4.25
- 1 Occupational Exploration Kit SRA Assoc.
- 1 Occupational Information: the Dynamics of its nature & Use 3rd Ed. Bear & Rieber SRA 1964
- 8 Occupational Outlook Handbook 1972-73 Edition U.S. Dept. of Labor
- 1 The Official Catholic College Guide U.S. Catholic Conference \$1.45
- 20 Off to College 1971 Guidance Research Group Huntingdon College
- 15 Off to College 1972 Publications-Off to College Montgomery, Ala.
- 1 On the Job Training and Where to Get it Liston 1967 \$3.64
- 1 On the Job Norton Ferguson Publishing 1970 \$7.95
- 2 Opportunities in Environmental Careers Odom Fanning 1971 Vocational Guidance Manual

ARMSTRONG SENIOR HIGH SCHOOL  
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1	Opportunities in Oceanographic Careers	Odom Fanning	1969	\$5.75
14	Paramedical Training in Minnesota			
1	Preparing for College	Bette J. Soldwedel	The MacMillan Co.	\$1.95
	Guidebook For Parents			
1	Science & Engineering Careers Kit	Careers	Largo, Florida	
1	SRA Career Information Kit	SRA Association	Chicago	
1	Starting and Managing Series	Small Business Administration		
1	#1 Business of Your Own			
1	#2 Credit Bureau & Collection Service			
2	#3 Service Station			
2	#4 Bookkeeping Service			
1	#5 Building Business			
1	#7 Motel			
1	#8 Duplicating & Mailing Service			
1	#9 Restaurant			
2	#10 Retail Hardware Store			
1	#11 Retail Drugstore			
1	#12 Dry Cleaning Business			
1	#13 Automatic Vending Machine			
2	#14 Carwash			
1	Student Aid Annual 1970-71	Chronicle Guidance Publications		\$3.95
1	Student Aid Annual 1971-73	Chronicle Guidance Publications		\$3.95
2	Student Aid Bulletins 1970-71	Chronicle Guidance Publications		
2	Student Aid Bulletins 1971-72	Chronicle Guidance Publications		
1	Summer Camp & Summer Schools	17th Edition 1971	Porter Sargent Publishers	11 Beacon St. Boston, Mass. 02108
1	Summer Employment Guide 1971	University Publications	Denver	
2	Technician Education Yearbook	Prokken Publications	1969-70	\$8.95
1	The Blue Book of Occupational Education	1971	CCM Information Corp.	
1	The College Blue Book (10 vol.) (2 vol. 1, 2 vol. 2)	13th Ed.		
	1969-70 CCM Information Corp.	NY	1969	
6	The College Handbook	College Entrance Examination Board	1969	\$4.75
1	The First Years in College	Riolin, Fraser, Stern	1965	Houghton, Mifflin Co. \$3.95
1	Thirty Three Ways to Meet the Spiraling Cost of a College Education	J. K. Lesser	Cornerstone Library	New York \$1.25
1	Vocational Biography	May 1971 Vol. 7. Scholarships, Summer Employment, Jr. College, Landing A Job, Apprenticeship		
1	Vocational Biography	April 1972 Series B Vol. 7 Business for Yourself		
1	Wall Street Careers	Sarnoff	1968	Messner \$3.64
1	Women's Higher & Continuing Education: An Annotated Bibliography with Selected References on related aspects of Women's Lives	Westervelt & Fixter	College Entrance Examination Board	1971 \$1.50
1	Your Calling as a Brother	Cashin Rosen	1966	\$3.99
1	Your Calling as a Nun; a sense of Mission	Sister Mary Hurcen	Rosen	1967 \$3.78
1	Your Career if You're Not Going to College	Splaver	Messner	1971
1	Your Career in Aviation: Skyline	Neal	Messner	1963 \$3.64
1	"	Chemistry	Neal	Messner 1964 \$3.64
1	"	Civil Service	Lister	Messner 1966 \$3.64
1	"	Electronics	Neal	Messner 1963 \$3.95
1	"	Engineering: Engineers Unlimited	Neal	Messner 1968
1	"	Film Making	Gordon & Falk	Messner
1	"	Interior Design	Doyle	1969 \$4.29
1	"	Medical Research: Disease Detectives	Neal	Messner 1959 \$5.64
1	"	Medicine	Bleich	Messner 1964 \$3.64
1	"	Oceanology	Boyd	Messner 1968 \$3.95

1	Your Career in Parks & Recreation	McCall Messner	1970	\$4.29
1	" Physical Therapy	Darby Messner	1969	\$3.64
1	" Selling	Liston Messner	1967	\$3.64
1	" Teaching	Dowdell Messner	1967	\$3.64
1	" Theatre; Stage struck	Hirschfeld Messner	1963	\$3.64
1	" Transportation	Liston, Messner	1966	\$3.64
1	" The World of Travel	Dowdell Messner	1971	\$4.50
1	Your Future as a Dental Hygienist	Paige Rosen	1969	\$3.99
1	" Dietitian	American Dietetic Assoc. Rosen	1964	\$2.97
1	" Guidance Counselor	McDonough Rosen	1966	3.99
1	" Home Economist	Paris Rosen	1964	\$3.99
1	" Minister	Floyd Rosen	1969	\$3.99
1	" Model	MacGil Rosen	1964	\$5.97
1	" Physician	Kalb Rosen	1963	\$2.97
1	" Pilot	Kimball Scribner Rosen	1972	\$4.00
1	" Rabbi; a Calling that Counts	Gottschalk Rosen	1967	\$2.99
1	" Secretary 2nd Ed.	Noyes Rosen	1970	\$3.99
1	" Shorthand Reporter	VanAllen Rosen	1969	\$3.99
1	" Temporary Office Worker	Winter Rosen	1969	\$3.99
1	" Optician	Hirschhorn Rosen	1970	\$3.99
1	Your Future in a Changing World	Brunetti & Higerson Rosen	1970	\$3.99
1	" Accounting	Locklear Posen	1963	\$2.97
1	" Aerospace Technology	Ely Rosen	1962	\$2.97
1	" Agriculture	Hutchinson Rosen	1965	\$3.99
1	" Architecture	Roth Rosen	1960	\$2.97
1	" Astronomy	Bell Rosen	1970	\$3.99
1	" Banking	Boynton Rosen	1965	\$2.97
1	" Beauty Culture	Gelb Rosen	1970	\$3.99
1	" Chemical Engineering	Feder Rosen	1961	\$2.97
1	" Civil Engineering	Golze Rosen	1965	\$2.97
1	" Computer Programming	Davis Rosen	1969	\$3.99
1	" Dental Assisting	Frost Rosen	1970	\$3.99
1	" Dentistry	Vershel Rosen	1970	\$3.99
1	" Direct Selling	Goodrich Rosen	1965	\$5.97
1	" Electronic Engineering	Levine Rosen	1961	\$2.97
1	" Elementary School Teaching	Shockley Rosen	1961	\$2.97
1	" Fashion Design	Fashion Group, Inc. Rosen	1966	\$2.99
1	" Forestry	Hanaburgh Rosen	1961	\$3.99
1	" Geology	Leonard Weitz Rosen	1966	\$3.99
1	" Hospital Administration	Kirk Rosen	1963	\$2.97
1	" Hotel Management Revised Ed.	Sonnabend Arco	1971	\$5.97
1	" Industrial Engineering	Hammond Rosen	1965	\$2.97
1	" Interior Design	Greer Rosen	1963	\$3.99
1	" International Service	Calvert Rosen	1969	\$3.99
1	" Job Abroad	Winter Rosen	1968	\$3.99
1	" Journalism	Schaleben Rosen	1961	\$2.97
1	" Landscape Architecture	Frazier & Julin Rosen	1967	\$3.99
1	" Law Enforcement	Gammage Rosen	1961	\$2.97
1	" Marketing	Orent Rosen	1965	\$2.97
1	" Medical Assisting	Chernok Rosen	1970	\$3.99
1	" Meteorology	Frank Rosen	1962	\$2.97
1	" Museums	Burns Rosen	1967	\$3.99
1	" Music	Curtis Rosen	1962	\$2.97
1	" NASA	Levine Rosen	1969	\$4.00
1	" Naval Architecture, with information on Marine Engineering	Benford & Mathes Rosen	1968	\$3.99
1	" Nuclear Energy Fields	Thompson, Jr. Revised Ed. Arco	1971	\$2.97



1	Your Future in Nursing Careers	Robinson & Reres	Rosen	1972	\$2.99
1	"	Occupational Therapy	Shuff Rosen	1964	\$2.97
1	"	Oceanography	Revised Ed. Gaber Rosen	1967	\$3.99
1	"	Personnel Work	Pond Rosen	1962	\$3.99
1	"	Pharmacy	Kraemer Rosen	1964	\$2.97
1	"	Photography	Keppler Rosen	1965	\$2.97
1	"	Physics	Bell Rosen	1967	\$3.99
1	"	Printing	Reinfeld Rosen	1963	\$2.97
1	"	Public Relations	Bernards Rosen	1961	\$5.97
1	"	Radiologic Technology	Spirko Rosen	1966	\$3.99
1	"	Railroading	Goodfellow Rosen	1960	\$2.97
1	"	Real Estate	Durst & Stern Rosen		\$2.97
1	"	Retailing	Scott Rosen	1961	\$3.99
1	"	School Psychology	Gelinas Rosen	1968	\$3.99
1	"	Social Work	Bock Rosen	1964	\$2.97
1	"	Television	Deutsher Rosen	1963	\$2.97
1	"	The Air Force	MacCloskey Rosen	1964	\$2.97
1	"	The Army	Walmsley Rosen	1960	\$2.97
1	"	The Automotive Industry	Taylor Rosen	1963	\$2.97
1	"	The Beauty Business	LeVathes Rosen	1969	\$3.99
1	"	The Credit Field	Neifeld Rosen	1963	\$2.97
1	"	The Electronic Computer Field	Bibby Rosen	1970	\$3.99
1	"	The Federal Government	Gould Rosen	1962	\$2.97
1	"	The Foreign Service	DeLaney Rosen	1961	\$2.97
1	"	The High Fidelity Industry	Newman Rosen	1966	\$3.99
1	"	The Marine Corps	Fraser Rosen	1969	\$3.99
1	"	The Merchant Marine	McLintock Rosen	1968	\$3.99
1	"	The Navy	Burrows Rosen	1965	\$2.97
1	"	The Nursery Industry	Pinney Lg. Type Rosen	1966	\$5.97
1	"	Traffic Management	Heine Rosen	1967	\$3.99
1	"	Translating and Interpreting	Hendry Rosen	1969	\$4.00
1	"	Veterinary Medicine	Riser	1970	\$3.99
1	"	Your Own Business	Winter Rosen	1966	\$3.99
1	Your Personality and You	Splaver Messner	1965	\$4.29	
1	Your Practical Guide To College Admission	Dolmen	Chronicle Guidance Publications, Inc.	1968	

NEW ADDITIONS

- 3 Guide to Apprenticeships Minnesota Dept. of Manpower Services
- 1 Comparative Guide to Two-Year Colleges & Four-Year Specialized Schools and Programs

Salary Surveys

- Bulletins for Minn. State & Jr. Colleges and assorted Out-Of-State Bulletins
- Bulletins for Area Vocational-Technical & Private Trade Schools
- Assorted pamphlets on Chemical Dependency, Mental (hang-ups) Health, Family Relationships, Masculinity-Femininity, and Military Careers
- Magazines such as Career World, Occupational Outlook Quarterly, and Manpower

# ARMSTRONG SENIOR HIGH SCHOOL

## GUIDANCE DEPARTMENT

ALLIED HEALTH CAREERS			
Medical Records Tech.		X	Anok - Ramsey
Medical Health Worker		X	Austin
Occupational Therapy Ass't			Brainerd
Optometric Ass't			Fergus Falls
Orthopedic Ass't			Hibbing
Physical Therapy			Inver Hills
Practical Nursing			Itasca
Urological Ass't			Lakewood
Veterinary medicine Ass't			Mesabi
X-ray Tech. Ass't			Metropolitan
BUSINESS - COMMUNICATIONS			
Accounting			Normandale
Business Administration			North Hennepin
Business Technology			Northland
Clerk Typist and Clerk			Rainy River
Communications (Graphics)			Rochester
Credit and Collections			Vermillion
Computer - Data Processing			Willmar
			Worthington
			St. Mary's
			St. Scholastica
			Golden Valley Lutheran
			St. Benedict's
			Concordia-Moorhead
			Mankato St.
			Moorhead St.
			Winona St.
			St. Cloud St.
			Southwest St.
			U of M General
			U of M Crookston
			U of M Waseca

Occupational Field	Anoka-Ramsey	Austin	Brainerd	Fergus Falls	Hibbing	Inver Hills	Itasca	Lakewood	Mesabi	Metropolitan	Normandale	North Hennepin	Northland	Rainy River	Rochester	Vermillion	Willmar	Worthington	St. Mary's	St. Scholastica	Golden Vallev Lutheran	St. Benedict's	Concordia-Doorhead	Mankato State	Doorhead State	Winona State	St. Cloud State	Southwest State	U of M General	U of M Crookston	U of M Waseca
Distributive Education	X	X																													
Fashion Merchandising	X																														
General Business																															
Home Furnishings Marketing																															
Hotel-Retail Management																															
Insurance																															
Mass Media Technology (Journalism, Radio-T.V.)																															
Real Estate	X																														
Retail Management																															
Sales & Marketing																															
Secretarial (1 year)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Secretarial (2 years)		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Special Secretarial																															
Legal																															
Medical																															
Insurance																															
Parish																															
Small Business Management																															
Technical Aide																															
Transportation and Traffic Management	X																														
OCUPATIONAL - TRADE																															
Architectural Drafting Tech.																															
Chemical Engineering Tech.																															
Civil Engineering Tech.																															
Commercial Art																															
Computer Technology																															
Drafting and Design Tech.	X																														





ARMSTRONG SENIOR HIGH SCHOOL  
COLUMBIANA, MISSISSIPPI

How to Share Information With Your Parents and Then Visit  
A Vocational-Technical School

The questions below require some thinking and planning before you visit a vocational-technical school; look them over and decide which questions are important to you, then compare with actual conditions when you visit. It is usually possible to answer some of these questions before visiting the school. You should therefore read the school catalog and related materials carefully, and, if possible, talk with graduates of the school. This will enable you to make most effective use of your time during your actual visit by concentrating on questions which can not be answered beforehand.

Location and Surroundings

1. Is the school a part of the surrounding community or set apart from it? Is it in or near a city or town, or is it a self-contained unit?
2. How does the campus compare with your idea of a campus? How important is this to you?
3. What method of transportation would you use for trips to and from school and/or trips to and from home and school during vacations? How does this fit your budget?
4. What types of housing are available? How easy would it be to find nearby housing at a reasonable rate? Are rooms plentiful or in short supply? Do you prefer privacy or group living and study? How do the living conditions meet your preference?
5. How much room would you have for study, for arrangement of your belongings, and for storage?

Academic and Cultural Environment

1. What type opportunities--work-study programs or part-time jobs--exist in the community for practical application of your classroom knowledge?
2. What courses would you be required to take--in general, and in your major field of training?

4. Do the teachers encourage discussion in class? How much divergent thinking is expressed, and how is it received by the teacher and the class?
5. What seems to be the attitude of students toward their classes--enthusiastic, tolerant, or hostile?
6. Can any credits be transferred to a college program at a later date?
7. What level of academic performance, is required to stay in school?
8. How approachable are members of the faculty and administration, on an informal basis?
9. Would high-school credits in some courses qualify you to apply for advanced placement? At what level would you begin in your field?

#### The Student Body

1. Talk with students. What were their initial reaction to the school when they started? What changes have taken place in their feelings since then?
2. What reasons did some of the students you meet have for choosing the school? Are these reasons being borne out, in their opinions?

#### Campus Life

1. To what extent do the students share in establishing and enforcing school regulations? Is there an honor system?
2. What level of personal freedom exists? What do you and your parents think is a good level of personal freedom--setting your own rules and limits--for you?

Student Services

1. How much contact would you have with an advisor for discussion of course scheduling, analysis of grades, and meeting your potential?
  
2. What types of service does the school offer to graduates in contacting potential employers and placing them in jobs?

Personal Budget Form

SCHOOL:	I.	2.	B.	4.
Tuition				
Fees				
Books				
Room				
Board				
Travel				
Misc.				
Clothing, Laundry etc.				
Spending				
TOTAL				
Deduct				
Scholarships				
Grants				
Part-time job Income				
NET COST				



How to Share Information With Your Parents and Then Visit Colleges

The questions below require some thinking and planning before you visit a college; look them over and decide which questions are important to you, then compare with actual conditions when you visit. It is usually possible to answer some of these questions before visiting the college. You should therefore read the college catalog and related materials carefully, and, if possible, talk with alumni in the community and with students from the college when they are home on vacation. This will enable you to make most effective use of your time during your actual visit by concentrating on questions which cannot be answered beforehand.

Location and Surroundings

1. What is the size and type of the institution? Large or small; private, state or municipal; Liberal arts colleges, university, community college or technical institute.
2. Is the college a part of the surrounding community or set apart from it? Is it in or near a city or town, or is it a self-contained unit?
3. How does the campus compare with your idea of a campus? How important is this to you?
4. What method of transportation would you use for trips to and from home and college? How does this fit your budget?
5. What regulations govern ownership and use by students, especially freshman, of bikes, scooters and cars?
6. What types of housing are available to freshman? There are advantages to dormitory life during freshman year--check on whether this is required or readily available for borders?
7. Would you pick your own roommates or be assigned to them?
8. How much room would you have for study, for arrangement of your belongings, and for storage?

9. If you are to be living off campus, how easy would it be to find nearby housing at a reasonable rate? Are rooms plentiful or in short supply? Ask a student at the college about this.
  
10. Do you prefer privacy or group living and study? How do the living conditions meet your preferences?

#### Academic and Cultural Environment

- I. What areas of study are emphasized, and how do they fit your field of interest and ability? Is the college strong in Science, fine arts, the humanities? An investigation of the college's reputation and the careers of its outstanding graduates will help you find this.
  
2. What type of instruction does the college offer in your field: practical, theoretical, or a mix? After talking it over with your counselor, which mode do you think best for you?
  
3. What types of honors programs are available? How much independent study would be possible in your field?
  
4. What opportunities--work study programs or part-time jobs--exist in the community for practical application of your classroom knowledge?
  
5. To what extent is there interaction between faculty and students?
  
6. What courses would you be required to take--in general, and in your major field? What would constitute a typical freshman program?

7. What teaching methods are used in various classes--lectures or discussion? Is there an active process of investigation and learning on the part of the students or do most seem to sit quietly and take notes? Consult some college students to find answers to this and the next three questions.
8. Do the professors encourage discussions in class? How much divergent thinking is expressed, and how is it received by the professor and the class?
9. How much outside discussion of the subject matter takes place before and after class?
10. What seems to be the attitude toward their classes--enthusiastic, tolerant, or hostile?
11. Do freshmen have a chance to take some courses from the college's major professors? Who teaches freshman courses--graduate assistants or permanent staff?
12. What library facilities are available on campus? What are the library's hours? Would you want to spend much time there?
13. Can qualified upperclassmen transfer to professional schools (law, engineering, dentistry, medicine, forestry, etc.) after two years if they desire?
14. What level of academic performance, grade point average, if this system is used, is required to stay in college?
15. How approachable are members of the faculty and administration, on an informal basis?
16. Would high-school credits in some advanced courses (math, languages, etc.) qualify you to apply for advanced placement? At what level would you begin in these fields?

17. What opportunities for cultural enrichment--concerts, exhibits, speakers--are present on the campus and in the community? Would you be able to take an active part in these activities.

### The Student Body

1. What is the ratio of resident students to commuting students? How many come from public high schools; how many from private or prep schools? Ask to see the college freshman profile--a composite view of the freshman class--and compare yourself with it.
2. Talk with students, especially freshman. What were their initial reactions to the college when they started? What changes have taken place in their feelings since then?
3. What reasons did some of the students you meet have for choosing the college? Are these reasons being borne out, in their opinions?
4. How much emphasis is put on dress, social standing, and material wealth as a factor in acceptance by fellow students? What are your reactions to your findings here?
5. What is the makeup of the student body according to national, regional, social, and ethnic background? Are there a number of foreign students from all over the U.S., and students from all types of home environments--or does one region or class predominate.

### Campus Life and Community Living

1. How wide is the range of activities in political, athletic and other extracurricular interests?
2. If the college is not coeducational, what types of social opportunities are available through mixers, dances, sororities, fraternities, etc.?

3. To what extent do the students share in establishing and enforcing college regulations? Is there an honor system?
4. How active and effective is the student government?
5. What level of personal freedom exists? What do you and your parents think is a good level of personal freedom--setting your own rules and limits--for you?
6. What are the opportunities for participation in an organized program of intercollegiate and/or intramural sports?
7. What special interest groups--clubs, publications, teams--in your field are active (or in existence) on the campus?

#### Religious Environment

1. If the college is affiliated with a religious denomination, are all students, regardless of creed, required to take religion courses, attend chapel, etc.?

#### Student Services

1. What type of orientation program does the college conduct for new students?
2. How complete and up-to-date are the infirmary and health services? Is there a doctor on campus all or part of the time?
3. How much contact would you have with an academic advisor for discussion of course scheduling, analysis of grades, and meeting your potential?
4. What types of financial aid are available--scholarships, grants, loans, part-time work?

5. Is there a professional counseling service available to help you in vocational planning and other personal concerns?
6. What type of service does the college offer to seniors in contacting potential employers and placing them in jobs after graduation.

Some Special Questions for Women (Men are interested in some of these too)

1. What are the prevailing attitudes toward equal opportunity for women in education for the professions?
2. What special rules govern your choice of residence and hours?
3. What facilities are available on campus for informal dates?
4. What kind of laundry and ironing facilities are available on campus or nearby?
5. Are private telephones available? If not, what's the ratio of girls to telephones?
6. If the college is coeducational, what is the ratio of men to women?

Personal Budget Form

NAME: I. 2. 3. 4.

Tuition

Fees

Books

Room

Board

Travel

Misc.

Clothing, Laundry, etc.

Spending

TOTAL

Deduct

Scholarships

Grants

Part-time job  
Income

NET COST

*See copy of report with the original materials, etc.*

INTEREST TESTS - SPENCER AND KUDER

Administered and interpreted -  
Sophomores - 30                      Ratio of almost 2 girls to  
Juniors - 62                          1 boy taking the test.  
Seniors - 61  
Consumer Education Class - 15 students  
Work Experience Students - OVIS - 60 students  
Junior Sales and Marketing - 20 students

GATB - Administered and interpreted 4 tests-requested by  
Psychologist, Teachers, and Counselors.

ORIENTATION AND PRESENTATIONS

March-1972 - Trade and Industry Classes  
May-1972 - Work Experience Students  
September-1972 - Approximately 450 sophomores  
                    Work Experience Large Groups  
November-1972 - Math Large Group  
                    Home Economics Cooperation Large Group  
December-1972 - Trade and Industry Classes  
January-1973 - Home Economics classes (3)  
February-1973 - Spent 2 weeks in Consumer Problems class  
                    Math Life Career Care  
                    Career Fair - In-service Program  
April-1973 - Work Experience Classes (6)  
May-1973 - 8 Groups of Juniors - Informational Services  
                    Social 12 Structured Classes (6) Questions,  
                    Answers and Presentation  
                    Group of Betty Olson's Students - Information  
Orientations for Business Education Department, Home Economics  
Department, English Department, Math Department, Physical  
Education Department, Foreign Language Department, Biology  
Department, Work Coordinators

GROUPS

April to June-1972 - Career Exploration Group 4 boys  
April to June-1972 - " " " 5 girls  
December-February - Career Planning Group 10 students  
February to May-1973 - Decision Making Group 7 students  
April-1973 - Job Application Skills Group 5 Sophomores

CAREER DAYS

Foreign Language Career Day                      held the same day  
Health Careers Day



1. How your reaction to the game. Please respond by circling the number that best describes your feelings to each of the questions.

no or some      little      some      considerable      great deal  
1                      2                      3                      4                      5

1. Has helped me in planning my after high school education.  1  2  3  4  5
2. Has helped me in planning my after high school occupation.  1  2  3  4  5
3. Has helped me in planning my high school course selection.  1  2  3  4  5
4. Has caused me to do more thinking about my future.  1  2  3  4  5
5. Has helped me in learning to work with other students as a team.  1  2  3  4  5
6. Has helped me gain some feeling as to how the opposite sex might view a situation differently than myself.  1  2  3  4  5
7. I found that my views were different from others in the class.  1  2  3  4  5
8. How often did you discuss the game with your parents?  1  2  3  4  5
9. Because of playing the game, I will approach my high school course planning in a more serious way.  1  2  3  4  5
10. Helped me see that alternatives are available.  1  2  3  4  5
11. Helped me become more aware of the educational opportunities available after high school.  1  2  3  4  5
12. As an overall summary, I feel that the playing of the Life Career Game was of value to me.  1  2  3  4  5
13. I feel the game should be played by other students within their senior high school days.  1  2  3  4  5

Number of responses to that item —

Please make other comments regarding the game that you feel would help us in deciding whether this opportunity should be offered to students again. Share, if you wish, your feelings about the game; be honest, no need to sign your name. Use the back of this sheet for more room.

- I thought the game was of personal value
- It helped me understand myself better
- More people should have chance to play it
- I think the game is good; it makes you think about your future
- I thought the game was alright (3)
- It was okay

15 students - Feb 14 through March 6 - 40 min everyday (14 days)

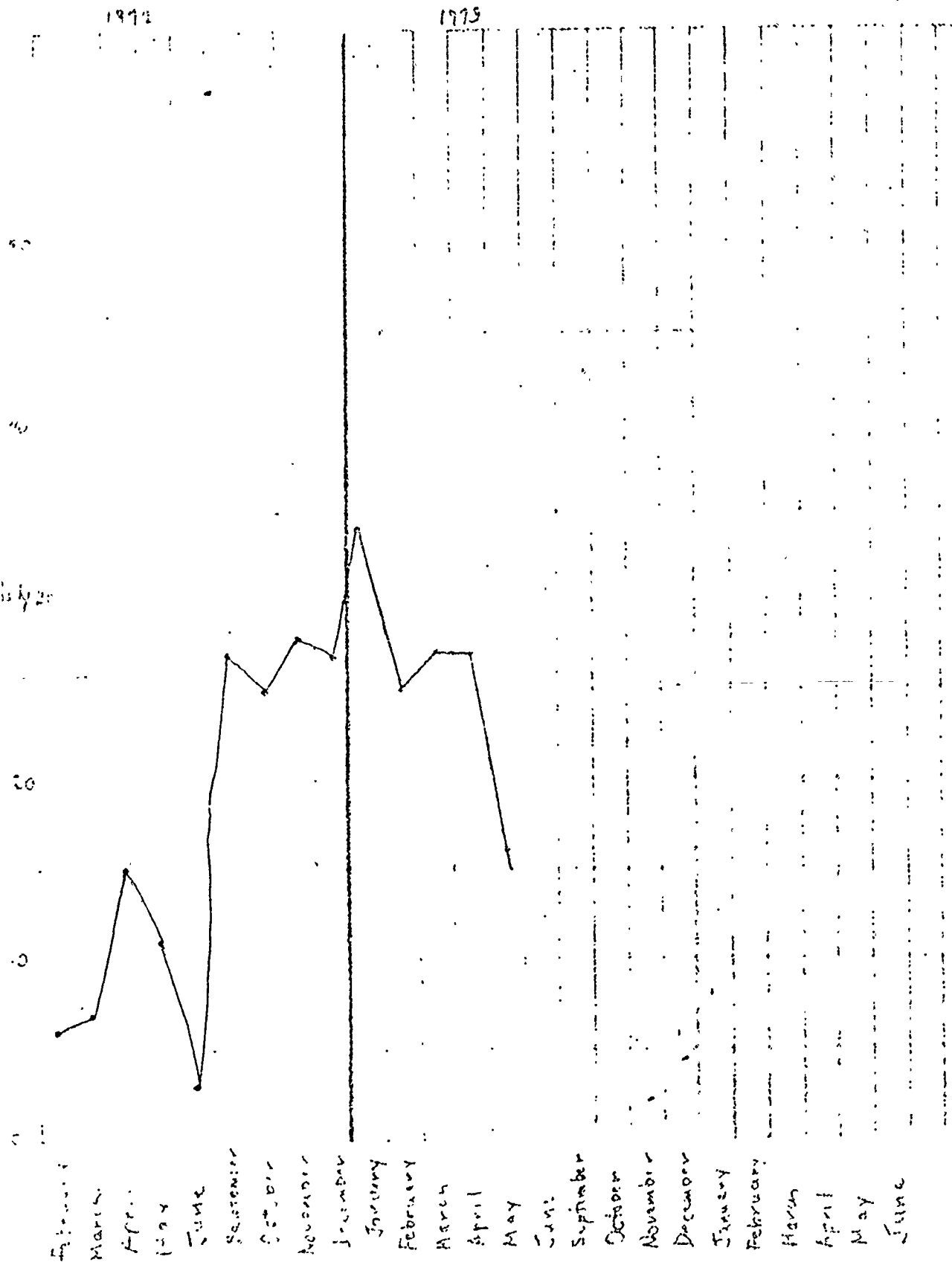
MATERIAL PREPARED

3 - Newsletters to Seniors  
2 - " to Juniors  
1 - Newsletter to Sophomores  
Career Workbook for Groups

TOTAL # OF STUDENTS PER MONTH  
Career Resource Center (These figures do not  
include groups. They are shown elsewhere.)

February '72	- 23
March '72	- 157
April '72	- 245
May '72	- 212
June '72	- 20
September '72	- 406
October '72	- 430
November '72	- 467
December '72	- 377
January '73	- 548
February '73	- 454
March '73	- 475
April '73	- 350
May '73	- 315

# Student Utilization - Resource Center - Monthly Aves



VISITORS TO ARABIAN RESOURCE CENTER

- 5/7 Teacher from Plymouth Jr. High School  
5/8 Former Graduate  
5/10 Andy Hrezo - St. Thomas College - Counseling Education  
5/4 Mr. Tingley - Vocational Biographies  
3/28 Counselors from Robbinsdale Sr. High School  
3/30 Donna Nickerson - Counseling Education Student - U. of M.  
2/21 Richard Kraft U. of M. Graduate Student working on Career Development  
2/22 Judy Kessel - Chaska Jonathan School District - used our material for writing scripts for films  
2/22 Park Senior High - Cottage Grove - W. E. Coordinator - Vocational Education Coordinator - Assistant Superintendent - Director of Elementary Education  
2/8 Former Graduate  
2/9 Larry Arnold - Referred by Community Career Center  
1/24 Former Graduate - Referred by C.C.C.  
1/24 Former Graduate  
1/17 Mrs. Henke - St. Paul Mechanic Arts High School  
1/17 Ann Podingheimer - Student in Home Economics Education at St. Catherine, Referred by Alice Ellison  
- 1/19 Former Graduate  
- 11/20 Former Graduate - Referred by C.C.C.  
11/22 Iowa State Group  
10/20 Bruce Hanson - Park Senior High - Cottage Grove  
10/3 Visitors from Amherst  
1972 - 8/23 Former Graduate

6/1/73 Joe Freeman, Vice Director and Commissioner Little Falls, Minn.

to everything there is a season --

a time for laughter

and a time for sorrow

a time for dreaming

and a

# TIME FOR TOMORROW



a guide to career planning

TIME FOR TOMORROW

A Guide To Career Planning  
For Students 10 - 12

Developed By

Anne Boe  
Audrey Strandberg

Revised March, 1973

Armstrong High School  
Independent School District 281  
Robbinsdale, Minn.

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Name \_\_\_\_\_

### A "CAREER" MIXER

Task: Acquire as many signatures as possible by the following career related phrases.

In addition to a signature, enter into discussion with the other person.

- \_\_\_\_\_ 1. I enjoy golf in leisure time.
- \_\_\_\_\_ 2. I have worked as a sales person.
- \_\_\_\_\_ 3. I am a good student.
- \_\_\_\_\_ 4. I am a good skier.
- \_\_\_\_\_ 5. I like dancing.
- \_\_\_\_\_ 6. I have taken part in student government.
- \_\_\_\_\_ 7. I have had a paper route.
- \_\_\_\_\_ 8. I am a good reader.
- \_\_\_\_\_ 9. I am aware of myself.
- \_\_\_\_\_ 10. I am good at sports.
- \_\_\_\_\_ 11. I enjoy school.
- \_\_\_\_\_ 12. I can make a decision easily.
- \_\_\_\_\_ 13. I am a good listener.
- \_\_\_\_\_ 14. I like to cook.
- \_\_\_\_\_ 15. I like to sing as a hobby.
- \_\_\_\_\_ 16. I like to interact with people.
- \_\_\_\_\_ 17. I attended a technical school.
- \_\_\_\_\_ 18. I like to watch T.V. in leisure time.
- \_\_\_\_\_ 19. I have been a waitress or a bus-boy.
- \_\_\_\_\_ 20. I am well groomed.
- \_\_\_\_\_ 21. I am not a litter bug.
- \_\_\_\_\_ 22. I like to eat.
- \_\_\_\_\_ 23. I took swimming lessons.
- \_\_\_\_\_ 24. I play an instrument.
- \_\_\_\_\_ 25. I have worked as a pilot.
- \_\_\_\_\_ 26. I like to ride a bike.
- \_\_\_\_\_ 27. I like to go camping.
- \_\_\_\_\_ 28. I am a good citizen.
- \_\_\_\_\_ 29. I like to be outdoors.
- \_\_\_\_\_ 30. I am a good skater.

## AUCTION FOR STUDENTS

<u>Items to be Auctioned</u>	<u>Amount Budgeted</u>	<u>Highest Amount Bid</u>	<u>Purchased</u>
1. Various feedback from peers.	_____	_____	_____
2. Student's aid (person who assists you with your classes, homework, etc.)	_____	_____	_____
3. A chance to set your own working conditions.	_____	_____	_____
4. Acceptance into any occupation you want.	_____	_____	_____
5. Career Resource material and information, inexhaustable supply.	_____	_____	_____
6. Fully functioning self.	_____	_____	_____
7. Classes all day in which you do nothing but play games.	_____	_____	_____
8. Your choice of any three wishes you want.	_____	_____	_____
9. Capable of handling any job effectively.	_____	_____	_____
10. Being able to do anything you want all day in school.	_____	_____	_____
11. An inexhaustable supply of anti-hang-up pills.	_____	_____	_____
12. An inexhaustable supply of records.	_____	_____	_____
13. Decision making power in school policies.	_____	_____	_____
14. A chance to do your own thing without hasseling.	_____	_____	_____
15. Being able to see your counselor whenever you want to without an appointment.	_____	_____	_____

"Who am I?"

Instructions: Write five statements describing who you are.

1.

2.

3.

4.

5.

## MY VALUES

**DIRECTIONS:** Here are a number of sets of alternatives. Read them over and decide in each case whether you would prefer choice A or choice B. Check your preference in the space provided. There are no right or wrong answers; either alternative may be right for you. In class discussions on this activity sheet, be prepared to explain your choice.

Which would you choose?

- A \_\_\_\_\_ A job that pays \$250 a week but involves constant travel  
B \_\_\_\_\_ A job of the same type paying only \$125 a week but allowing you to stay home
- A \_\_\_\_\_ To live in a small quiet town but not be able to do the type of work you are interested in  
B \_\_\_\_\_ To get into the field you like but have to move to a large city
- A \_\_\_\_\_ To marry early and have a family  
B \_\_\_\_\_ To work for a while before marriage
- A \_\_\_\_\_ To get above average grades in high school but to have to give up many social activities in order to devote your time to study  
B \_\_\_\_\_ To get just-passing grades and have enough time left after study to keep up a full schedule of social activities
- A \_\_\_\_\_ To be an outstanding athlete  
B \_\_\_\_\_ To be a student government leader
- A \_\_\_\_\_ To defend your beliefs even though you know your action may make you less popular with some of your classmates  
B \_\_\_\_\_ To keep silent about your beliefs in order to keep the approval of your classmates
- A \_\_\_\_\_ To go to a concert  
B \_\_\_\_\_ To go to a ball game
- A \_\_\_\_\_ To spend your free time just having fun with your friends  
B \_\_\_\_\_ To give your free time to community service projects
- A \_\_\_\_\_ To spend free time in reading or quiet activities  
B \_\_\_\_\_ To keep yourself busy by joining clubs and working on committees
- A \_\_\_\_\_ To have a job and independence immediately after high school  
B \_\_\_\_\_ To give time to further education or training in order to qualify for a better job
- A \_\_\_\_\_ To make lots of money  
B \_\_\_\_\_ To have prestige, be a leader, and have others look up to you

### WHAT I WANT FROM A JOB

Directions: Study the left-hand column then rate yourself in the center columns, as to how important each job reward is to you. Then study the right-hand column to find what types of jobs are most likely to offer you the job rewards you want.

JOB REWARDS	VERY Important	MODERATELY Important	NOT Important	TYPICAL JOBS
1. High Income (over \$20,000 a year)				Some professions; large businesses and farms; high-level saleswork; professional athletics; some jobs in entertainment
2. Middle income (\$8,000-\$20,000 a year)				Most professions and businesses; skilled trades; some sales and technical work; some jobs in entertainment
3. Moderate or lower income (below \$8000 a year)				Clerical; some sales; operatives; service workers; laborers; farmers
4. Security				Government work; jobs with large companies having employees benefit plans; jobs in unionized industries
5. Risk or adventure				Some sales; jobs in advertising, entertainment; jobs abroad; starting a business or working for a new company
6. Interesting and varied responsibilities; chance to exercise initiative and make own decisions				Most Professions; most businesses at management level; some outside sales; some craftsmen's jobs
7. Short hours				Most factory and routine office jobs
8. Vacations				Longest in government work of all kinds
9. High standing in the community				Jobs requiring high degree of skill and education

WHAT I WANT FROM A JOB (continued)

JOB REWARDS	VERY Important	MODERATELY Important	NOT Important	TYPICAL JOBS
10. Early retirement				Policemen's and firemen's jobs; armed forces; some dangerous jobs, such as mining
11. Light, easy work				Routine assembly jobs; light sales jobs; many clerical jobs
12. Outdoor work				Surveying; some construction work; forestry; wildlife management; greenhouse, nursery, landscape work; tree surgery; orchard and farm work
13. Pleasant working conditions				Jobs in modern factories; offices; supermarkets; air conditioned stores
14. Variety of duties every day				Repair work of most kinds; saleswork; installations of machinery or appliances; some office jobs, especially in smaller companies
15. Same duties every day				Routine filing jobs; assembly jobs
16. Chance to be creative				Tailoring and dressmaking; cabinetmaking and carpentry; jobs in commercial art, advertising, publishing; interior decorating
17. Chance to be alone				Forestry; some laboratory jobs; jobs as night watchmen; jobs as truck drivers
18. Chance to be with people				Saleswork; social service work; receptionist jobs; jobs as doctors' or dentists' assistants, jobs as waiters or waitresses

## Defining Your Interests

Below are listed 10 statements relating to kinds of work situations. Choose the three that you would most prefer in terms of spending most of your working day doing them.

- A. \_\_\_\_\_ Work situations involving activities dealing with things and objects.
- B. \_\_\_\_\_ Work situations involving business contact with people.
- C. \_\_\_\_\_ Work situations involving activities which are routine, practical and well organized.
- D. \_\_\_\_\_ Work situations involving working for people for their benefit, as in the social welfare sense, or for dealing with people in social activities.
- E. \_\_\_\_\_ Work situations involving activities resulting in your receiving prestige or the esteem of others.
- F. \_\_\_\_\_ Work situations involving activities concerning people and the communications of ideas.
- G. \_\_\_\_\_ Work situations involving activities where scientific and technical knowledge and techniques are used.
- H. \_\_\_\_\_ Work situations involving activities of an abstract and creative nature.
- I. \_\_\_\_\_ Work situations involving activities that are carried on in relation to processes, machines, and techniques.
- J. \_\_\_\_\_ Work situations involving activities resulting in a feeling of having accomplished something productive.

## Areas of Work

Below are listed 18 general areas of work. Within each general area are several more specific areas. In each specific area we have listed the interest area, or areas, that most people in these types of occupations have. Compare these areas with the three interest areas you chose and select the areas of work (either specific or general) that most appeal to you. Remember in each of the general areas there are some jobs that anyone can do, regardless of his ability or the amount of time he is willing to spend in training.

### ART

### INTEREST AREAS

Instructive Work - Teaching and Instructing	E, F, or H
Decorating Work - Interior Design and Decorating	N, B, or F
Artistic Restoration Work - Restoring and Caring for Art Objects	I or J

### BUSINESS RELATIONS

Administration	B, E, or F
Contract Negotiating and Related Work	B, E, or F
Business Training - Teaching or Instructing	B, E, or F
Supervisory Work - Clerical and Sales	B or E
Managerial - Managing a store or department	B or E
Interviewing and Related Work	B or F
Accounting and Related Work	A, G, or I
Corresponding	B or F
Information Gathering	B or F

### CLERICAL WORK

Scheduling and Dispatching	B or I
Secretarial Work	B or F
Paying and Receiving Work - Banks and other Establishments	B or C
Cashiering - Drugstores, Supermarkets, etc.	B or C
Inspecting and Stock Checking	A, C, or I
Typesetting	C or I
Filing	B, C, or I
Stenographic Work	C or F
Computing Work - Bookkeeping, etc.	C
Sorting Work	A, C, or I
Typing and Related Recording Work	C
Routine Checking Working	C
Switchboard Work	B or C



COUNSELING, GUIDANCE, AND SOCIAL WORK

INTEREST AREAS

Social Science, Psychological, and Related  
Research  
Guidance and Counseling

F, G, or H  
D, E, F, or H

CRAFTS

Supervisory Work - Foreman, etc.  
Costuming, Tailoring and Dressmaking  
Cooking  
Craftsmanship Work - Fabricating and  
Repairing, Toolmaker, Carpenter,  
Mechanic, etc.

E or I  
A, I, or J  
I or J

A, I, or J

EDUCATION AND TRAINING

Industrial Training  
Vocational Education  
Flight and Related Training  
High School, College, and Related Education  
Kindergarten, Elementary School and Related  
Education  
Animal Training

B, E, or F  
D, E, F, or G  
D, E, or F  
D, E, or F

D, E, or F  
C, D, or F

ENGINEERING

Engineering, Research and Design  
Sales Engineering  
Engineering, Scientific, and Technical  
Coordination  
Drafting and Related Work  
Engineering and Related Work  
Surveying and Related Work  
Technical Writing

G or H  
B, F, or G

E, F, or G  
A, G, or I  
A, G, or I  
A, G, or I  
G or H

ENTERTAINMENT

Dramatics  
Musical Work, Instrumental  
Musical Work, Vocal  
Rhythmics - Dancing, etc.  
Radio and Television  
Modeling and Related Work

E, F, or H  
E, F, or H  
E, F, or H  
E, F, or H  
E or F  
C or F

FARMING, FISHING, AND FORESTRY

Farming, Animal Breeding, and Gardening  
Technical Work, Science and Related Fields

A, G, I, or J  
C or G

INVESTIGATING, INSPECTING, AND TESTING

INTEREST AREAS

Investigating and Protecting	B, E, or F
Materials Analysis Work - Lab Tester or Lab Assistant	A, G, or I G
Appraising and Investigating Work	
Transporting and Test Driving Work - Truck Driver, Airplane Pilot, Test Driver, etc.	A or I

LAW AND LAW ENFORCEMENT

Legal and Related Work	E, F, or H
Protecting and Related Work	B or F

MACHINE WORK

Set Up and/or All-around Machine Operating	I or J
Operating-Controlling Work	A or I
Driving-Operating Work	A, C, or I
Tending Work	A, C, or I

MATHEMATICS AND SCIENCE

Scientific Research Work	A, G, or H
Social Science, Psychological, and Related Research	F, G, or H
Mathematics, Physical Sciences and Related Research	G or H

MEDICINE AND HEALTH

Surgery	D, E, or G
Medicine, Veterinary, and Related Work	D, E, or G
Therapeutic Work	D, F, G, or H
Nursing, X-ray, and Related Work	D or G
Child and Adult Care	B, D, or I

MERCHANDISING

Promotion and Publicity Work	B, E, F, or H
Purchase and Sales Work	B or E
Sales and Service Work	B or G
Demonstration and Sales Work	B or F
Selling and Related Work	A or B

PERSONAL SERVICE

Beautician and Barbering Services	B, H, or I
Customer Service Work	B or C
Accommodating Work - Hostess, Steward, Guides, etc.	B or F
Miscellaneous Personal Service - Waiter or Waitress	B or C
Animal Care	C, D, F, or I

PHOTOGRAPHY AND COMMUNICATIONS

INTEREST AREAS

Photography and Related Work  
Radio and Television Transmitting Work

G or I  
G or I

WRITING

Journalism and Editorial Work  
Promotion and Publicity Work  
Creative writing Work  
News Reporting Work  
Translating Work

B, E, or F  
B, E, F, or H  
E, F, or H  
B, E, or F  
B, E, or F

"My uncle in California wants me to come out there and work in the interest area of my choice. I don't know anything about them. Could you help me? I don't even know what the jobs are much less whether or not I'd be good in any of them."

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INTEREST AREA or Areas

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JOB OPPORTUNITIES

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MATERIALS and Resources

## STATING CLEAR PERSONAL OBJECTIVES

Changing values into clearly stated objectives is a skill that will be very helpful in decision-making. It is easier to decide how to accomplish your objective if you can say clearly what it is.

Your objective is clear if you can answer these questions:

Does it make clear what I can do when I reach it?

Does it indicate a time by which I should reach it?

Is there a way I can judge whether I have reached it?

Here's a chance to practice recognizing and stating clear objectives. Print the letter C (for clear) beside each objective below that is clear, and print the letter U (for unclear) beside each objective that is unclear. Use the three questions above as a basis for deciding whether an objective is clear.

- \_\_\_\_\_ I want to make five new friends this semester.
- \_\_\_\_\_ I want to have a better life than my parents have.
- \_\_\_\_\_ I want to be accepted for admission at the state university when I graduate.
- \_\_\_\_\_ I want to get married before I am 25 years old.
- \_\_\_\_\_ I want to select courses for next year in which I can get grades of B.
- \_\_\_\_\_ I want to make this a better school.
- \_\_\_\_\_ I want to help correct the pollution problem in my area.

On the lines below write three clear objectives for yourself. \_\_\_\_\_

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## ACTIONS BASED ON PERSONAL OBJECTIVES

Clear objectives should help a person make a decision. Listed below are some personal objectives. Add three of your own. See if you can write one or two possible actions

at the right to help a person reach each objective. Ask other members of the class what they were able to come up with as actions.

	The Objective	The action (write in your ideas)
1.	I want to make five new friends this semester.	
2.	I want to have a better life than my parents have.	
3.	I want to be accepted for admission at the state university when I graduate.	
4.	I want to get married before I am 25 years old.	
5.	I want to select courses for next year in which I can get grades of B.	
6.	I want to make this a better school.	
7.	I want to help correct the pollution problem in my area.	
8.		
9.		
10.		

The following pages include occupations relating to a specific subject area. You may want to compare your interests and values to the occupations you find in that section. For instance, if you like music - take a look and see the numerous career opportunities open for you to explore. Then, let's explore these interest areas as a group.

## FOREIGN LANGUAGE CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

- |                                  |  |
|----------------------------------|--|
| 1. Acting                        | 47. Policeman                                  |
| 2. Advertising                   | 48. Radio & T.V. Announcer                     |
| 3. Airline Stewardess-Steward    | 49. Radio Monitor                              |
| 4. Archaeologist                 | 50. Receptionist                               |
| 5. Architect                     | 51. Researcher                                 |
| 6. Art Collector                 | 52. Salesman                                   |
| 7. Art Historian                 | 53. Secretary                                  |
| 8. Book Dealer                   | 54. Social Worker                              |
| 9. Branch Managers Airways Corp. | 55. Taxi Driver                                |
| 10. Buyer                        | 56. Teacher                                    |
| 11. Chef                         | 57. Theater - Singer                           |
| 12. Civil Service Worker         | 58. Tour Conductor                             |
| 13. Clerk                        | 59. Trade Magazine Publisher                   |
| 14. Collection Clerk             | 60. Translator                                 |
| 15. College Teacher              | 61. Traveling Companion                        |
| 16. Commercial Attache           | 62. Travel Bureau Supervisor                   |
| 17. Consul                       | United Nations Work                            |
| 18. Critic                       | 63. Clerk                                      |
| 19. Curator                      | 64. Interpreter                                |
| 20. Customs Inspector            | 65. Proofreader                                |
| 21. Diplomat                     | 66. Secretary                                  |
| 22. Engineering                  | 67. Summary Reporter                           |
| 23. Exporter                     | 68. Translator                                 |
| 24. Fashion Buyer                | 69. Verbatim Reporter                          |
| 25. Foreign Correspondent        | 70. Armed Services                             |
| 26. Foreign Exchange Clerk       | 71. International Market (Business & Industry) |
| 27. Foreign Government Advisor   | 72. Foreign Governments                        |
| 28. Foreign Service Worker       | 73. Foreign Business Firms                     |
| 29. Geologist                    | 74. International Agencies & Organizations     |
| 30. Government Service Worker    | 75. Philanthropic & educational Foundations    |
| 31. Hotel Manager                | 76. Religious Organizations and Agencies       |
| 32. Information Aide Courtier    | 77. Research and Teacher Exchange Programs     |
| 33. Immigration Inspector        | 78. U.N. Agencies & Organizations              |
| 34. Importer                     | U.S. Government                                |
| 35. Intelligence Officer         | 79. Department of Defence                      |
| 36. International Publisher      | 80. Department of State                        |
| 37. Interpreter                  | 81. International Cooperation Administration   |
| 38. Journalist                   | 82. U.S. Information Agency                    |
| 39. Lawyer                       | Voluntary Agencies                             |
| 40. Librarian                    | 83. American Red Cross                         |
| 41. Linguist                     | 84. International Rescue Commission            |
| 42. Missionary                   | 85. Wireless Operator                          |
| 43. Music Librarian              |  |
| 44. Musician                     |  |
| 45. Nurse                        |  |
| 46. Physician                    |  |

Lists Compiled from:

- 1 - State Board of Education Occupational Charts
- 2 - S.R.A. Guidance Books
- 3 - Dr. C. Helling's Clusters



## HOME ECONOMICS CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1. Advertising                    | 40. Homemaker                    |
| 2. Alteration Specialist          | 41. Homemaker Consultant         |
| 3. Apparel Specialist             | 42. Home Service Representative  |
| 4. Appliance Sales                | 43. Hotel - Motel Aide           |
| 5. Baker                          | 44. Hotel - Motel Housekeeper    |
| 6. Beautician                     | 45. Hotel - Motel Manager        |
| 7. Buyer                          | 46. Interior Design              |
| 8. Cake Decorator                 | 47. Journalism                   |
| 9. Camp Staff                     | 48. Laboratory Technician        |
| 10. Caretaker Services            | 49. Laundry Worker               |
| 11. Caterer                       | 50. Meat Cutter                  |
| 12. Chef - Cook                   | 51. Meat and Dairy Inspector     |
| 13. Child Care Technician-Aide    | 52. Millinery                    |
| 14. Comparison Shopper            | 53. Nurse, Practical, Aide, R.N. |
| 15. Consumer Planner              | 54. Nutritionist                 |
| 16. Consumer Technician           | 55. Occupational Therapist       |
| 17. Custodial Services            | 56. Orderly                      |
| 18. Decorator - Home              | 57. Parenthood                   |
| 19. Dietician                     | 58. Physical Therapist           |
| 20. Display Manager               | 59. Power Machine Operator       |
| 21. Dress Maker                   | 60. Pre-School Education         |
| 22. Dry Cleaning Services         | 61. Psychiatric Technician       |
| 23. Education Director (Business) | 62. Public Health                |
| 24. Equipment Sales               | 63. Radio & T.V. Commentating    |
| 25. Executives - Milling          | 64. Recreational Therapy         |
| 26. Extension Home Economist      | 65. Researcher                   |
| 27. Extension Services Specialist | 66. Sanitation Consultant        |
| 28. Family Service Consultant     | 67. School Food Services         |
| 29. Fashion Coordinator           | 68. Social Worker                |
| 30. Fashion Design                | 69. Special Education            |
| 31. Fashion Merchandising         | 70. Stewardess                   |
| 32. Food Chemist                  | 71. Supermarket Manager          |
| 33. Food Processing               | 72. Tailor                       |
| 34. Food Service Manager          | 73. Textile Chemist              |
| 35. Food Service Worker           | 74. Travel Services              |
| 36. Group Foster Care             | 75. Upholsterer                  |
| 37. Group Health Care             | 76. Waitress - Waiter            |
| 38. Home Economics Teacher        |                                  |
| 39. Home Health Aide              |                                  |

Lists Compiled from:

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## PHYSICAL EDUCATION-HEALTH

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

- |                                 |   |
|---------------------------------|---|
| 1. Aerialist                    | 28. Institutional Director                  |
| 2. Athletic Coach               | 29. Lifeguard                               |
| 3. Athletic Instructor          | 30. Masseuse                                |
| 4. Athletic Manager             | 31. Nurse-School                            |
| 5. Athletic Trainer             | 32. Occupational Therapist                  |
| 6. Bacteriologist               | 33. Park Supervisor                         |
| 7. Caddie                       | 34. Physical Therapist                      |
| 8. Camp Counselor               | 35. Playground Supervisor                   |
| 9. Camp Instructor              | 36. Playground Worker                       |
| 10. Camp Director               | 37. Recreation Facility Attendant           |
| 11. Chiropractor                | 38. Recreational Therapist                  |
| 12. Choreographer               | 39. Referee                                 |
| 13. Community Center Worker     | 40. Research Technician (Physiological)     |
| 14. Community Recreation Leader | 41. Sanitary Engineer and Technician        |
| 15. Dancing Master              | 42. Social Worker                           |
| 16. Ecological Monitor          | 43. Speech & Hearing Technician             |
| 17. Environmentalist            | 44. Sporting Goods Store<br>Sales & Manager |
| 18. Golf Club Attendant         | 45. Sports Announcer                        |
| 19. Golf club maker             | 46. Sports Cartoonist                       |
| 20. Golf Club Manager           | 47. Sports Editor                           |
| 21. Greens Keeper               | 48. Sports Writer                           |
| 22. Guide                       | 49. Statistician (Health)                   |
| 23. Health Aide                 | 50. Timekeeper                              |
| 24. Health Ed. Teacher          | 51. Umpire                                  |
| 25. Health Hygienist            |   |
| 26. Health Inspector            |   |
| 27. Hospital Rehabilitation     |   |

Lists Compiled from:

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- 2 - S.R.A. Guidance Books
- 3 - Dr. C. Helling's Clusters

### MUSIC CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject is necessary.

- |                              |                         |
|------------------------------|-------------------------|
| 1. Accompanists              | 11. Performer           |
| 2. Arranger                  | 12. Dancer              |
| 3. Chorus and Choir Director | 13. Singer              |
| 4. Composer                  | 14. Piano - Organ Tuner |
| 5. Concert Master            | 15. Piano Organ Repair  |
| 6. Conductor                 | 16. Sales               |
| 7. Critic                    | 17. Music               |
| 8. Impresario                | 18. Musical Instruments |
| 9. Instrument Repairman      | 19. Stage Hands         |
| 10. Music Librarian          | 20. Teacher             |
| 11. Music Store Manager      | 21. Private             |
|                              | 22. School              |

#### Lists Compiled from:

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## ART CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

- |                           |                         |                        |
|---------------------------|-------------------------|------------------------|
| 1. Advertising Design     | 29. Cartographer        | Illustrator            |
| 2. Advertising Lay-out    | 30. Cartoonist          | 57. Histological       |
| 3. Advertising Manager    | 31. Ceramicist (Potter) | 58. Medical            |
| 4. Aeronautical Design    | 32. Costume Design      | 59. Greeting Cards     |
| 5. Animated Artist        | 33. Costume Production  | 60. Show Cards         |
| 6. Anthropologist         | 34. Craft Worker        | 61. Technical          |
| 7. Archaeologist          | 35. Curator             | 62. Interior Decorator |
| Architect                 | 36. Delineator          | 63. Jeweler            |
| 8. Landscape              | Designer                | 64. Landscape Gardener |
| 9. Industrial             | 37. Auto                | 65. Lithographer       |
| 10. Architectural Modeler | 38. Crafts              | 66. Painter            |
| 11. Art Appraiser         | 39. Ceramics            | 67. Photo engraver     |
| 12. Art Buyer             | 40. Jewelry             | 68. Photographer       |
| 13. Art Dealer            | 41. Fashion             | 69. Researcher         |
| 14. Art Director          | 42. Millinery           | 70. Sculptor           |
| 15. Art Editor            | 43. Textile             | 71. Sign Designer      |
| 16. Art Gallery Guard     | 44. Die                 | 72. Sign Painter       |
| 17. Art Historian         | 45. Floral              | 73. Stone Carver       |
| 18. Art Librarian         | 46. Environmental       | 74. Wardrobe Mistress  |
| 19. Art Teacher           | 47. Industrial          | 75. Window Trimmer     |
| Arts & Craft Director     | 48. Stage & T.V.        | 76. Wood Engraver      |
| 20. Camps                 | 49. Displayman          |                        |
| Recreation                | 50. Draftsman           |                        |
| Artist                    | 51. Draper              |                        |
| 22. Commercial            | 52. Engraver            |                        |
| 23. Lay-out               | 53. Etcher (Hand)       |                        |
| 24. Production            | 54. Glass Blower        |                        |
| 25. Portrait              | 55. Graphic Arts        |                        |
| 26. Beautician            | Processor               |                        |
| 27. Bookbinder            | 56. Hand Grainer        |                        |
| 28. Cabinet Maker         |                         |                        |

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## SCIENCE CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

1. Agricultural Business
2. Agricultural Extension
3. Agronomist
4. Anatomist
5. Animal Trainer
6. Annealer
7. Anthropologist
8. Apiarist
9. Archaeologist
10. Architect
11. Astronomist
12. Auctioneer
13. Bacteriologist
14. Biologist
15. Botanist
16. Botanical Artist
17. Cartographer
18. Chemist
19. Chiropractist
20. Chiropractor
21. Civil Technologist
22. Communications Tech.
23. Cosmetologist
24. Counselor
25. County Agent
26. Curator
27. Dairy Farmer
28. Dairy Products Industry
29. Dental Hygienist
30. Dental Technician
31. Dentist
32. Dietician
33. Draftsman
34. Dry Cleaner
35. Ecologist
36. Ecological Tech.
37. Electrician
38. Electronics Tech.
39. Electrotherapist
40. Electroplater
41. Embalmer
- Engineering
42. Electrical
43. Ceramics
44. Air Conditioning
45. Mining
46. Metallurgical
47. Acoustical
48. Electronics
49. Petroleum
50. Mechanical
51. Geological
52. Meteorological
53. Processing
54. Aerospace
55. Atomic
56. Sales
57. Sanitation
58. Agricultural
59. Chemical
60. Civil
61. Architectural
62. Structural
63. Plastics
64. Nuclear
65. Entomologist
66. Excavator
67. Exterminator
68. Farmer
69. Firemen
70. Fish & Wildlife Service
71. Florist
72. Food & Drug Inspector
73. Food Processing
74. Forestry
75. Game Farm Management
76. Game Warden
77. Geneticist
78. Geographer
79. Geologist

SCIENCE CAREERS (Cont.)

- |  |                                 |
|--|---------------------------------|
| 80. Geophysicist                       | 121. Pathologist                |
| 81. Glass Blower                       | 122. Pediatrician               |
| 82. Herpetologist                      | 123. Pharmacist                 |
| 83. Horticulture                       | 124. Photographer               |
| 84. Hydraulics Tech.                   | 125. Physical Ed. Teacher       |
| 85. Ichthyologist                      | 126. Physical Therapist         |
| 86. Illustrator - Medical &<br>Science | 127. Physician                  |
| 87. Immunologist                       | 128. Physicist                  |
| 88. Instrumentation Tech.              | 129. Physiologist               |
| 89. Laboratory Technician              | 130. Poultryman                 |
| 90. Land Development Tech.             | 131. Prefabrication Technician  |
| 91. Landscaping                        | 132. Psychologist               |
| 92. Lineman                            | 133. Psychiatrist               |
| 93. Lithographer                       | 134. Psychometrist              |
| 94. Livestock Marketing                | 135. Radar Technician           |
| 95. Lumber Inspector                   | 136. Radio Engineer             |
| 96. Manufacturing                      | 137. Radio - Isotope Technician |
| 97. Market News Analyst                | 138. Radio Operator             |
| 98. Masseuse                           | 139. Radio Repairman            |
| 99. Mathematician                      | 140. Rancher                    |
| 100. Heat Inspector                    | 141. Range Management           |
| 101. Medical Librarian                 | 142. Researcher                 |
| 102. Medical Technologist              | 143. Roentgenologist            |
| 103. Metallurgist                      | 144. Sales                      |
| 104. Mineralogist                      | 145. Sanitarian                 |
| 105. Mortician                         | 146. Science Teacher            |
| 106. Museum Worker                     | 147. Secretarial                |
| 107. Naturalist                        | 148. Seismologist               |
| 108. Navigator                         | 149. Soil Conservationist       |
| 109. Nurse - Practical,<br>Aide, R.N.  | 150. Surgeon                    |
| 110. Nurseryman                        | 151. Taxidermist                |
| 111. Nutritionist                      | 152. Textile Technician         |
| 112. Occupational Therapist            | 153. Tree Surgeon               |
| 113. Oceanographer                     | 154. Truck Gardener             |
| 114. Oculist                           | 155. Veterinary & Assistant     |
| 115. Ophthalmologist                   | 156. Weather Observer           |
| 116. Optician                          | 157. Wildlife Specialist        |
| 117. Optometrist                       | 158. Wood Products Industry     |
| 118. Orphanage                         | 159. X-Ray Technician           |
| 119. Ornithologist                     | 160. Zookeeper                  |
| 120. Ortopath                          |                                 |

Lists compiled from:

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- 2 - S.H.A. Guidance Books
- 3 - Dr. C. Helling's Clusters

## BUSINESS CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

- |   |                                       |  |
|---|---------------------------------------|--|
| 1. Accountant                                   | 37. Comptroller                       | 71. Building Material                  |
| 2. Actuary                                      | 38. Computer Operator                 | 72. Game Farm                          |
| 3. Advertising Agent                            | 39. Computer Programmer               | 73. Marketing                          |
| 4. Airline Reservationist                       | 40. Contractor                        | 74. Hotel-Motels                       |
| 5. Airport Superintendent                       | 41. Corporate Executive               | 75. Employment                         |
| 6. Appraiser                                    | 42. Credit Manager Collections        | 76. Service Station                    |
| 7. Assayer                                      | 43. Data Processing                   | 77. Insurance                          |
| 8. Auctioneer                                   | 44. Employment Counselor              | 78. Credit                             |
| 9. Auditor                                      | 45. Employment Interviewer            | 79. Real Estate                        |
| 10. Banker                                      | 46. Estate Planner                    | 80. Manufacturer's Representative      |
| 11. Bank Teller                                 | 47. Estimator                         | 81. Marketing                          |
| 12. Bookkeeper                                  | 48. Fashion Coordinator               | 82. Marketing Analyst                  |
| 13. Broker                                      | 49. Field Interviewer                 | 83. Media Director                     |
| 14. Business Administrator                      | 50. Public Opinion Polls              | 84. Meter Reader                       |
| 15. Business Ed. Teacher                        | 51. Research                          | 85. Office Machine Operator            |
| 16. Business Agent                              | 52. Hospital Administrator            | 86. Personnel Training Director        |
| 17. Buyer                                       | 53. Hospital Equipment Engineer       | 87. Postal Carriers                    |
| 18. Cashiers                                    | 54. Hotel-Motel Operators             | 88. Psychometrist                      |
| 19. Census Taker                                | 55. Industrial Relations Job Analysis | 89. Public Relations                   |
| 20. Certified Public Accountant Clerks - Credit | 56. Wage & Salary                     | 90. Purchasing Agent                   |
| 21. Accounting                                  | 57. Technical                         | 91. Radio - T.V.                       |
| 22. Banking                                     | 58. Journalist                        | 92. Recreation Director                |
| 23. Personnel                                   | 59. Key Punch Operator                | 93. Resort Owner/Manager               |
| 24. Payroll                                     | 60. Labor Relations Specialist        | 94. Sales Secretarial                  |
| 25. Hospital Station                            | 61. Librarian                         | 95. Legal                              |
| 26. Hotel - Motel Reservation                   | 62. Tape                              | 96. Medical                            |
| 27. Correspondence                              | 63. Medical Records                   | 97. General                            |
| 28. Law   | 64. Law                               | 98. Educational                        |
| 29. Legislative                                 | 65. Managers                          | 99. Financial                          |
| 30. Insurance                                   | 66. Personnel                         | 100. Industrial                        |
| 31. Actuarial                                   | 67. Sales                             | 101. Statisticians                     |
| 32. Brokerage                                   | 68. Small Business                    | 102. Systems Analysts                  |
| 33. File  | 69. Office                            | 103. Systems Engineer                  |
| 34. Inventory                                   | 70. Clubs                             | 104. Technical Writers                 |
| 35. City Desks                                  | 71. Theater                           | 105. Architectural                     |
| 36. Sales                                       | 72. Restaurant                        | 106. Medical                           |
|   | 73. Parks                             | 107. Engineering                       |
|   |                                       | 108. Science                           |
|   |                                       | 109. Telephone Engineers & Operators   |
|   |                                       | 110. Typists                           |
|   |                                       | 111. Union Agents                      |
|   |                                       | 112. Sewing Machine Operator/Collector |

Lists Compiled From:

- 1 - State Board of Education
- Occupational Charts
- 2 - S.R.A. Guidance Books
- 3 - Dr. C. Helling's Clusters

## SOCIAL STUDIES CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

- |  |  |   |
|--|--|---|
| <ol style="list-style-type: none"> <li>1. Actuary</li> <li>2. Anthropologist</li> <li>3. Arbitrator</li> <li>4. Archaeologist</li> <li>5. Archivist</li> <li>6. Assessor</li> <li>7. Athlete,<br/>Professional</li> <li>8. Author</li> <li>9. Bailiff</li> <li>10. Banker</li> <li>11. Bank Teller</li> <li>12. Bellhop</li> <li>13. Businessman</li> <li>14. Buyers</li> <li>15. Canvassers</li> <li>16. Cartographer</li> <li>17. Cartoonist</li> <li>18. Chamber of Commerce<br/>Director</li> <li>19. City Manager</li> <li>20. City Planner/<br/>Designer<br/>Civil Service</li> <li>21. Fireman</li> <li>22. Health Inspector</li> <li>23. Building "</li> <li>24. Police - City,<br/>State, National,<br/>County</li> <li>25. Claim Adjuster</li> <li>26. Claim Examiner</li> <li>27. Clergyman</li> <li>28. Commerce-Industry</li> <li>29. Computer Studies</li> <li>30. Conservationist</li> <li>31. Councilman<br/>Counselors</li> <li>32. School</li> <li>33. Employment</li> <li>34. Vocational</li> <li>35. Personnel</li> <li>36. Court Reporter</li> <li>37. Court Services-<br/>Caseworker</li> <li>38. Criminologist</li> <li>39. Curator</li> <li>40. Diplomat</li> <li>41. Domestic Service</li> <li>42. Dramatic Arts</li> <li>43. Economist</li> <li>44. Editor</li> <li>45. Elevator Operator</li> <li>46. Employment Interviewer</li> </ol> | <ol style="list-style-type: none"> <li>47. Ethnologist</li> <li>48. Exporter</li> <li>49. Floor Walker</li> <li>50. Foreign Correspondent</li> <li>51. Foreign Service</li> <li>52. Forester</li> <li>53. Genealogist</li> <li>54. Government Service</li> <li>55. Geographer</li> <li>56. Guide - National &amp;<br/>State Parks</li> <li>57. Historian</li> <li>58. Human Relations<br/>Specialist</li> <li>59. Importer</li> <li>60. Industrial Executives</li> <li>61. Insurance Agent</li> <li>62. Intelligence Officer</li> <li>63. Interviewer (Polls)</li> <li>64. Investigator</li> <li>65. Investment Advisor</li> <li>66. Judges</li> <li>67. Justice of the Peace</li> <li>68. Labor Conciliator</li> <li>69. Law Clerks</li> <li>70. Lawyers</li> <li>71. Legislative Pages</li> <li>72. Librarians &amp; Ass't</li> <li>73. Market Analyst</li> <li>74. Museum Guide</li> <li>75. Naturalist</li> <li>76. News Commentators</li> <li>77. News Reporters</li> <li>78. News Work</li> <li>79. Paleontologists</li> <li>80. Park Rangers</li> <li>81. Peace Corps</li> <li>82. Personnel Coordinator</li> <li>83. Personnel Manager</li> <li>84. Philologists</li> <li>85. Political Scientist</li> <li>86. Politician</li> <li>87. Production Manager</li> </ol> | <ol style="list-style-type: none"> <li>88. Program Coordinator</li> <li>89. Psychiatrist<br/>Psychologist</li> <li>90. Industrial</li> <li>91. Clinical</li> <li>92. School</li> <li>93. Social</li> <li>94. Educational</li> <li>95. Public Administration</li> <li>96. Public Finance</li> <li>97. Public Relations</li> <li>98. Radio - T.V.<br/>Announcer</li> <li>99. Religious Worker</li> <li>100. Researcher</li> <li>101. Retailer</li> <li>102. Sales</li> <li>103. Script Writer<br/>Secretarial</li> <li>104. General</li> <li>105. Legal<br/>Social-Civic Service</li> <li>106. Y.M.C.A.</li> <li>107. Y.W.C.A.</li> <li>108. Social Worker</li> <li>109. Sociologist</li> <li>110. Statistician</li> <li>111. Teacher</li> <li>112. Tour Conductor</li> <li>113. Trade Commissioner</li> <li>114. Train Porters<br/>Transportation</li> <li>115. Bus, Taxi, Truck<br/>Drivers</li> <li>116. Travel Bureau<br/>Director</li> <li>117. Union Official</li> <li>118. Ushers</li> <li>119. Vista</li> <li>120. Wholesalers</li> </ol> |
|--|--|---|

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Lists Compiled from:

- 1 - State Board of Education Occupational Charts
- 2 - S.R.A. Guidance Books
- 3 - Dr. C. Helling's Clusters



## INDUSTRIAL EDUCATION CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

- |                                  |                                       |                                |
|----------------------------------|---------------------------------------|--------------------------------|
| 1. Advertising Copywriter        | 39. Die Designer                      | 75. Oil Well Driller           |
| 2. Advertising Manager           | 40. Distributor                       | 76. Operating Engineer         |
| 3. Aero Engineer                 | 41. Draftman                          | 77. Optician                   |
| 4. Air Conditioning-Heating      | 42. Draftsman                         | 78. Painter/Sprayer            |
| 5. Airplane Mechanics            | 43. Drill Press Operator              | 79. Partsman                   |
| 6. Appliance Repair              | 44. Editor ( Industrial Publications) | 80. Photo-engraver             |
| 7. Architects                    | 45. Electrical Engineer               | 81. Photographer               |
| 8. Architectural Engineer        | 46. Electrician                       | 82. Photo-Technician           |
| 9. Armature Winder               | 47. Electric Utilities                | 83. Plumber                    |
| 10. Artists                      | 48. Electronics                       | 84. Pre-Fabrication Contractor |
| 11. Arts - Crafts                | 49. Factory Foremen                   | 85. Radio Operator             |
| 12. Assembler                    | 50. Fluid Power Tech.                 | 86. Printer                    |
| 13. Audio/Visual Tech.           | 51. Gas Appliance Serviceman          | 87. Radio/T.V. Repairman       |
| 14. Auto Body Repair             | 52. Glass and Plastic Technician      | 88. Railroad Work              |
| 15. Auto Diesel Mechanics        | 53. Graphic Arts                      | 89. Receiving Clerk            |
| 16. Automotive Engineer          | 54. Gunsmith                          | 90. Recreation Therapy         |
| 17. Auto Welder                  | 55. Heavy Equipment Operator          | 91. Reporter                   |
| 18. Aviation Mechanic            | 56. Hydraulic Tech.                   | 92. Research Products          |
| 19. Blueprint Machine Operator   | 57. Industrial Chemist                | 93. Sales                      |
| 20. Boiler Inspector             | 58. Iron-Construction                 | 94. Service Station Attendant  |
| 21. Boiler Maker                 | 59. Lath Operator                     | 95. Sheet Metal Worker         |
| 22. Bricklayer                   | 60. Leather Work                      | 96. Small Engine Repairman     |
| 23. Bus Driver                   | 61. Lineman                           | 97. Stationary Engineer        |
| 24. Business Machine Serviceman  | 62. Linotype Operator                 | 98. Teacher                    |
| 25. Cabinet Maker                | 63. Lumber Inspector                  | 99. Technician                 |
| 26. Cable Splicer                | 64. Machinist                         | 100. Telegraph Technician      |
| 27. Carpenter                    | 65. Maintenance Man                   | 101. Telephone Inspector       |
| 28. Ceramics Engineer            | 66. Marine Mechanic                   | 102. Telephone Lineman         |
| 29. Chauffeur                    | 67. Mason                             | 103. Toolkeeper                |
| 30. Civil Engineers              | 68. Mechanical Engineer               | 104. Tool Designer             |
| 31. Communications Tech.         | 69. Metallurgist                      | 105. Tractor Driver            |
| 32. Composer                     | 70. Meteorologist                     | 106. Tree Surgeon              |
| 33. Construction Worker          | 71. Mobile Radio Communications       | 107. Truck Driver              |
| 34. Contractor (Building Trades) | 72. Multigraph Operator               | 108. Vocational Instructor     |
| 35. Crane Operator               | 73. Occupational Therapist            | 109. Waste Water Treatment     |
| 36. Custodian                    | 74. Oil Painter                       | 110. Welder                    |
| 37. Decorator                    |                                       | 111. Wood Turner               |
| 38. Design Technician            |                                       | 112. Writer                    |

Lists Compiled From:

- 1 - State Board of Education Occupational Charts
- 2 - S.R.A. Guidance Books
- 3 - Dr. C. Helling's Clusters

## MATHEMATICS CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

- |                                    |                                     |                            |
|------------------------------------|-------------------------------------|----------------------------|
| 1. Accountant                      | 48. Engineer                        | 92. Physicist              |
| 2. Actuary                         | 49. Mechanical                      | 93. Plumber                |
| 3. Airplane Inspector              | 50. Electrical                      | 94. Psychometrist          |
| 4. Airplane Mechanic               | 51. Nuclear                         | 95. Purchasing Agent       |
| 5. Airplane Pilot                  | 52. Aerospace                       | 96. Radio Operator         |
| 6. Appraiser                       | 53. Architectural                   | 97. Real Estate Sales      |
| 7. Architect                       | 54. Civil                           | 98. Retail Manager         |
| 8. Assessor                        | 55. Highway                         | 99. Reorganization Advisor |
| 9. Astronomer                      | 56. Ceramic                         | Research                   |
| 10. Auditor                        | 57. Chemical                        | 100. Biology               |
| 11. Banker                         | 58. Industrial                      | 101. Meteorology           |
| 12. Bank Examiner                  | 59. Metallurgical                   | 102. Geophysical           |
| 13. Bookkeeper                     | 60. Mining                          | 103. Chemical              |
| 14. Broadcasting Tech.             | 61. Marine                          | 104. Geology               |
| 15. Broker                         | 62. Sales                           | 105. Electronics           |
| 16. Bursar                         | 63. Electronics                     | 106. Sales Manager         |
| 17. Business Agent                 | 64. Engineering Tech.               | 107. Sales Person          |
| 18. Carpenter                      | 65. Estimator                       | 108. Secretary             |
| 19. Cartographer                   | 66. Exporter                        | 109. Sociologist           |
| 20. Cashier                        | 67. Farmer                          | 110. Sociometrician        |
| 21. Certified Public<br>Accountant | 68. Farm Manager                    | 111. Statistician          |
| 22. Chemist                        | 69. Financial Advisor               | 112. Surveyor              |
| Clerk                              | 70. Forester -<br>Conservationist   | 113. Systems Analyst       |
| 23. Actuarial                      | 71. Home Economist                  | 114. Tax Attorney          |
| 24. Broker                         | 72. Importer                        | 115. Tax Collector         |
| 25. Cost                           | 73. Insurance                       | 116. Tax Export            |
| 26. Budget                         | Underwriter                         | 117. Teacher               |
| 27. Accounting                     | 74. Inventor                        | 118. Teller                |
| 28. Billing                        | 75. Investment Advisor              | 119. Ticket Agent          |
| 29. Bank                           | 76. Key Punch Operator              | 120. Timekeeper            |
| 30. Sales                          | 77. Machine Designer                | 121. Time - Study Person   |
| 31. Insurance                      | 78. Machinist                       | 122. Tool Designer         |
| 32. Statistical                    | 79. Mathematician                   | 123. Tool and Die Maker    |
| 33. Payroll                        | 80. Marketing Expert                | 124. Traffic Clerk         |
| 34. Collection Manager             | 81. Medical Lab. Tech.              | 125. Traffic Manager       |
| 35. Comptroller                    | 82. Medical Records                 | 126. Treasurer             |
| 36. Computer Operator              | Librarian                           | 127. X-Ray Technicians     |
| 37. Computer Programmer            | 83. Merchandise Manager             |                            |
| 38. Contractor                     | 84. Motion Picture Tech.<br>(Audio) |                            |
| 39. Corp. Statement<br>Analyst     | 85. Navigator                       |                            |
| 40. Credit Manager                 | 86. Office Machine<br>Operator      |                            |
| 41. Dental Hygienist               | 87. Office Manager                  |                            |
| 42. Dental Lab. Tech.              | 88. Optician                        |                            |
| 43. Dentist                        | 89. Optometrist                     |                            |
| 44. Designer                       | 90. Pattern Maker                   |                            |
| 45. Draftsman                      | 91. Political Scientist             |                            |
| 46. Economist                      |                                     |                            |
| 47. Electrician                    |                                     |                            |

Lists Compiled from:

- 1 - State Board of Education Occupational Charts  
2 - S.R.A. Guidance Books; 3 - DR. C. Helling's Clusters

## ENGLISH CAREERS

The occupations listed are either directly related to the subject area or a knowledge of that subject area is necessary.

1. Actress - Actor
2. Advertising Writer
3. Art Critic
4. Artist - Commercial
5. Auctioneer
6. Author
7. Barker
8. Buyer
9. Bibliographer
10. Clergyman
11. Commentator
12. Copy Writer
13. Comedian
14. Counselor
15. Court Reporter
16. Creative Writer
17. Cryptographer
18. Customs Inspector
19. Demonstrator
20. Dispatcher
21. Drama Coach
22. Drama Critic
23. Dramatic Reader
24. Editor
25. Editorial Writer
26. Employment Manager
27. Engineer - Sales
28. Etymologist
29. Fashion Writer
30. Floorwalker
31. Foreign Correspondent
32. Film & Tape Editor
33. Foreign Exchange Clerk
34. Hostess
35. Immigration Official
36. Interpreter
37. Journalist
38. Judge
39. Lawyer
40. Lecturer
41. Librarian & Assistant
42. Marketing Specialist
43. Medical Librarian
44. Motion Picture Director
45. Personnel Director
46. Pharmacist
47. Playwright
48. Poet
49. Politician
50. Printer
51. Proofreader
52. Public Relations
53. Publisher
54. Radio - T.V. Announcer
55. Reading Specialist
56. Receptionist
57. Reporter
58. Retail Manager
59. Rewrite Person  
Sales  
Clerk
60. Clerk
61. Manager
62. Correspondent
63. Scenerie Writer
64. Scientist
65. Script Writer
66. Secretary
67. Social Worker
68. Speech Therapist
69. Sports Writer
70. Stewardess
71. Teachers
72. Technical Writers
73. Telegraph Operators
74. Telephone Operators
75. Traffic Managers
76. Translators
77. Tutor
78. Typist
79. Typesetter
80. Usher

Lists Compiled from:

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- 2 - S.R.A. Guidance Books
- 3 - Dr. C. Helling's Clusters

## WHERE WILL THE JOBS BE?

Excerpts from Nations Business.....

The nation appears to be undergoing shifts in priorities with more efforts and funds heading for housing, pollution control, health care, transportation and urban renewal and lessened emphasis in such areas as military hardware, aerospace and education.

The projections assume a stable economy, high levels of employment and utilization of manpower, economic and social relationships that change at about the same pace as in the past, technological advancements at about the same rate as in recent years and defense activities in 1980 approximating pre Viet-Nam levels.

Where is the growth likely to be? First, a service economy with the strongest growth opportunities in such industries as trade, transportation, communications and public utilities, real estate, finance, insurance and government. Service industries like these are expected to employ 7 out of every 10 workers in 1980.

In goods producing industries only one--construction--is expected to show a quickened pace of employment.

Farm workers opportunities will continue to shrink.

The increase in professional and technical workers will out strip all others. Demand will be strong in socio-economic projects such as urban renewal, transportation, and pollution control. There will be continuing emphasis on the social sciences and medical services where the demand will jump 50%. In the professional, technical areas there is expected to be a particularly large increase for systems analysts (183%) and for programmers (129%). All kinds of jobs in health services will grow with the demand for psychologists alone predicted to rise over 85%. Demand for chemists, social workers and counselors, dietitians, physicists, accountants and oceanographers will increase strongly. Job openings for engineers, despite current slack demand, should rise about 40%. The most rapid increase will be in industrial, civil and electrical engineering.

The Department of Labor estimates supply and demand to be about in balance for lawyers and architects but it sees some oversupply in pharmacy, mathematics, life sciences and elementary and secondary teachers.

Service workers should increase about 40%. This category ranges from police and firemen, to household workers, cooks, building custodians, beauticians, etc. A swiftly growing occupation in the service field is licensed practical nursing with a projected growth of 88%.

White collar jobs will continue to increase rapidly. This group will account for about half of all employed workers in 1980. Blue collar skills will account for a smaller part of the total work force in 1980 than now.

Clerical workers: The demand for secretaries, stenographers, bookkeepers, cashiers and office machine operators, etc., will show a marked increase. While the computers and bookkeeping machines may eliminate some clerk-type jobs, there will be a need for personnel to prepare computer inputs. Higher levels of education and training will be needed. A large need for clerical staffs is projected in finance, real estate, insurance and government.

Sales workers: Faster than average growth is predicted.

Managers, officials and proprietors: Employment here will rise more slowly. Changes in business organization and the growth of chain stores and discount houses will probably reduce the number of self-employed proprietors but business will increasingly depend on trained management specialists, hiking the demand for salaried managers and officials significantly.

Craftsmen, foreman and skilled workers outside the crafts are expected to expand more slowly. Some areas such as business machine servicemen will show much faster growth (75%). Despite the strong growth, it is important to consider and remember there will be a need for only 200,000 such servicemen in 1980.

Substantial growth is seen for plumbers and pipefitters, construction machinery operators and aircraft mechanics.

Semiskilled workers: Employment should grow about 10%. Replacement needs will be particularly significant in determining growth.

80% of all jobs in 1980 will actually require less than a college degree. Some advance schooling or training will be needed, however, and duration of training will be determined by the area being entered.

Needs List

List concerns and expectations which the group has not yet met.

APPENDIX III

Senior High Resource Center Description of Function and Material

106 13 12 10 0 0 0

The paper which is the subject of this letter is published  
by the American Psychological Association, 1200 17th St., N.W.,  
Washington, D.C. 20036. It is a journal of the American Psychological Association.

The paper may also be used as a reference for students  
to read and discuss. It is a good source of information on  
the subject.

In addition, you may wish to refer to the book, "The  
American Psychological Association, A History of the  
Organization, 1887-1975."

January 22, 1971

To: Mrs. Alice  
R. P. 100  
9-36 100 100 100



## YOU PLAY THE MAJOR ROLE IN THE JOB INTERVIEW

### Know Your Value

Remember that you are the only person who will have an employment interview. You should be already employed. Be sure you are in a job. So be sure you know the value of your own skills and experience. You can get paid you sell before you can make a career step into your future.

### Know Yourself

Know your own skills and qualifications? Yes, a prospective employer will want to know. It is essential to talk about them intelligently and clearly during the interview.

### Know Something About the Firm

Know a little about the firm you are interviewing. Know as much as you can about the firm. The more you know about the firm the better. It will be so suggest how you can be of service to your prospective employer when he interviews you.

### Look Your Personal Best

Are you a neat dresser?

If you are a neat dresser, wear the best, wear suitable clothing for the average office. If it is a factory job, wear clean, neat work clothes.

DO NOT OVERDRESS. Dress for the job.

### Go to the Interview Alone

Do not have anyone with you in the way you present yourself. He doesn't want to hear your opinion of a firm's value or your qualifications. He will judge for himself. So go to the interview alone.

### Arrive Early

Go to the interview a few minutes ahead of time. Present yourself in a straightforward manner. Let the receptionist know who you are and whom you wish to see.

### Bring a Paper Sheet

A paper sheet about your job, dates of work, wages, kinds of work and reasons for leaving, is essential. Write the facts down, and put a date on it.

Be prepared to give, if necessary . . .

1. Names and addresses of employers.
2. Dates you worked.
3. Names and addresses of at least two other persons who know of your abilities and background.
4. Names and addresses of all schools you have attended.
5. Dates you attended each school.
6. Dates of graduation and types of diploma received.
7. Subjects you took in school and ones you liked most, and least, and those that might help you with a job.
8. Experience in the activities at school. Who were the officers held.
9. Important papers such as a ref. of a military record, work cards, work permits, social security card, health certificate, licenses (driving), union cards.

### Be Alert During the Interview

Get up early in the morning during the interview. Try to be at ease and to answer your prospective employer's questions in a businesslike manner.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The text outlines the various types of records that should be maintained, including receipts, invoices, and bank statements, and provides guidance on how to organize and store these records effectively.

The second part of the document focuses on the role of internal controls in ensuring the accuracy and reliability of financial information. It describes the various types of internal controls, such as segregation of duties, authorization requirements, and independent verification, and explains how these controls can be implemented and monitored. The text also discusses the importance of regular internal audits and the role of the internal audit function in identifying and correcting weaknesses in the internal control system.

The third part of the document discusses the importance of transparency and disclosure in financial reporting. It emphasizes that providing clear and concise information about the company's financial performance and position is essential for the confidence of investors and other stakeholders. The text outlines the various types of financial statements that should be prepared and presented, including the balance sheet, income statement, and cash flow statement, and provides guidance on how to format and disclose this information in a way that is easy to understand and compare.

Store W. H. & S. Co. 1000 1/2 St. N.W.  
Phone Number 222-1111 1000 1/2 St. N.W.  
Type of job available 1st shift  
# of hours per week 40 1st shift  
Union None  
Special clothing, etc. None  
Previous experience needed None  
Other None

Store W. H. & S. Co. 1000 1/2 St. N.W.  
Phone Number 222-1111 1000 1/2 St. N.W.  
Type of job available 1st shift  
# of hours per week 40 1st shift  
Union None  
Special clothing, etc. None  
Previous experience needed None  
Other None

Store W. H. & S. Co. 1000 1/2 St. N.W.  
Phone Number 222-1111 1000 1/2 St. N.W.  
Type of job available 1st shift  
# of hours per week 40 1st shift  
Union None  
Special clothing, etc. None  
Previous experience needed None  
Other None

There are 42 additional pages not reproduced here in this sample.





1777

1778

1779

1780

The following table shows the number of persons in the United States in 1777, 1778, 1779, and 1780, according to the census of 1790. The population in 1777 was 3,929,214; in 1778, 3,929,214; in 1779, 3,929,214; and in 1780, 3,929,214.

Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is arranged in several columns and is mostly illegible due to low contrast and blurring.

[Faint, illegible text in the left column, possibly names or titles.]

[Faint, illegible text in the middle column, possibly addresses or affiliations.]

[Faint, illegible text in the right column, possibly phone numbers or contact information.]



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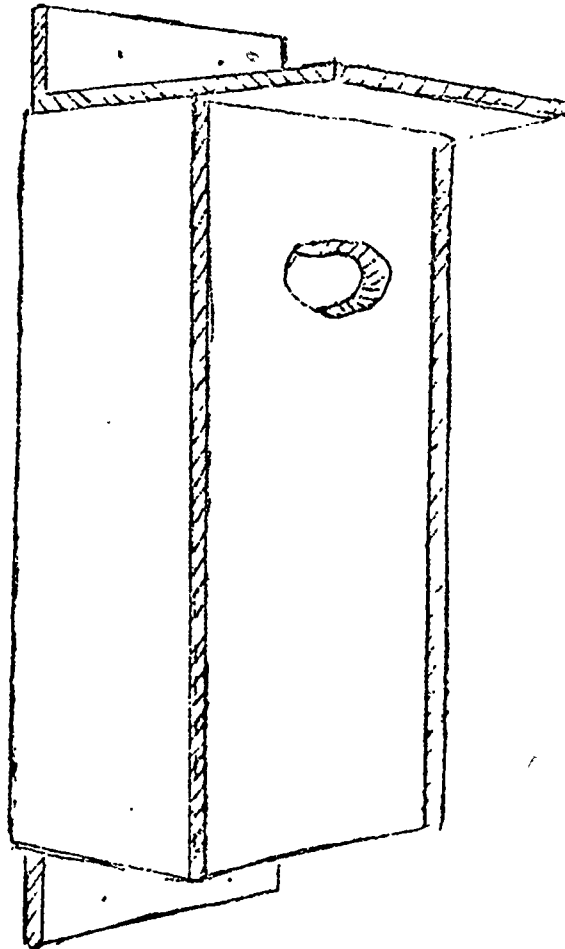




APPENDIX IV

Work Experience Unit for Senior High

WOOD DUCK NEST BOX



PROJECT BY :

WORK EXPERIENCE PROGRAM

RHS - 1973

J. Campe - W/E Coordinator



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- I. INTRODUCTION TO UNIT: When working with the Minnesota Environmental Science Foundation I felt a need for developing a unit on a matter of concern in the environment. After discussion with Don Johansen, of the Foundation, the idea of getting my students interested in building wood duck houses was raised. The basic premise for doing this unit was in allowing students to become more aware of problems in the environment. We felt a "hands-on" experiment must be introduced that would allow for individual students to function in the class setting. Such a unit is contained here: however, many changes took place as we developed the unit. Another words, from the onset, I knew this unit would have to be flexible.
- II. NATURE OF THE STUDENTS: The student chosen for this unit is in the Work Experience program at Robbinsdale Senior High School. The basic tenant of this program is that the student be either lowly motivated towards high school, be a former drop-out, a potential drop-out, or have a special need in regards to finances, discipline, etc. Because of the very nature of this student it was not known by this instructor whether they would accept the unit or even allow it to operate.
- III. STARTING THE UNIT: In the beginning of the unit, I introduced many ideas as to what they, as students of the environment, could do to help the problems in our society. I think it was my own idea that we might help wildlife if we built some wood duck houses. The response from the students was less than dramatic. They did seem to think that this would be better than learning how to fill out an application form. In the beginning, the class thought that it would be a good idea to sell the houses in order to make money and to allow those students without a job to gain some employment time. It seemed at first that this would work; however, the amount of planning done by this instructor and the nature of the student

this was not carried through. We never got off the ground with forming a company to produce, sell, and distribute the wood duck houses. I think, however, that this might work with a new group of students, more time spent in planning, and better organization by the instructor.

IV. COST OF THE HOUSES: We purchased our materials from a local lumber company and were fortunate to have a local benefactor pay the costs. Currently, each wood duck house costs five dollars to build. This would vary greatly depending on the location, type of wood, and rising lumber costs. It might be possible to pick up materials free by contacting local contractors or lumber yards.

V. MATERIALS NEEDED: We purchased the following materials to build ten wood duck houses:

- 120 linear feet of 1" x 12" - #3 Cedar
- 5 linear feet of 24" Aluminum Screen wire
- 8 lbs. of 8d Galvanized nails
- 10 pair of 2" hinges
- 2 dozen 2" x 10" F-H Wood Screws

Added to this list would be sheet metal to cover the holes and staples to attach the wire. I think that our screen had too small of an opening. Make sure that the screen has at least 1/4" openings.

VI. PROCEDURE: We cut all the materials in the school workshop and assembled them in our classroom. The plans we used are contained on page #8 of this booklet. A total of ten students worked on the project. The remainder of the students sat around or did other school work when we assembled the houses. Try to not have too many students in the wood shop with you - too many people get in your way and it can be hazardous. To assemble the houses you should have a 1/4" drill, a drill bit to start nail holes and not split the wood, a countersink for tapping screws for the top, hammers, screw drivers, stapler and staples, and water proof glue.

The actual procedure for assembly of the houses should be:

1. Place the 6 pieces of wood on the table top. (Top, bottom, two sides, front, back.)
2. Staple the screen to the inside piece of wood.
3. Drill nail holes in both side pieces.
4. Drill nail holes for the bottom.
5. Glue and nail bottom onto sides.
6. Drill back piece.
7. Glue and nail back into position.
8. Drill and place on both hinges to top and back.
9. Counter sink both screws on the top piece.
10. Install both screws.
11. Drill holes in back piece of lumber for attachment to trees.
12. Put wood shavings or saw dust into box.
13. Drill three drain holes in bottom.

#### VII. UNIT PLANS FOR MAKING WOOD DUCK HOUSES:

1st Day -

- 1) Introduce basic ideas to the students.
- 2) Explain what the houses are and their purposes.
- 3) Introduce company formation if you choose to form one.
- 4) List different areas that students need to study.
- 5) Pass out written material contained in this unit.

2nd Day -

- 1) Talk to each of the students about what they did, in regards to the assignment above.
- 2) Send students to library, wood shop, biology teachers. The students should follow up on these areas.

3rd Day -

- 1) Bring out plans for houses.
- 2) Discuss what wood ducks are and their habits.
- 3) Show movie on wood ducks. (Both movies may be rented from Minneapolis Public Library)
  - A. Wood Duck Ways - 20 minutes, color, on the life cycle of wood ducks.
  - B. Wood Duck World - 30 minutes, color, on a study of wood ducks.

4th Day -

- 1) Cut materials in wood shop.

5th, 6th, 7th, and 8th Day -

- 1) Assemble wood duck houses.

9th and 10th Day -

- 1) Put wood duck houses up.

Worksheet Given to the Students:

"W.E. Wood" Assignments for Friday

The following is a list of things that I want you to do this Friday:

1st Hour Nomination committee: Task to be completed--come up with at least one name for each job listed from your class. They don't have to agree with your selection, but should be the best person for the job.

John Carroll  
Larry Copeland  
Dave Foss  
Barry Libson

1st Hour Information Committee: Task to be completed--come up with a summary of the reading material assigned. Present this to the class in the last 10 minutes of the period.

Ron Nafstad  
Linda Nystrom  
Frank Zimpher

Dennis Rundquist - work on sales list

Kevin Gartner - work on duties list

Jon Schleusner - work on duties list

Johnny Marty - work on lumber list

Don Rogers - work on house plans

This Worksheet may be used if a company is formed:

WORKSHEET FOR BOTH CLASSES on Friday, March 16, 1973.

NOMINATIONS FOR OFFICERS:

President: \_\_\_\_\_  
\_\_\_\_\_

Vice  
President: \_\_\_\_\_  
\_\_\_\_\_

Secretary: \_\_\_\_\_  
\_\_\_\_\_

Construction  
Foreman: \_\_\_\_\_  
\_\_\_\_\_

Terry Bloom and Don Rogers: Attach house plans and material lists

Kathy Nelson, Peg Bury, Dennis Runquist: Attach poster list, pamphlet format,  
P.R. contacts.

Doug Halverson and Johnny Marty: Places to purchase lumber:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Jon Schleusner and Kevin Gartner: attach list of duties for the above  
officers plus what you think the duties  
of the salesman and laborers should be.....

Minnesota Department of Conservation  
Division of Game and Fish

How to Build A Nest Box for Goldeneyes and Wood Ducks

The common goldeneye is a fine game duck species. It provides a high quality sport to the hunter and is available for hunting on some areas at times when other species are not present.

These ducks nest in hollow trees or in nest boxes provided for them. Their nesting range is in the wooded northern area of the state; including Cass, Beltrami, Itasca, Koochiching, Lake of the Woods, St. Louis Lake, and Cook counties. They nest along the larger fish type lakes and rivers in this resort region. Resort owners or private cottage owners can enhance their enjoyment of the out-of-doors by providing nest boxes and having goldeneyes nesting in their yards.

Plans for constructing goldeneye nest boxes are shown on the following page. The boxes should be 25 inches deep and should be made from good lumber so that light does not leak in through knotholes or cracks. The entrance hole must be elliptical in shape and must measure as follows: vertical,  $3\frac{1}{2}$  inches; horizontal,  $4\frac{1}{2}$  inches. The entrance hole should be 18 inches above the bottom of the box. This design, when followed will exclude most raccoon predators. A piece one-eighth to a quarter-inch mesh screen should be attached on the inside below the entrance hole. This is used as a ladder for ducklings to get out of the box after hatching. About two or three inches of wood shavings or some such material should be provided in the box as nest material. Ducks do not carry nesting material to the box.

The boxes should be placed on mature hardwood trees near lakes. They are often put up on trees in the yards of resorts or lake cottages. It is recommended that the box entrance face the water and that the boxes be placed 20 feet above the ground. Also, it is desirable that there be no branches or other obstacles for at least 30 feet out in front of the entrance as birds have difficulty maneuvering in flight.

Goldeneyes enter chimneys in some localities in search of a nesting cavity. Here they often become trapped and die. This could indicate a shortage of natural nesting cavities. In the region where goldeneyes nest it is recommended that a screen or hardware cloth device be put over the chimney to keep the birds out.

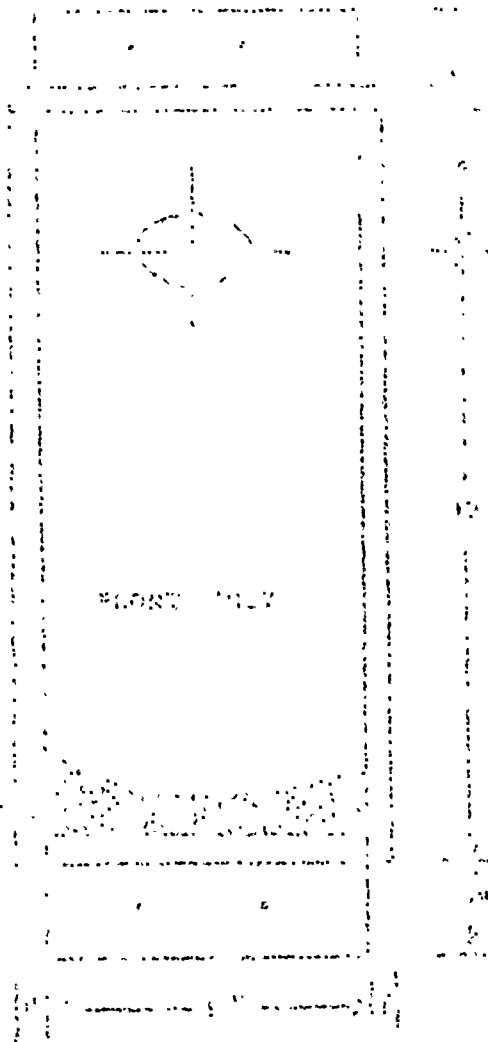
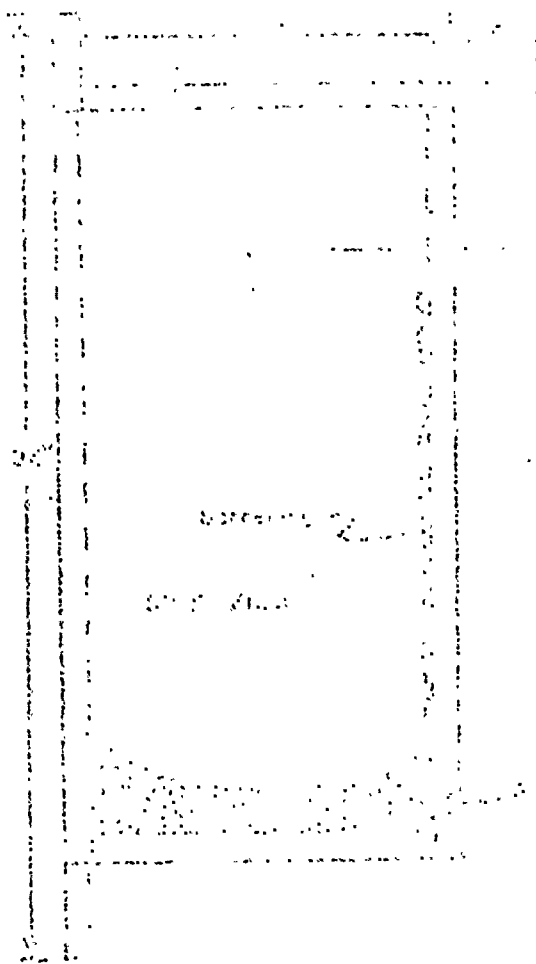
The boxes can be attached by nailing or screwing the extended portions of the backboard to the tree. Once nesting boxes have been placed in a suitable location, care of them will insure greatest use by goldeneyes. Squirrels frequently make leaf nests in the boxes which should be removed in the spring before breeding birds arrive. Occasionally, boxes may have to be cleared out several times to discourage use by squirrels.

This same nest box can be used for wood ducks, except that the dimensions of the entrance hole should be smaller. For wood ducks, the oval entrance should be three inches high and four inches wide.

Prepared by

Leon Johnson, Game Biologist, Section of Game

CO. 111. 111. 111. 111. 111. 111.



REAR VIEW  
(Laboratory 11111)

- 1- 1/2" x 1/2" x 1/2" (3)
- 1- 1/2" x 1/2" x 1/2" (3)
- 1- 1/2" x 1/2" x 1/2" (3)
- 1- 1/2" x 1/2" x 1/2" (3)
- 1- 1/2" x 1/2" x 1/2" (3)

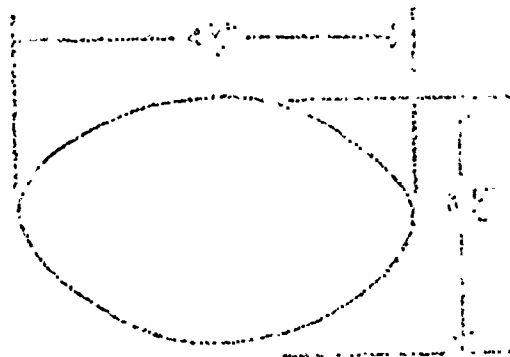
Total number of pieces can be obtained from:  
 one 1/2" x 1/2" x 1/2" (3)  
 one 1/2" x 1/2" x 1/2" (3)

1- Piece of cardboard cloth to inside surface  
 4" x 10" to be attached to the inside of surface  
 below the entrance.

4- One No. 10 galvanized steel nails  
 1/2" flat head (2 at each end)

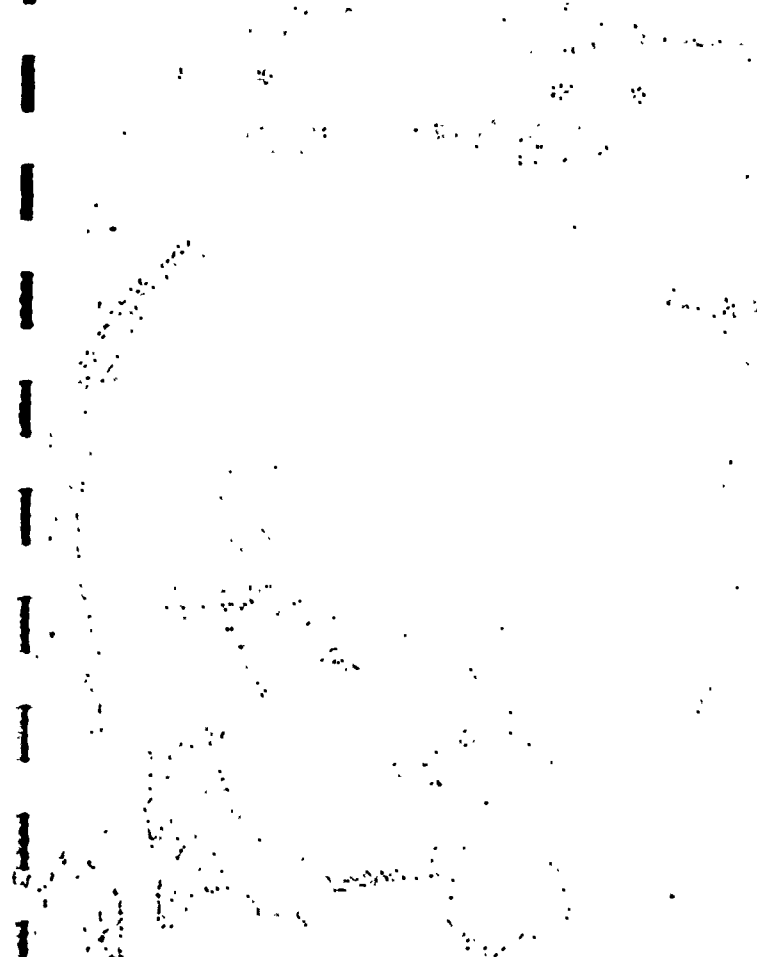
1- 1/2" x 1/2" x 1/2" (3)  
 (one each, one in each)

2- Hinges (one each side)  
 2- 1/2" wide strips (to be attached to each side)



3" x 11" for material





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**WILSON WEEK** ...  
 A YOUNG WOOD DUCK ... out of its ...  
 in the Wildlife Week ...  
 the Good 'ole Miss ...  
 the Wildlife Federation. (See story) ...

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 (Continued from page 22)  
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LET'S LEND A HAND

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Beyond that proverbial shadow of a doubt, the wood duck truly rates the honor of being called the "All-American" duck. A quick look at the U.S. map depicting the breeding range of wood ducks shows that this is the only major species of the 48 on the continent whose nesting (and wintering) range is almost all within the borders of the United States. His popularity is also of All-American caliber--ranking fourth in harvest statistics during the 1970 season.

In addition, this unique duck also has earned the title of "North America's Most Handsome Waterfowl," due to the drake's brilliant rainbow plumage. And, his nesting habits are also unusual--with the choice of a home site being in a cavity or a hole of a tree, rather than on the ground or over water. It's because of these unusual nesting traits that you can lend the "All-American" duck an important helping hand.

Wood ducks readily accept nest houses that are properly made and placed. Nest houses designed to eliminate some of the nest predation have the potential of providing safer nest sites than do natural cavities. In Illinois, studies have shown that only 17 percent of the wood duck nests in natural cavities were successful, whereas 71 percent of the nests in metal houses were successful.

Two basic types of materials are suitable for wood duck houses: wood and metal. A house made from either material has certain advantages or disadvantages over the other. The wood house is more readily accepted by wood ducks, but the metal house provides the safer nest site.

Raccoons are responsible for the greatest destruction of wood duck nests. Next to the raccoon, fox squirrels are the greatest cause of wood duck nest predation in many areas. It is difficult to prevent fox squirrels from entering wood nest houses, but nests in metal houses are practically immune to their depredations. Where fox squirrels pose no problems, wood houses are recommended; where fox squirrels occur in numbers, metal houses are recommended.

WOOD NEST BOX

The wood duck nest box shown in the plan is simple and can be made by anyone handy with tools. The box has an elliptical opening designed to keep out raccoons. The opening should be made exactly as shown if it is to admit wood duck hens but exclude raccoons. A circular opening, if large enough to admit wood duck hens, will also admit raccoons. Bull snakes are sometimes a problem in wood houses. Where bull snakes are abundant, metal houses are recommended.

The box should be made of rough-cut lumber, Cypress is best, but fir may be used if it is painted with a wood preservative. The rough-cut lumber enables young wood ducks, recently hatched, to climb to the entrance. If dressed lumber is used, hardware cloth should be placed inside the front of the box, below the opening, to serve as a ladder for young ducks.

## METAL NEST BOX

The metal house consists of a 26-gauge metal cylinder, 12 inches in diameter and 24 inches long. The conical roof, attached by metal screws, is 15 inches high. Because of its greater durability, a metal plate is preferred to a wood plate for the bottom. The metal plate can be soldered into place, or held in place by metal screws.

An elliptical entrance should be used on metal houses as well as on wood ones to prevent the entrance of raccoons. The metal surface deters squirrels but not raccoons.

Wood duck ducklings climb out of their nest cavity when 24 hours old. Therefore, a ladder of  $\frac{1}{2}$ -inch-mesh hardware cloth is recommended on the interior front, between the entrance and the bottom, to enable the ducklings to climb out.

## LOCATION OF NEST HOUSES

Nest houses for wood ducks should be placed over or adjacent to water areas attractive to the birds. Water areas favored by wood ducks have overhanging woody cover within a few feet of the water surface, and shrubs or trees, or both, which are partially inundated, at least during the early part of the breeding season.

Woodies tend to return to areas in which they have previously nested successfully. The yearlings and the older birds congregate early in the breeding season, and evidently the yearlings follow the adults to nest areas. Wood ducks are prone to seek nest sites in favorable locations--locations that, in the past, have had an abundance of natural cavities or man-made nest boxes.

Houses erected over water may be placed within 2-3 feet of the highest water level. Where trees or dead snags are lacking, the houses may be placed on wood or metal posts driven firmly into the bottom.

The trunks of trees, from the water's edge to as far as 400 yards from the shore, provide suitable sites for wood duck houses. Nest houses placed in comparatively open stands of mature trees with large, spreading limbs have a higher rate of occupancy than houses placed in dense stands of young trees. Woodies evidently prefer to fly to their nests through a relatively open canopy and to perch on large horizontal limbs near their nests. The great preference for nest sites in open areas was demonstrated in an area where nest houses were on dead trees standing in water. Nest houses placed on dead trees have had a higher rate of use than those placed on live trees. Hens tend to avoid selecting houses that are shielded by saplings or overhanging branches, or houses that are attached so insecurely as to move on contact.

In order to capitalize on the homing of adult and yearling hens, nest houses should be erected in groups when placed in woods large than 40 acres. In such groupings, houses should be placed from 50 to 100 yards apart (a density of one or two per acre).

## START A WOOD DUCK NESTING BOX PROJECT

DONALD WAGNER

The wood duck, generally considered the handsomest of all waterfowl, is unusual in that it normally nests in tree cavities. These ducks frequent wooded margins of lakes, ponds, and streams; the tree cavities used for nesting are found mostly in old, large trees and, in many places, such trees close to water are scarce. Because of its willingness to accept artificial nest sites, we are able to provide an essential part of its breeding requirements by putting up nest boxes. A wood duck nest box program is worthwhile "do it yourself" conservation project, particularly if youth are involved in the activities.

The birds learn to use nest boxes; it may take a few years to get local wood ducks accustomed to them. However, once the hens use them they will return or "home" to nest in the same box the next year, providing they survive the hunting season and other hazards. Young hens also tend to "home" to the region in which they were reared. It also appears that young reared in a nest box are much more likely to select a nest box when they reach breeding age than are birds hatched in natural cavities. They have, during the first few hours after emerging from the egg, become "imprinted" to nest boxes and regard them as proper homes. Thus, both "homing" of adults, and "imprinting" of young increases the use of nest boxes.

At the turn of the century the wood duck was near extinction but protection from hunting allowed it to make a remarkable come-back. Nest box usage and breeding populations may increase rapidly in areas which supply the other habitat needs of the birds. We can raise more by building nest boxes and putting them up where the ducks are apt to use them.

Nest boxes have long been used for wood ducks. They vary in materials used and design to suit them to the quality of habitat in the birds' diverse breeding range (largely the eastern half of the United States and the Pacific Coast States south to central California). A well-built box made of cypress lumber, galvanized sheet metal, or aluminum may last 25 years or longer. It can be mounted on special predator-proof posts near or over water. However, properly built wooden boxes attached to trees provide a good scaring point. Satisfactory boxes can be built lasting 5 to 10 years, for \$5 or less for material and labor, using rough-cut pine, spruce or cedar lumber.

Now, it is time to get started and build the box. You will need a handsaw, a hammer, and a wood auger, a key hold saw for cutting the entrance hole and a metal shears for cutting the galvanized sheet metal mask. The mask prevents raccoons from gaining entrance into the box by gnawing the hole larger. Just get some well-seasoned 1 by 12 inch boards, a good supply of 8 or 10 penny galvanized nails, and a sheet of 26-gauge galvanized metal and go to work. To determine the amounts of materials for each box, follow the suggested construction plans. The box should be 25 inches deep with a 3 by 4 inch elliptical entrance located 17 inches above the bottom. Poorly made nest boxes (those allowing easy access to predators) are death traps for nesting ducks. The design given will exclude most raccoons. A piece of 1/2 inch hardware cloth or window screen, approximately 6 inches wide, extending from the entrance to the nest basin must be securely attached to the inside of the box. This serves as a ladder on which ducklings can get a toe hold to climb out of the box after hatching. Since wood ducks do not carry nesting material, 3 to 5 inches of wood shavings or other suitable material must be provided in the bottom of the box. To keep the nesting

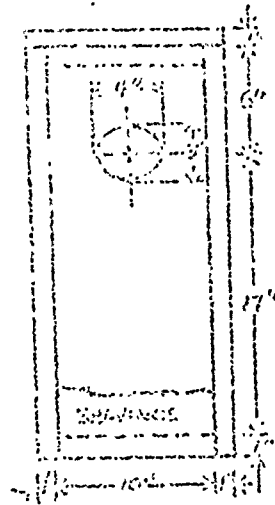
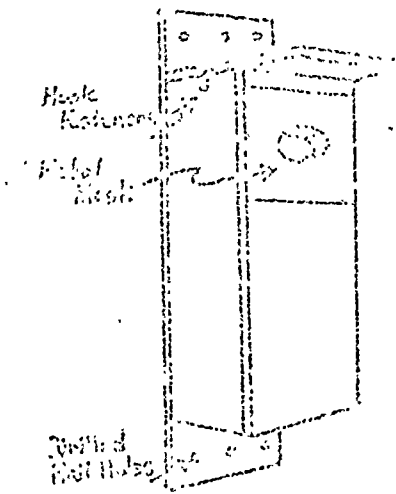
## Start a Wood Duck Nesting Box Project

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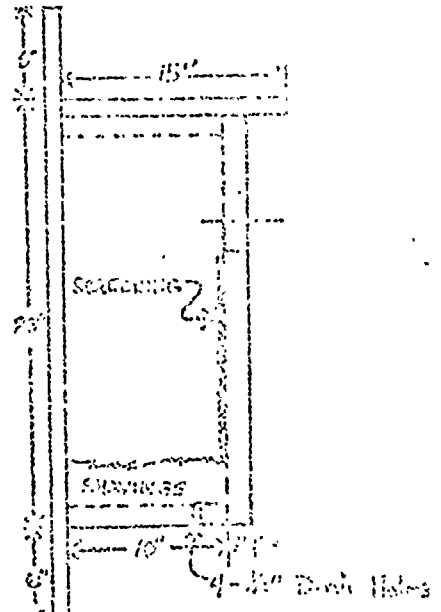
material from getting too wet, four, quarter inch drainage holes should be bored through the bottom. You may want to treat the bottom with a wood preservative (one which is noninjurious to ducks) or paint the box to increase its life expectancy.

For best results, the nest box should be placed about 20 feet above the ground preferably near old, mature hardwood trees. The entrance hole should be easily visible to the ducks with a clear flyway to it. Wood ducks prefer the smaller wooded ponds and streams, particularly where the water is quite weedy and where aquatic insects are abundant. Nest boxes should be installed near such areas. To put the box up, a safe ladder and a helper are essential. Since the back board projects above and below the nest box, the tabs sticking out on the ends will do for nailing the box to the tree. It is suggested that several holes be drilled in these tabs to take the nails. Easy does it, take your time and make sure the box is securely attached to the tree and easily accessible for future maintenance.

It should be inspected at least once a year, preferable shortly before the birds return to nest. At this time repairs can be made, debris cleaned out, wood shavings loosened, and fresh material added. A hinged or removable top secured by hooks or springs will help greatly in maintenance. What is more, you can come around now and then and enjoy your nesting birds. Do not worry about the ducklings getting hurt by falling from the box 20 feet to the ground, they simply bounce and then line-up to follow the hen to the nearest water.



FRONT



SIDE

Contents of Experiment

1. Object of the experiment

2. Aim of the experiment

3. Theory of the experiment

4. Apparatus required

APPENDIX V

Community Career Center Report on Activities



WHO ? WHAT?? WHY??? WHERE??? HOW??? WHO? WHAT?? WHY??? WHERE??? HOW ???

THE COMMUNITY CAREER CENTER is a drop-in Center located at 7695-42nd Avenue North in space provided by the New Hope Village Council. The Center is one of five phases of the CAREERS PROJECT in District 281. It is funded by the federal government through the Minnesota Environmental Sciences Foundation.

The Center serves the residents of District 281 with priority given to students who have interrupted or terminated their secondary school education.

The Center staff helps the student to identify his/her needs and concerns and to work out a plan of action to meet these needs and concerns. Contact is maintained with the student; most have two or more counseling conferences and a number of follow-up conferences and/or phone contacts. Most students give priority to obtaining a job, followed by educational and occupational counseling when they feel ready to consider choosing a career. Many of these students are in alternative educational programs operating outside of District 281.

ALL residents of District 281 are welcome at the Center. To encourage use of the Center, hours during March have been extended: 8:30 a.m. to 9:00 p.m., Mondays through Thursdays, and 8:30 a.m. to 5:00 p.m. on Fridays.

The Center has identified a variety of resources available in the Twin Cities area so if the services needed are not available at the Center, the individual is referred to another individual, agency or institution for help.

WHY IS THE CENTER NECESSARY? Because people need a place to go to put it all together. Most people do not have a place to go - so the Center provides a place and extends guidance and counseling services into the community.

WHO REALLY USES THE CENTER? Since October about three hundred people, approximately one hundred fifty of that number are teen-agers. The others include young adults who are trying to decide on a career, Viet Nam War Veterans trying to re-establish themselves, housewives who wish to re-enter the labor market, and college students (some graduates) who need to reconsider their career choices.

WHAT CAN YOU DO? Encourage anyone who is no longer in a secondary school to contact the Center. This includes all residents of District 281 regardless of age who might be able to use the services of the Center.

THE TELEPHONE NUMBER IS 533-5404. Hotline, 330.

STAFF

DON JOHANSEN, Project Director

LYNDA GOODWIN, Job Counselor

BETTY OLSON, Center Director

AUDREY STRANDBERG, Intern

# CAREER DEVELOPMENT HUMAN DEVELOPMENT

= 1

District 281 Career Fair  
March 8, 1:30 to 4 p.m.  
Cooper Auditorium and Gym

## PROGRAM

- 1:10 to 1:30 p.m. .... Cooper Music Department
- 1:30 p.m. Dr. Leroy Hood ..... Auditorium  
Welcome and Introduction
- 2 p.m. Career Exhibits ..... Gym  
(Coffee served)
- 3 p.m. Commissioner Howard Casney ..... Auditorium  
Careers: Key to the Future

## WHAT IS CAREER DEVELOPMENT?

Career development is a process that is closely related to human development. Career experiences offer us a chance and a reality to test who we are in relationship to other people and things. Work, in this frame of reference, means the integration of self and society and includes endeavors that offer psychological rewards as well as money. Self development through career development involves the valuing of doings and feelings as well as the thinking processes of humans. Career education links school subject content to people at work and humanizes the educational process. It serves as feedback to the teachers as to the relevance of their content to student needs.

## PARTIAL LIST OF DISPLAYS

Armstrong Career Center  
Career Curriculum Writing Teams in Various Areas  
Cooper Career Days  
Cooperative Education Program  
Community Career Center  
Community Education  
Consumer Homemaking  
District 287 (Secondary and Adult)  
Environmental Science Center  
Hosterman Career Project (School Wide)  
Sandburg Career Exploration  
The World of Construction  
The World of Manufacturing

THE COMMUNITY CAREER CENTER

A Statistical Report on CCC use From  
October 4, 1972 to May 3, 1973

The Community Career Center drop-in office, located at 7695-42nd Avenue North, is donated by the Village of New Hope. It is staffed by Miss Betty Olson, a certified counselor drawn from the District staff, and by Miss Lynda Goodwin, a Career Resource Technician with a background in job placement.

- A. Total dropouts from District: 236  
(Total includes 189 from the 1972-73 school year.)
- B. There are at least 5 contacts per individual made either at the office, at a home visit, or by phone.

DROPOUTS:

- C. Who returned to regular day school: 21
- D. In alternative educational programs (outside of district): 57
- E. In GED prep or passed: 19
- F. In North Hennepin State Junior College: 4
- G. In Vocational-Technical Institutes: 5
- H. In Military: 3
- I. Working (full or part time): 105

Total number dropouts involved in:

AN EDUCATIONAL PROGRAM: 106  
WORKING (full/part time): 105

OTHERS:

- J. Graduates: 58
- K. North Hennepin State Junior College dropouts from District: 21
- L. Miscellaneous: 42  
(Includes; adult women returning to work or school; veterans; adults wanting to change jobs; inschool people wanting to dropout.)
- M. TOTAL NUMBER OF PEOPLE CCC IS PRESENTLY WORKING WITH: 357

5/15/73

## THE COMMUNITY CAREER CENTER

## A Report of the New Referral Services for Dropouts

The Community Career Center is a drop-in office located at 7695 - 42nd Avenue North which places its many services at the disposal of the community with priority given to students who have interrupted or terminated their secondary school education. In other words, it serves the dropouts from Robbinsdale Area Schools. The nature of the service will be revealed in this report which addresses itself to an examination of the dropout problem, an explanation of who and what is being done to resolve it, a documentation of these efforts and a discussion of the cost of the services.

## DROPOUTS

## Who Are They?

- Raymond is a member of a minority group who has lived in foster homes and has a history of general troublemaking. He also has a serious reading problem. He just didn't like school...he left...to do nothing.
- Mark was bored, school lacked challenge for him, he became defiant of its regulations and subsequently developed serious drug problems. "I just couldn't hack school," he said.
- Marie's parents were divorced, living with other relatives she developed a kind of maturity not typical of her peers becoming ultimately a troublemaker. She was unsatisfied with traditional educational programs which offered her limited alternatives.
- Don was a bright personality who enjoyed excellent relations with both peers and parents. But he was bored and he became clever at manipulating the system until it caught up with him. He was told to leave.

It is important to remember that the overwhelming majority of youngsters remain in school. Enrollment for the three senior high schools as of April 12, 1973 is 6,162. These schools have many programs which appeal to and satisfy a wide range of student needs. This means that they do recognize diversity within the population they serve. However, for many reasons they cannot provide for one hundred percent and it would be unreasonable to expect them to.

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### What Factors Create A Dropout?

During this current school year 190 students are known to have dropped out of Robbinsdale Area Schools as of April 12, 1973. There are perhaps 190 different reasons for why this has happened. Making generalizations about causes is thus somewhat risky. However there are some factors that do stand out and are worth noting.

#### Dropouts:

- are hassled by irrelevant school offerings, and are frustrated and distracted by conflicting value sets
- often are greatly troubled by a poor home environment and find that their concern for it interferes with their education
- in some cases have learning difficulties which the schools are incapable of dealing with at such a late date
- may view a job and an income as having priority over an education
- can be so troubled by a number of personal growth things that they can no longer function in the school setting
- are confused by the fact that they do not know what they want to be and this is further complicated by their inability to sort out choices.

Surely, there are other outstanding reasons why youngsters leave school. Possibly those who are still in would have additional points of view about why their friends leave.

### Why Should We Be Concerned?

There are several kinds of concern people have about the dropout problem. Following in no particular order of importance are several of them.

- because dropouts can be a potential source of societal problems placing a financial burden on the community in terms of higher levels of unemployment, welfare, crime, and additional demands on our beleaguered social service agencies
- because dropouts represent a potential waste of valuable human resources since, chances are, their limited education will never permit them to make a real contribution to their community in return for its services to them
- because dropouts stop attending school they represent a financial loss to the district in terms of potential state aid money not received. Currently the school district receives state aid of \$1,050 for every secondary student for a full year of attendance. That amount is reduced in proportion to non-attendance. One hundred ninety dropouts could represent nearly \$200,000 in lost

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state aid if they left school early in the year. (1972-3 \$750 per pupil unit, secondary students = 1.4 pupil units. New levels have not been set by legislators for 1973-4.)

- because dropouts may be indicators of institutional failures.

The nature and the implications of each of the foregoing concerns should suggest that no one can afford to dismiss the dropout problem as a minor one.

#### What Can Be Done?

With all the programs and services available, dropouts still occur. Many school districts profess concern but few do anything positive. Robbinsdale has begun to show responsibility toward its dropouts. The following case study is a composite picture of how a dropout can be helped by concerned and responsive people - in this case the Community Career Center staff and those in the various referral agencies with whom the Center has contact.

#### A Case Study

Tom is seventeen. He dropped out of school this week because "it's too much of a hassle," and "I wasn't learning anything important." He would like a job that pays well so he can get some "wheels." He can use the family car but that's "just not often enough."

Tom does not want to return to high school; he has thought about "learning a trade or something."

Tom is presented with all of the possibilities available to him, including educational alternatives such as our night school, South High Night School, the Work Experience/Night School Program and the GED (General Educational Development test for high school equivalency)--the latter not available until Tom is 19 or until his class graduation date.

Tom is not interested. No pressure is exerted on him to choose any alternative.

Tom does elect to take a brief forty-minute job application skills unit in which he learns how to fill out job applications, how to be interviewed, how to follow-up after applying for a job, etc. The job counselor gives him ideas and leads on where to look for employment.

A card with a few brief notes on Tom is filed and marked "Follow up (date)", usually a contact is made a second time within two weeks of the first meeting.

Two week follow up: Tom is discouraged, hasn't been able to find a job. We talked to his job counselor at Manpower; he will try to help us with Tom. Age is a problem.

Ten days later, Mr. D. called from Manpower--Jones Plastic may be hiring 17 year olds. Called Tom with information.

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Three days later: Tom is working 11:00 P.M. - 7:00 A.M. shift at plastics company at \$1.85 per hour. Follow up in one month.

Two weeks later: Tom called, concerned about his high school diploma. Encouraged Tom and his parents to come to the Center. Appointment set for Wednesday evening.

Conference with Tom and parents: All educational alternatives are outlined and discussed. Parents expressed interest in having Tom attend South High Night School program for four evenings a week. Tom says he won't go for four nights, he believes two nights are enough to begin with. Since Tom is working, he wants to try the Work Experience Program/Night School program at the Lake Street School. This could also cut down on the distance traveled and the nights the family car would be in use. Some time is spent working out a program for making up five credits, including one English and one Social which Tom will take later at South High School. If Tom completes the programs as outlined or elects to return to District 281 next fall, he will be short one credit which may be made up by carrying six courses or attending our evening school program.

## THE COMMUNITY CAREER CENTER

### What Does It Do?

As might be gathered from the foregoing case study, the C.C.C. is actively involved in helping others make decisions related to careers, education and personal adjustment. This is essentially a process of helping students help themselves. Most of its visitors as indicated are dropouts. It has identified four working priorities which are listed below and which have evolved out of two years of intensive experience with dropouts.

1. Job development. The majority of visitors to the Center seek immediate employment.
2. Educational counseling. Paradoxically, dropouts often request help in locating alternative educational routes.
3. Personal counseling. As indicated previously in this report, dropouts are people with concerns and while they request assistance in securing jobs, often a more significant form of help may be to examine their concerns and effect the adjustment needed.
4. Career counseling. Many Center clients need help in matching interests and abilities to the job options.

### Who Does It?

The C.C.C. is staffed by two individuals; one, Miss Betty Olson, is a certified counselor, drawn from the District staff. The other, Miss Lynda Goodwin, is a Career Resource Technician with a background in job placement. Together, these two staff a small office donated to the project by the Village of New Hope. It is located in the old New Hope Village Hall apart from any school building and is thus not obviously associated with the Robbinsdale Area Schools. This location has some important advantages mainly that "turned off" students enter this office more freely than they would a school building.

## How Does It Function?

### Relationship to the Schools

The effectiveness of the Center is directly related to the close communication it enjoys with school district counselors since almost all of the dropouts seen by the Center counselor have been referred by a District counselor. When a counselor knows a student is about to terminate, the student is apprised of the Center and its many services. The counselor fills out a form that "introduces" the dropout to the Center and forwards it to Betty Olson. Ms. Olson attempts immediate contact with the dropout inviting him to visit the Center as soon as possible thus ensuring little time lapse between termination and interview.

Without school district referrals, the Center would have great difficulty locating its potential clients. Dropouts in turn could be "spinning their wheels" in search of jobs, alternative schools or other help. The school counselor is a catalyst in this system acting to direct and hasten the engagement between the dropout and the Career Center. This role is a crucial one; the success of the program hinges upon it. Betty Olson has expressed appreciation for the cooperation she has received.

### Relationship with Dropouts and Other Clients

Once a dropout is identified, the principal role of the Career Center is to help him create a bridge between the school and work environment. As indicated previously its first priority is to respond to the need presented by the dropout when he first comes through the door. In many cases the need is for a job thus the staff has established contacts with employers and employment agencies. It also receives a number of unsolicited job orders from many community sources. Obtaining a job is one thing, maintaining it and feeling good about it are also important. To that end the Center staff feel that job development rather than placement should be emphasized. To the degree that they can, Center staff:

- find out what kind of previous work experience the dropout has had. Everything conceivable is important including babysitting, mowing lawns and paper routes.
- explore what a dropout wants to do including testing for career interest and aptitude. Many do not know what they want to do but they do know how much they want to be paid.
- help them examine realistic choices in terms of past experience, interests, need for future schooling, urgency of need and skills
- provide them with job application skills if needed
- place dropouts in the job most appropriate for now or refer to an appropriate agency
- follow up on the dropouts' progress



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In the process of job development, dropouts have an opportunity to share their perception of themselves, of work and their future with both Center staff. Often these conversations uncover some personal growth problems which are also dealt with.

In a number of cases Center visitors are actually seeking more education but do not know what is available. Center staff expand educational possibilities and interest and have successfully placed former dropouts in a number of schools.

Career and educational counseling are services provided to the entire community. To augment counseling, the Center staff engage in some occupational aptitude and interest testing. The GATB - General Aptitude Test Battery - the OVIS, STRONG and Kuder instruments are the principal testing devices used. A combination of test results, personal report and counselor evaluation provide a basis for identifying possible career or education options.

### Relationship to Community Agencies

The general procedure outlined above for the dropout or other clients is an ideal process and not always as straightforward as described. Clients need help in many areas. Recognizing this, contacts have been made with a wide variety of community agencies and institutions. A complete list of those resources is appended to this report. A sampling follows.

1. Placement Services
  - A) State Department of Manpower Services, Inc.
  - B) Associated Clerical Services
  - C) Neighborhood Youth Corp
  - D) MSP Volunteer Alert
2. Educational Alternatives
  - A) Vocational Schools
    - i) Anoka
    - ii) Suburban Hennepin
    - iii) Vo. Tech. 915, etc.
  - B) Schools for High School Credit
    - i) Pilot Outreach
    - ii) South Community School E.4.A.A. Program
3. Miscellaneous Services
  - A) B'Nai Brith
  - B) Hennepin County Offices
  - C) Drug Counselors, Psychiatrists, Psychologists, Social Workers

A good working relationship with each of the many agencies and institutions listed here is vital to the Center's operation. With limited staff and finances the effectiveness of the Center would be appreciably lessened if they did not have access to the services rendered through other agencies. The Center is thus a central referral clearinghouse capable of placing its clients with an appropriate agency thereby relieving the client of the often confusing and expensive experience of locating the right people at the time when their help is most needed. The Center is one of few (possibly the only local referral agency) agencies in the metropolitan area performing this kind of service.

A dropout leaves the Center knowing that his progress will be followed by Center staff. According to the staff, self-report is on the increase. Center records reveal that many come back in person to relate their experiences and feelings indicating the quality of the rapport established between staff and client. Whether by self-report or staff follow-up, the Center needs and wants to know what happens after a visit to the office. It is a measure of their effectiveness and a way to demonstrate continuing concern for the welfare of the dropout.

Relationship to Community Adults

In addition to its intensive work with dropouts, the Center also serves the adult population in the following ways:

- it can put a limited number of adults in touch with local employers
- it can counsel out-of-work adults into new employment areas by providing them with career information
- it can administer the GATB, OVIS, STRONG and Kuder tests which will indicate general interest and aptitude in certain career areas
- it can provide them with knowledge about further educational opportunities
- it can teach them job application skills
- it can refer them to other agencies

Community Career Center staff opened their doors in the evening throughout the month of March for purposes of testing whether or not adults would avail themselves of the services offered. This program evolved out of a Wednesday night open door policy. The results are still being analyzed however, it is certain that evening hours will attract more adults thus enabling the staff to serve a broader sector of the community.

What Are the Results?

As of April 4, 1973 the Center has seen 214 dropouts, most all of which left school this calendar year. The results of Career Center counseling are as follows:

<u>Status</u>	<u>Armstrong Population (N=52)</u>	<u>Robbinsdale Population (N=84)</u>	<u>Cooper Population (N=81)</u>
Working	28 15 are working and in school	37 9 are working and in school	36 16 are working and in school
In School	24	31	31
Nothing	13	24	30

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For purposes of record keeping each status category is checked separately for each student. For example, for Armstrong the chart shows a total of 52 (28+24) students in each of the first two categories. Fifteen students have a dual status of working and in school. Summing categories for all students and then subtracting the total dual category students equals 214. Therefore, of the total of 217 dropouts reported by counselors to the Center, three have not been successfully contacted.

In some cases working students have acquired jobs without the help of the Center. However, the Center is directly responsible for placement of all dropouts in other educational programs.

Thirty percent of the dropouts were doing nothing at the time these data were collected. Status changes daily. The most significant results will be revealed in end-of-the year data since the dropout number decreases to a trickle after the spring vacation period. Therefore pre-vacation dropouts will have been out for some time during which the Center will have many opportunities to explore both jobs and further education with them.

#### What Does It Cost?

At the present time Robbinsdale does not directly bear the cost of the Community Career Center since it is funded by the federal government. The operating budget of the Center for the coming fiscal is \$23,921. This can be broken down into two figures \$23,621 in salaries and \$300 in materials and supplies, including career resource materials. The Career Resource Technician position is for 12 months while the Center Counselor's is for 44 weeks. The Center will offer services throughout the summer but on a more limited basis.

#### Summary and Future Plans

There is a poster prominently displayed on a wall in the C.C.C. office which says, "People are lonely because they build walls instead of bridges." C.C.C. staff in a sense are architects whose mission is to help others design and construct the bridges needed to enter into productive community life. They are equipped with the maps and blueprints of the profession which they use to help others span the distance between confusion and self-direction. Their tools are wielded with a strong humanistic feeling about the net worth of the entire individual not simply the vocational part of a person. Consequently, while job acquisition is an immediate priority for most clients, the "job is but one test of an individual's effectiveness in dealing with his total environment" according to Betty Olson.

Aware of the high incidence of job dissatisfaction among the nation's employed, Ms. Olson feels that it is the responsibility of the Career Center to take the individual where he is and in a cooperative effort chart a reasonable career course, including both education and job, based on a person's stated goals. Career orientation and goal setting, wise decision making and honest self-appraisal can lead to greater job satisfaction now and in the future.

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Will the Center operate next year? Yes, but its future beyond that is not clear. Challenged by the press of time and the needs, Miss Olson still has thoughts of expanding the services to round out the program. Next year some of the following could occur:

- installation of a "hotline" phone manned by volunteers trained to offer career occupational information to all who call
- increased advertisement of services
- acquire and operate a microfiche system for job development
- group work for youngsters returning to school and with parents of dropouts
- production of informative brochure which would discuss a parental role in the dropout situation.

The final item - brochures for parents - is an outgrowth of many months of dealing with the relationship between parents and dropouts. Often in the emotionalism surrounding an early departure from school by a student, both parties lose sight of the things that have made them a family. Counseling can help parents clarify their roles and responsibilities toward their youngsters whereas it can also provide youngsters with new insights relative to their new family status. Most important of all counseling can help all parties regain and/or maintain regard for the personal worth of one another.

Ken, a dropout, felt disowned by his parents who couldn't face the fact that he had left school. He had failed them. They saw it as a "what'll our friends think" situation. After all, dropouts were generally regarded by the community as kids who couldn't make it, goof offs, troublemakers and kind of dumb, too. The implication was that Ken's parents were also failures since they had had no influence on him to remain in school. Antagonism grew. Ken moved out and even though he had found a job through the Center and was also attending night school he was "really hung up" with his parents' attitude. "They can't stand me 'cause I don't buy their values," he reported. If he hadn't cared, he would not have continued to discuss the situation with Center staff.

A few phone calls resulted in a meeting with the parents. Through discussion it was apparent that they were victims of a kind of social thinking that many are susceptible to. They had erroneously reasoned that Ken was washed up because he did not finish high school, could not go onto college and therefore would never recapture his original social status.

Referral to a Parent Effectiveness Training program is changing this thinking. There has been a definite rise in self-esteem on both sides. This is helping to heal some wounds. There is a residue of anger but it is against the wrongheadedness of those who perpetuate the notion that dropouts and their parents are failures.

The Community Career Center has an overarching mission to dispel the failure idea associated with dropouts. If it terminates in another year with nothing else to its credit, it surely will have had an impact on the way the community views dropouts. This in itself will be a major achievement of which everyone associated with Robbinsdale Schools can be proud.

LIST OF RESOURCES

1. Employment Services

- A. State Department of Manpower Services - includes job placement, job development, aptitude evaluation, occupational skill center, Job Corp, apprenticeship programs (Hopkins and Minneapolis offices).
- B. Associated Clerical, Inc. - private employment agency which specializes in clerical placement and has all employer fee paid jobs.
- C. Graduate Placement Services - private employment agency which specializes in the placement of college graduates.
- D. American Lutheran Church - provides occupational information and job placement.
- E. Neighborhood Youth Corp. - works with high school dropouts only - 16 to 18 years of age - NYC is an accredited school; its goal is to place dropouts in an educational system whereby the student can work at his pace; and NYC offers jobs to these students on a Work Experience Program in order that the student may get a diploma and be prepared for the World of Work.
- F. Youth Research Center - is a private non-profit organization whose funding comes from foundations from local and various parts of the U.S. When the center started 13 years ago, it was part of the American Lutheran Church services. The originator, Dr. Merten P. Strommen, chose to become separate some time later. The services, which are offered to parents, teachers, ministers, etc., or anyone involved and interested in children, include human relations courses, values clarification, Teacher Effectiveness Training and Parent Effectiveness Training, and, also has a research department. YRC has a staff of 12 and is located at 122 West Franklin, Minneapolis.
- G. NSP - "Volunteer Alert" - Agencies will interview and sign up teenagers for summer jobs. The Alert is for teenagers 14 and older. It is sponsored by the Voluntary Action Center (formerly Volunteer Service Bureau). NSP is providing building space.

2. Educational Alternatives

- A. Vocational Schools most used - Anoka, Dunwoody, St. Paul, Suburban Hennepin, 916.
- B. Junior Colleges most used - Anoka-Ramsey, North Hennepin, and Metropolitan State Junior Colleges.
- C. Schools for High School Credit -
  - District 281 - Adult Basic Education
  - District 281 - Evening School
  - District 281 - Continuing Education Center for Pregnant Girls
  - District 281 - GED prep classes at Hosterman, Lee, and Armstrong
  - Holmes School - for adult basic education and GED preparation

C. Schools for High School Credit (cont.) -

- Pilot Outreach - sponsored by Northwestern National Bank.
- Night school for high school dropouts.
- E4AA Program (Education for Adult Advancement) - Lehman School, South Community School and Lake Street School. It has a Work Experience Program tied into it
- Education Exploration Center - free and alternative school information
- Career Clinic for Mature Women - program offered through the University of Minnesota for older women wanting to re-enter the job market - includes skills training and/or refresher, job referral, attitude and counseling.
- Continuing Education Center for Women - program offered through the University of Minnesota for credit.
- Twin Cities Opportunities Industrialization Center, Inc. - TCOIC - offers vo-tech training, GED preparation, job placement and its free. Some pre-vocational courses offered are: computational skills, communicational skills, consumer education, GED preparation, jobology, minority history, personality development and reading improvement. Some vocational courses offered are: appliance repair, carpentry, drafting, key punch, office skills, printing, surveying and welding. Requirements for TCOIC trainee: must be at least 16 years old or over. TCOIC is a non-profit manpower training agency, funded by the Department of Labor, Department of Health Education and Welfare, the Office of Economic Opportunity and local sources. In June 1973, it plans to change to a revenue sharing program only.
- Minnesota Literacy Council - private tutoring for low ability or illiterates.
- Neighborhood Touch Corp - See #1, E.
- University of Minnesota - correspondence courses and extension program
- Franklin Community School - night school program for dropouts.

3. Miscellaneous Services

- A. B'Nai Brith - includes vocational testing, psychological testing and counseling. It is a private non-profit volunteer counseling center which is APGA accredited.
- B. Hennepin County Offices - Welfare Department, Probation Officers, AFDC and Child Welfare Intake.
- C. Community Information and Referral Service - has a volume of resources of various agencies, businesses, etc., throughout the Twin Cities area.
- D. Dakota County Center - provide information about programs and vacancies in programs of all the Vocational Technical Institutes in the State.
- E. Society for the Blind - occupational development center and financial aid assistance program.
- F. Several drug counselors, social workers, psychologists, psychiatrists.