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AUTHOR Montgomery, Janey L.; McKay, Joane W.
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ABSTRACT

This paper gives an overview of career development theory. It examines the scope and sequence of educational activities provided in the authors' "A Guide to Developing Career Education Across the Curriculum," which explains the "Iowa Model" of career education; and it presents practical suggestions to implement career activities with gifted and talented children and youth. A student competency and five activities are listed for each of seven domains (set of skills and concepts) in the Iowa Model: self; interpersonal relations; self and society; decision-making; economics; occupational knowledge; and work attitudes and values. Descriptions of the activities are brief and provide no advice to the teacher, such as time estimates, or support materials, such as student worksheets and lists of resources. Among the student activities are the following: begin a "Lifelong Notebook" in which to collect ideas and dreams as a tool to understanding self; construct a family career tree and interview family members to determine how interests and abilities influence career choices; do research on a person the student believes is a humanitarian and brainstorm how students can serve others; visit college campuses with families; use computer software that simulates a business; and research the impact life-style has on career choice. A list of 34 references is provided. (CML)

Career Development Activities for Gifted and Talented Youth

by
Janey L. Montgomery, Ph. D.
University of Northern Iowa, Cedar Falls
U. S. A.

Joane W. McKay, Ph. D.
University of Nevada - Las Vegas
U. S. A.

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CAREER DEVELOPMENT ACTIVITIES FOR GIFTED AND TALENTED CHILDREN AND YOUTH

DR. JANEY L. MONTGOMERY*
University of Northern Iowa
Cedar Falls, IA

DR. JOANE W. MCKAY
University of Nevada
Las Vegas, NV

The objectives of this presentation are to: (1) overview career development theory, (2) examine scope and sequence of career development activities provided in A Guide to Developing Career Education Across the Curriculum, a K-12 curriculum guide (Montgomery & McKay, 1989) and (3) present practical suggestions to implement career activities with gifted and talented children and youth.

The Iowa Model for Career Education provides a sound basis for developing a comprehensive career education plan. The model depicts a concept of career development beginning in kindergarten and continuing throughout life. It evolves around two basic concepts--the concept of self and the concept of the world of work. The purposes of these two concepts remain the same throughout the model, but function differently during each phase of career development. The four phases of career development in the Iowa Model are: awareness, accomodation, exploration, and preparation. The basic components of self and work are used to establish a set of skills and concepts (domains) for each level of the Iowa model. The seven domains are: 1) self, 2) interpersonal relations, 3) self and society, 4) decision-making, 5) economics, 6) occupational knowledge, and 7) work attitudes and values.

Application of the Iowa Model to gifted and talented students will be shared against a background of career development theory (Krumboltz, Mitchell & Jones, 1976; Mitchell and Krumboltz, 1984) as well as theories explaining the development of potential in precocious children (Tannebaum, 1983; Feldman & Goldsmith, 1986). Mitchell and Krumboltz (1984) suggest that each individual is unique and creates their own career path. To understand what factors influence or reinforce career decisions among gifted and talented children and youth will therefore require an in-depth study of such individuals, with respect for their unique choices and career paths. Practical strategies and career development activities for gifted and talented children and youth will be shared.

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DR. JANEY L. MONTGOMERY*
University of Northern Iowa - Cedar Falls

DR. JOANE W. MCKAY
University of Nevada - Las Vegas

Introduction

The purpose of this presentation is to share career development activities for gifted and talented children and youth. Three objectives include: (1) to overview career development theory, (2) to examine scope and sequence of career development activities provided in A Guide to Developing Career Education Across the Curriculum, a K-12 curriculum guide (Montgomery & McKay, 1989), and (3) to present practical suggestions to implement activities with gifted and talented children and youth.

Overview of Career decision-making theory

Several theories of career choice and career decision-making have been identified by recent reviews (Brown & Brooks, 1984; Crites, 1974; Herr & Cramer, 1979; McMahill, 1985; Sanderson & Helliwell, 1978; Srebalus, Marinelli, & Messing, 1982). These theories emphasize various factors contributing to the development of careers, such as: a good match of abilities and interests with occupations (Parsons, 1909), developmental stages, (Ginzberg, Ginzberg, Alexrod & Herman, 1951), life roles (Super, 1957, 1976, 1980), personality, (Holland, 1966), and psychological need, child rearing practices, and early family experiences (Roe, 1953; 1956). Crites (1974) concluded that each approach to career

counseling makes a unique contribution to the ways in which individuals make career decisions.

The origins of career decision-making theory, career choice theory, and achievement motivation are found in social learning theory (Atkinson, 1958, 1978; Krumboltz, Mitchell & Jones, 1976). Social learning theory (e.g., Bandura, 1978), posits that three sets of interacting influences affect learning and related behavior: (a) background variables, such as gender, ethnicity and ability; (b) psychological factors, such as self-concept, attitudes and beliefs, and experiences; and (c) environmental influences in society. According to Bandura (1978):

> In social learning theory, causal processes are conceptualized in terms of reciprocal determinism. Viewed from this perspective, psychological functioning involves a continuous reciprocal interaction between behavioral, cognitive, and environmental influence. (p. 344)

Krumboltz and co-authors (1976), explained how the socialization process in social learning perspective affects career choices. The theory hypothesis that an individual is more likely to express a preference for a course of study, an occupations, or field of work:

> 1)...if that individual has been positively reinforced for engaging in activities s/he has learned are associated with the successful performance of that course, occupation field of work.
>
> 2)...if that individual has observed a valued model being reinforced for engaging in activities s/he has learned are associated with the successful performance of that course, occupation, or field of work.
>
> 3)...if that individual has been consistently positively reinforced by a valued person who models and/or advocates

engaging in that course, occupation, or field of work.

4)... if that individual has been exposed to positive words and images associated with that course, occupation, field of work, or the activities related to it. (Krumboltz et. al., 1976, pp. 76-77).

Career decisions are influenced by an interacting set of variables which include reinforcement received from activities and experiences, genetic endowment, special abilities, environmental conditions, events, learning experiences, and task approach skills (Krumboltz et. al., 1976).

In comparison to other theories on the career choice process, Krumboltz's career decision-making theory is consistent with Super's (1980) focus on career choice as a process and a lifetime rather than a one time decision. The development of potential in gifted individuals is also considered a life-long process (e.g., Gruber, 1982; Feldman & Goldsmith, 1986; Tannebaum, 1983).

This focus on development of potential makes the transition from childhood precocity to adult creativity a concern of many researchers (Gruber,1982; Wallace, 1985; Tannebaum, 1983; Wallach, 1985; Feldman & Goldsmith, 1986). In addition to personal attributes (i.e., high intelligence) that are often also associated with definitions of giftedness (Terman, 1925; Humphreys, 1985), Tannebaum (1983) has identified four other factors that influence the development of potential: (1) specific ability, (2) nonintellective factors (i.e., personal, motivational, self-concept), (3) environmental factors, and (4) chance factors (i.e., birth order, gender, time, and opportunities).

A crucial time in this transition from childhood to adult productivity is late adolesence. At that time gifted adolescents outgrow

and leave a network of parents, teachers, and mentors that have supported the gift (Wallace, 1985). They are also faced with the task of making career decisions that will ultimately shape their life. Late adolescence is also of great importance to educators. This is the time when gifted youth complete secondary education and initiate plans for college or university work. Important decisions such as selecting a college or university and declaring a major occur during high school years.

The Iowa Model for Career Education

The Iowa Model for Career Education provides a sound basis for developing a comprehensive career education plan. According to the model, career education includes,

> planned activities and experiences through which students develop skills related to making decisions and exploring career and employment opportunities. Students develop positive attitudes, values, knowledge, and skills in relation to themselves and to work which contribute to personal fulfillment and economic independence. (Montgomery & McKay, 1989, p. 2)

The Iowa model depicts a concept of career development beginning in kindergarten and continuing throughout life. (Figure 1) It evolves around two basic concepts: --**the concept of self** and **the concept of the world of work.** The purposes of these two concepts remain the same throughout the model, but function differently during each phase of career development.

The four phases are awareness, accomodation, exploration and preparation. During the **awareness** phase, students become aware of themselves physically, socially, emotionally, culturally and mentally, and begin to develop skills in dealing with others. Students also become

aware of economic and technological work roles and responsibilities that apply to a variety of occupational areas and occupations. As students progress into the **accomodation** phase, they begin to fuse self perceptions with evolving personal goals. Occupational knowledge and the understanding of related work habits, attitudes and values are correlated with students' personal interests. Students learn to recognize the influences of cultural and societal values and the impact of economic and technological advances on global relations. During **exploration,** students assess personal goals in relation to a wide range of occupations which they experience through hands-on exploration and sample work situations conducted in the school and community. Students recognize the nature of change within the work force and the contribution of the individual to work in society. In the last phase, **preparation,** students begin to actualize personal aspirations, abilities, potentials, and life goals. Students learn to manage their behavior in terms of their own value system, social expectations and varying life roles. Decisions are made about pursuing a career area and identifying further educational options for their career field. Students continue to evaluate and revise plans for acheiving personal or career goals.

The basic components of **self and work** are used to establish a set of skills and concepts (domains) for each level of the Iowa model. The **seven domains** are: *1) self, 2) interpersonal relations, 3) self and society, 4) decision-making, 5) economics, 6) occupational knowledge and 7) work attitudes and values.* In each domain a **student competency** (Appendix A) identifies broad general statements about the types of student behaviors which are anticipated outcomes for each domain, regardless of grade level (Figure 2).

In the Iowa Model, examples of teaching strategies to develop the student competencies have been included at the K-6 and 7-12 levels for each of the **eight academic areas:** *arts, foreign language, health and physical education, language arts, mathematics, science, social studies and vocational education.* These teaching activities are designed to provide a stimulus in the creative minds of teachers and administrators and to act as catalyst for developing further career education activities. The guide also suggests a step-by-step process for analyzing and evaluating whether the career education concepts and skills are incorporated into the various areas of the curriculum.

Activities for Gifted and Talented Children and Youth

Application of the Iowa Model for gifted and talented students includes selecting appropriate objectives of each domain and level and then developing activities for gifted students based on the basic principles of this broad field called, "gifted education." For example, Mitchell and Krumboltz (1984) suggest that "each individual has a unique history of learning experiences that results in the chosen career path" (p. 241). To understand what factors influence or reinforce career decisions among gifted and talented children and youth will therefore require an indepth study of such individuals, with respect to their unique choices and career paths.

The following narrative contains summary of activities which can be implemented with gifted and talented children and youth. The activities are divided by each of the seven domains and use an integrative approach to a variety of curriculum areas.

1. Self

The domain of **self** includes items which reflect developing interests, values, feelings, mental and physical characteristics and potential of individuals in grades K-12. Concepts within this domain encourage the examination of self in relation to personal and career development goals, encourage assessment of the self concept and appraisal of interests and capabilities.

Student competency: Students will develop personal and career goals by assessing their individual interests, feelings, and mental and physical characteristics that influence a career decision.

Activities for gifted children and youth

1. **Understanding giftedness.** Many gifted programs provide activities which clarify the definition of gifted and talented used by the school, identification procedures, selection processes and purposes of the program. To understand these program components can help gifted children understand themselves. Topics for discussion: What is intelligence? What is an IQ? What does it mean? What is creativity? How do achievement and aptitude tests measure ability and aptitude? How important is the testing process? etc. Activities and discussion can focus on a variety of topics relating to conceptions of giftedness. References materials about gifted children may include research-based materials (Sternberg & Davidson, 1986) or materials written specifically written for gifted youth (Galbraith, 1983).

2. **Self-perception of Ability**. The In-Class Press Conference enables the gifted student to find out more about his/her personality, abilities, interests in relation to his/her giftedness. Betts (1985) suggests the following questions:

1. What do you see as your strengths?
2. In what areas are you gifted?
3. What challenges do you face in the next year? The next five years?
4. What areas of interest do you want to explore at this time?
5. What obstacles do you face in your life at this time? (p.15)

Begin the In Class Press Conference by sharing a visual representation of "you" on a 2' x 4' poster board which identifies interests and abilities. Allow the audience to

ask questions. When the press conference is concluded, debrief by asking the speaker to describe feelings and thoughts when answering questions and disclosing personal information.

3. **Career Inventories.** Ask your school guidance counselor to locate career inventories such as the Strong Campbell Interest Inventory, Valpar, etc. Ask the counselor to assist in interpretation of results. With gifted children and youth, multipotentiality of abilities and interests need to be viewed with special consideration. Utilizing the results of individual interests, locate specific job titles and clusters in the Guide for Occupational Exploration. Instead of taking a single and narrow perspective i.e. Chemist, encourage them to discover the 17 other job titles listed in the physical sciences 02.01. Always remember to compare results of standardized inventories to personal assessments of self. Are they compatible? Where are they different?

4. **LifeLong Notebook.** To document multiple interests of gifted children and youth, encourage them to begin a "LifeLong Notebook" (Betts, 1985) to collect ideas, dreams, as a tool in understanding self. The notebook dividers include: Lifelong reading list, provocative quotes, provocative questions, goals and dreams, people and places, adventures and experiences, areas of possible study, favorite friends and relatives, poems and special writings. The notebook is a personal treasure chest, a place to collect ideas, dreams, experiences, and memories. This activity promotes creativity and organization. The notebook can be a source of ideas when students start projects and research investigations. The notebook suggests that gifted students are people who have places to go and people to see. It is by its nature very achievement oriented, with a built-in motivation to collect. The lifelong notebook also reinforces for gifted students the goal of becoming self-directed, life-long learners.

5. **Letter writing.** Encourage students to write letters to themselves reflecting on their goals and priorities for the semester, year or "five year plan." Encourage students to write about feelings, interests and abilities as they relate to personal and career goals. Seal the letters in envelopes self addressed to the student to be mailed in a month, semester or year as indicated by the student.

Put other ideas here for developing self with gifted youth:

2. Interpersonal relationships

The domain of interpersonal relationships provides for interaction within and between peer and adult groups. The individual learns to relate appropriate with peers and all significant others within the environment. The impact of group dynamics on career paths and opportunities is recognized by the individual.

Student Competency: Students will recognize various peer groups and differentiate ways in which social and professional peer groups interact.

Activities for Gifted children and youth

1. **Group Building Activities.** As a group, gifted children and youth need time to get acquainted. Group building activities are designed to promote relationships with members of a group and build a sense of trust for future activities. Self disclosure is a means of getting to know each other. Early in the school year, have students participate in **Personal Interviews** by using triads. Divide up the group into group of 3 people with a designated questioner, respondent and observer. The questioner begins by asking the respondent open ended questions (which can't be answered by yes or no). The respondent has the right to answer the question, ask another question or pass. After asking the questions, the questioner summarizes what he/she has learned about the speaker. The respondent verifies these statements or make corrections. The observer gives feedback on the accuracy of summaries and feedback on nonverbal behavior. This process is repeated three times until all three participants have had a chance to experience the three roles.

2. **Peer Relationships.** Divide students into pairs to formulate their ideas regarding the influence of peers on career decisions. How do peer groups differ? How are peer groups formed? (age, intelligence, social, family, business, etc.) What are the peer groups in the students' life and how have they influenced, shaped, or directed either short term or long range educational and career goals? Have the group prepare a debate proposition and organize arguments for and against the proposition. Allow pairs to select one side and build their arguments. Select judges and after the debate, ask the judges for their opinions.

3. **Interpersonal Skills.** Interpersonal skills identified by Betts (1985) include: communication skills, interviewing skills, discussion skills, leadership skills, group process skills and coping skills. A variety of lessons need to be incorporated into the gifted curriculum to assure that these skills are assessed, developed, reinforced and evaluated on an ongoing basis. College texts for Interpersonal Communication classes offer an excellent resource for teaching materials. Teaching strategies should include active participation skills, through an experiential mode of learning where gifted student have opportunities to practice the interpersonal skills. Previous group building activities will provide a foundation on which interpersonal skills training can be successful. Students should be asked to share application of skills training in the gifted program to other aspects of their schooling, family and community endeavors.

4. **Family tree.** Construct a family "career" tree. Do people in your family have similar interests or mental and physical characteristics that influence them to choose similar career paths? Are career interests inherited or developed? Interview several members of your family to determine how interests and abilities influenced their career choices.

5. **Strength Bombardment.** This group building activity is designed to clarify personal achievement, share self-disclosure with peers, and receive feedback about self. Each student is asked to draw a timeline on a piece of paper that begins with their birth date and ends with today. On this timeline mark off 4 accomplishments during their life. Each student is asked to share the details of 2 or 3 of these accomplishments in a group of 4 or 5 students. Each of the responders in the group has a mailing label. After the student shares the accomplishments, the responders in the group write 2 or 3 words that describe the student. Each of the responders place their mailing label on the student timeline as they orally exchange the feedback. For example, "You sound very adventureous to have undertaken such a challenge." etc. Each student in the group take a turn at sharing their timeline and receiving feedback. As a finale, each students selects one piece of feedback that "best described" him/herself and share with the group.

Put other ideas here for developing interpersonal relationships with gifted youth.

3. Self and Society

The domain of self and society pertains to the role, expectations and interdependence of an individual as a contributing member of society. The individual recognizes the impact and expectations of societal units and institutions on personal values. As a member of society, the individual develops the ability to adjust to technological forecasts and trends which influence personal and career opportunities.

Student Competency: Students will identify the role and expectation of an individual in a technological, interdependent society by citing career trends and technological forecasts.

Activities for Gifted Children and Youth

1. **Study of Biography, Autobiography of Gifted Individuals.** Ask students to research a gifted person. Encourage multiple resources and investigation of many different aspects of the person, including their childhood, schooling, family, friends, work habits, interests, etc. Upon completion of the research, student share their findings with others. In many gifted programs students role play the person being researched in a "Eminent People News Conference" with questions from the audience. Other adaptations include "Eminent People Open House" or "Night of the Notables" which celebrates the life and times of many gifted individuals. Goetzel's Cradles of eminence is an excellent source as well as individual books such as Einstein: The life and times (Clark, 1971).

Biography as a tool to research giftedness enables student to discover and discuss how personal interests, hobbies, mental and physical characteristics effected career choices and career paths of famous people. Questions for discussion include: How did personal and career goals change as a result of individual interest? How did feelings effect career choice?

2. **Megatrends.** Assign selected readings from Megatrends and discuss implications of these forecasts on future careers of their choosing. What are the forecasters predicting for individuals and society in the future? What is forecasting? How is it determined? Is it reliable? Ask students to predict which jobs today will not exist in 30 to 50 years. Students will identify societal change and forecast

technological patterns that will influence their predictions. Collect articles from contemporary magazines and newspapers for display on a bulletin board. What kind of life style do they envision in the future? How will leisure time be used by workers in the high tech society of the future? Students will consider the impact of having only three workers to every retired citizen in the year 2000, as compared to a 17 to one ratio in 1987. Students can examine changes in technology which will influence travel in the future. Will tourism be more or less popular with people around the globe?

3. **Service Projects** - An important concept with the Autonomous Learner Model (Betts, 1985) is to provide experiences which will help students understand themselves and their relationship to other people. The Humanitarianism activity requests that student identify a people he/she believes is a humanitarian and completes research on that person. Students share their research with the rest of the group and then brainstorm common characteristics of people who are able to serve others (p. 46). After this activity, students are encouraged to complete a service project within the gifted program. After the Humanitarianism activity, students brainstorm how they could actively serve people. A total of 20 hours is required at the elementary level while junior high age students complete 30 hours and high school students complete 40 hours of service.

4. **Past and Future Interviews.** Encourage interviews with parents and if possible with grandparents. How are career decisions of teens and young adults influenced by social factors such as family, community, environment and educational background? What elements in your family influenced career decisions of siblings, parents, and/or grandparents? Which of these influences are prevalent in the 1990's? Ask a group of students to brainstorm possible questions for interviews. After sharing results, select common characteristics of responses. Select student to write up the results in their interviews for a school or community newspaper.

5. **Gender role orientation.** After a discussion of sex-roles and stereotypes that are experienced by the students in the school and community, students should identify non-traditional workers in their school and community. Invite both males and females who have chosen non-traditional careers to visit the program or have a panel discussion where panelists have an opportunity to clarify their career decision making or share information about the current job market. A followup discussion can help students clarify how gender role orientation influences career decisions. An investigation into the research on gender roles and achievement will review significant findings for gifted student to consider and debate. This activity can also be combined with a discussion on how lifestyle expectations are combined with career choices and achievement orientation.

Put other ideas here for developing self and society with gifted youth.

4. Decision Making

The domain of decision making encompasses learning to apply decision-making processes and analyzing consequences in developing both short and long-range personal and career goals. The decision making processes include the recognition and use of individual strengths and limitations in setting and achieving goals.

Student Competency: Students will demonstrate the process of effective decision making by analyzing the consequence of personal and career goals.

Activities for gifted children and youth

1. **Adventure trips.** Adventure trips (Betts, 1985) offer exciting interaction with peers. but also provides valuable planning skills for gifted children and youth. Whether students study geology and archaeology at the Grand Canyon, or explore cultural aspects of San Francisco, students become the planners of the trip. Brainstorming, forecasting, planning. sequencing, estimating, decision-making skills are reinforced through group cooperation and respect. Decision making skills are essential to a successful project.

2. **Summer Camps at University.** Many universities offer accelerated subject matter courses for gifted junior high and high school age youth. Decision making skills during this time "away from home" developing new friends and learning advanced content have been beneficial to many gifted students. A chance to interact with intellectual peers, even for a limited time, seems to be the biggest "advantage" of these programs. Advanced course work, especially in mathematics and sciences, can keep interests of gifted student focused and expose them to new areas of knowledge at advanced levels, which continues to develop interests in academic subjects and expose student to research opportunities.

3. **International Exchange Programs.** Gifted students, with multiple interests including global concerns who have participated in international exchange programs have focused interests and clarified career goals. An opportunity to live with a family in a new cultural setting exposes gifted students to different ways of life and thinking patterns. These programs enable gifted students to develop autonomy and decision making skills for themselves within a new setting. (Montgomery, 1990)

4. **Family trip to visit college campuses.** In the summer of the junior year in high school, many students will want to visit colleges and universities for interviews and campus visits. Encourage the student to plan the entire trip for the family. What colleges or universities will be visited? What interviews have been arranged? How many miles to the next appointment? etc. Create a timeline, map and estimated times of arrival. Arrange details with family members for the itinerary, budget and trip details. After the trip discuss individual campus visits. How were they similar? Different? How was decision making influenced by campus visits? Set personal goals, etc. for the coming year.

5. **Problem solving models.** Many gifted programs expose students to formal problem-solving models which utilize decision making in a systematic way. Future Problem Solving Program uses a matrix approach to making decisions with critieria and assessment information. The international aspect of this program also offers many opportunities for gifted students. The topics for problem solving are especially designed for interests of gifted students. Following instruction in formal decision making or problem solving models, gifted students should discuss and debate their application to "real" life. How does your personal learning style preference influence your view of decision making models? How do you make decisions about personal and career goals for the future?

Place other ideas here for developing decision-making with gifted youth.

5. Economics

The economic domain emphasizes the development of economic literacy and the concept that work is central to any economic system. This involves understanding the roles and contributions of producers and consumers. The costs and rewards of work influenced by supply and demand area included in this domain as well as the realization that the economic system affects lifestyle and the attainment of career goals.

Student Competency: Students will analyze the concept of work as a central factor in an economic system by developing economic literacy.

Activities for Gifted Children and Youth

1. **Getting down to Business.** Encourage gifted children and youth to assess the school and/or community needs and engage in the "new business." By analyzing producers and consumers needs and role, student can gain new insights into our economic system.

2. **Summer employment.** Encourage gifted youth to identify opportunities for summer employment that relate to personal or career goals. Whether students are working as an intern in a law office or volunteering service at a local hospital, they gain valuable knowledge of the world of work. International work opportunities are also available through research exchange programs with several universities. Valuable comparisons of economic systems and lifestyles are possible outcomes of these work experiences during the summer months.

3. **Computer simulations.** Computer programs are available to simulate running a business. Economic principles are experienced as a result of decisions made on the computer. Profits and gains are projected from the types of activity that are encountered and decisions that are made.

Place other ideas here for developing economic concepts with gifted youth.

6. Occupational Knowledge

The **occupational knowledge** domain encompasses the qualifications for and the similarities of various jobs and career paths. The roles and influences of labor management are recognized in the development of a productive work force. Gaining occupational knowledge includes the examination of a variety of careers and analysis of personal interests and abilities.

Student Competency: Students will select and match qualifications and personal interests with occupational requirements by researching a variety of occupational choices.

Activities for Gifted children and youth

1. **Career Fair.** Students are encouraged to think about careers that they are interested in exploring. Brainstorm a list of careers and cluster into groups. Consult with parents, friends to identify people in the community in these career fields. Plan a career fair and invite these people to visit your gifted program. Ask a student to host a "special guest" for the occasion. Each student should be responsible for interviewing and introducing the career person at the fair. A focus of the interviews should cluster around career decision making, occupational and educational requirements for that career field. Invite parents to attend.

2. **Independent Projects.** After participation in the career fair, students are asked to select a career fields to investigate in an independent project. Rather than selecting individual career job titles such as doctor or pediatrician, encourage students to select a broader field of medicine. What are different types of doctors? How are the clusters arranged? How are the clusters different? What the specialists areas in medicine? What are the educational requirements for different types of doctors? How are they similar or different? etc.

3. **Job Shadowing**. After completion of the independent project, students should be encourage to select a specific job title that they would like to investigate in the "real" world. Various communities have opportunities for gifted students to "shadow" or spend the day or week working with a career person on the job. Results of these experiences should be shared with the class. The important aspect of job shadowing for the gifted is that it should be an on-going process with many opportunities to shadow people in different occupations. Gifted students should debrief on how multiple interests can be incorporated into the profession of their

choice.

4. **Mentoring Projects.** Mentoring projects inable gifted students to work with a person in their career field over an extended amount of time (e.g., month, semester or year). Many gifted programs have focused mentoring assignments, not on the career field, but on a special project or independent study in which the student is assigned a mentor. If the focus of the independent project is electrical engineering, then the subject area expertise of the electrical engineer offers technical assistance to the student, and in the process the student learns about the role and responsibilities of electrical engineers. In some gifted programs, the business, i.e., electrical engineers identifies a project that is needed by the business and student assistance is solicited through the school gifted program.

5. **College Catalog.** As a project of the gifted class, have students identify colleges and universities they are interested in attending. Students should write for college information including a catalog. Start a reference file in the classroom. Brainstorm with students various methods of displaying information needed by college seniors: entrance requirements, majors offered, opportunities for international exchanges, costs, extracurricular activities, student organizations, etc.

Place other ideas here for developing occupational knowledge with gifted youth

7. Work Attitudes and Values

The domain of **work attitudes and values** allows the individual to recognize, develop and evaluate personal, social and economic satisfaction derived from productivity. The acquired work values and attitudes are demonstrated through appropriate behaviors and activities occurring in school, community and work settings.

Student Competency: Students will identify work attitudes and values by clarifying personal, social and economic benefits of work in a productive society.

Activities for Gifted children and youth

1. **Journaling.** Encourage gifted children and youth to keep journals as documentation of reflection on personal and career goals. What feelings as associated with various projects conducted throughout the gifted program? What careers are they considering? What ones have they eliminated from the list? Why? Encourage writing as a way of knowing.

2. **Independent Projects.** Independent projects conducted throughout the year offer many opportunities to monitor and evaluate work attitudes and values. During debriefing sessions, gifted students should clarify their roles during autonomous learning activities. Assessment of their learning styles preference through a variety of learning styles assessments: Myers-Briggs Type Indicator, Dunn & Dunn, or Gregoric can be used to identify strengths that relate to preferences for a variety of work settings. Help students match their learning and work style preferences to careers they are considering. Are they compatible? How are they different?

3. **Cultural Activities.** When activities are planned to visit museums, aquariums, attend concerts, plays, etc. investigate plans to meet "behind the scenes" with career people in these fields. How do actors or musicians rehearse before performances or debrief after "opening night." What is the daily schedule of the dolphin trainer? Arrange special events with individuals or groups of interested students with an opportunity of sharing with others. Encourage photography to document the event, if appropriate.

4. **Career as Lifestyle.** Lifestyle of career people reflect their attitudes and values. Expectations are expressed in terms of goals or preferences for specific career related concepts such as: salary, geographic location, working conditions, fringe benefits, and intregation of career, marriage, and family roles. Involve gifted youth in researching the implications of lifestyle on career choice. Invite several role models to interact with gifted youth discussing the lifestyle that they have achieved. Discuss the influence of lifestyle on career decisions. What role do the above factors play in career decisions.

5. **Seminars.** Throughout the year seminars, conducted by gifted youth, can provide a forum for ideas, debates and discussions. Allow students to plan and organize the format of seminars as well as the topics being discussed. Utilize resource persons in your community, state and nation. Incorporate a seminar with senators in conjunction with a field trip to the state capital. Facilitate the public speaking skills of gifted youth by practice and involvement.

Put other ideas here for developing the work attitudes and values of gifted youth.

References

Atkinson, J. Ed. (1958). Motives in fantasy, action and society. Princeton, NJ: Van Nostrand.

Atkinson, J. Ed. (1978). The mainsprings of achievement-oriented activity. In J. Atkinson & J. Raynor (Eds.), Personality, motivation and achievment (pp. 11-39). New York: Halstead.

Bandura, A. (1978). The self system in reciprocal determinism. American Psychologist, 33, 344-458.

Brown, D. & Brooks, J. (1984). Introduction to Career Development: Origins, evolution and current approaches. In D. Brown & J. Brooks (Eds.), Career choice and development (pp. 1-7). Washington: Jossey Bass Publishers.

Clark, R. W. (1971). Einstein: The life and times. New York: Avon Books.

Crites, J. O. (1974). Career counseling: A review of major approaches. The Counseling Psychologist, 4, 3-23.

Feldman, D. H. & Goldsmith, L. T. (1986). Nature's gambit: Child prodigies and the development of human potential. New York: Basic Books, Inc.

Galbraith, J. (1983). The gifted kids survival guide for ages 11-18. Minneapolis: Free Spirit Publishing.

Galbraith, J. (1984). The gifted kids survival guide for ages 10 and under. Minneapolis: Free Spirit Publishing.

Ginzberg, E., Ginzberg, S. W., Alexrod, S., & Herman, J. T. (1951). Occupational choice: An approach to a general theory. New York: Columbia University Press.

Goertzel, V. A. & Goertzel, M. (1978). Cradles of eminence. Boston: Little, Brown.

Gruber, H. E. (1982). On the hypothesized relations between giftedness and creativity. In D. H. Feldman (Ed.), Developmental approaches to giftedness and creativity (pp. 7-29). San Francisco, CA:

Jossey-Bass.

Herr, E. L. & Cramer, S. H. (1979). Career guidance and counseling through the life span. Boston: Little, Brown & Company.

Holland, J. (1966). The psychology of vocational choice. Waltham, MA: Blaisdell.

Humphreys, L. G. (1985). A conceptualization of intellectual giftedness. In M. D. Horowitz & M O'Brien (Eds.), The gifted and talented. Developmental Perspectives (pp. 331-360). Washington D.C.: American Psychological Association.

Kruger, M. (1978). On being gifted. New York: Walker and Co.

Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1976). A social learning theory of career selection. The Counseling Psycholgist 6(1), 71-81.

McMahill, J. (1985). The national impact of experience based career educaiton upon 1978-1982 graduates. (Doctoral dissertation, Iowa State University, Ames, Iowa.)

Mitchell, L. K. & Krumboltz, J D. (1984). Social learning approach to career-decision making: Krumboltz's theory. In Brown, D. & Brooks, J. Career choice and development (pp. 235-264). Washington: Jossey Bass Publishers.

Montgomery, J. L. (1990). Factors that influence the career aspirations of mathematically precocious females. Doctoral Dissertation, Iowa State University, ERIC publication 90345104 0097 IOWA-SU-AMES-D.

Montgomery, J. & McKay, J. (1989). Infusion of Career Education in K-12 Curriculum Areas: A Process for Horizontal Articulation. Des Moines, IA: Iowa Department of Education.

Parson, F. (1909). Choosing a vocation. Boston: Houghton Mifflin Company.

Roe, A. (1953). Making of a scientist. New York: Dodd, Mead & Company.

Roe, A. (1956). The Psychology of Occupations. New York: Wiley.

Sanderson, B. & Helliwell, C. (1978). Career development theory. Module 1. National Consortium on Competency-Based Staff Development. American Institutes for Research. ISBN 0-89785-552-3.

Srebalus, D. J., Marinelli, R. P., & Messing, J. K. (1982). Career development concepts and procedures. Monterey, CA: Brooks/ Cole Publishing Co.

Sternberg, R. J. & Davidson, J. E. (Eds.) (1986). Conceptions of Giftedness. New York: Cambridge University Press.

Super, D. (1957). The psychology of careers. New York: Harper and Row.

Super, D. (1976). Career education and the meanings of work. Monographs on Career Education. Washington, D.C.: U.S. Department of Health, Education, and Welfare.

Super, D. (1980). A life-span, life-space approach to career development. Journal of Vocational Behavior, 16, 282-298.

Tannebaum, A. (1983). Gifted children: Psychological and educational perspectives. New York: Macmillan Publishing Co., Inc.

Terman, L. M. (1925). Genetic studies of genious: Vol. 1 Mental and physical traits of a thousand gifted children. Stanford, CA: Stanford University Press.

Wallace, D. B. (1985). Giftedness and the construction of a creative life. In F. D. Horowitz and M. O'Brien (Eds.), The gifted and talented. Developmental Perspectives (pp. 361-386). Washington: D.C.: American Psychological Association.

Wallach, M. A. (1985). Creativity testing and giftedness. In M.D. Horowitz & M. O'Brien (Eds.) The gifted and talented. Developmental Perspectives (pp. 97-124). Washington D. C.: American Psychological Association.