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ABSTRACT

This document consists of the first two issues of a newsletter designed to disseminate information about the National Research Center on the Gifted and Talented, to serve as a forum for the research activities of scholars and practitioners in the field, and to reach other interested professional and parent groups. The first issue (which is also the premier issue of the newsletter) highlights the overall organization and mission of the Center. It summarizes research in progress and describes a needs assessment study designed to identify research needs, prioritize them, and develop a list of recommendations. The study resulted in a list of 21 research recommendations on topics including regular classroom practices for gifted students, regular curriculum modification, giftedness in economically disadvantaged and limited English proficient students, ability identification, program evaluation, and theory. The issue also identifies the Center's Collaborative School Districts, defined as those districts across the United States where the Center's research projects will be carried out. Research summaries are provided on the talented and gifted in rural Alaska, gifted education in the world community, scientific hypothesis forming ability of gifted ninth graders, early reading as predictive of giftedness, a longitudinal study of a pullout enrichment program, early assessment, cultural diversity and second language learning, and a statewide (Indiana) model bridging research, theory, and practice. The November issue reports on a learning outcomes project and describes year 2 research into successful classroom practices, gifted students with learning disabilities, cooperative learning, assessing giftedness in economically disadvantaged students, and motivation and underachievement. Other summaries examine grouping practices, five specific Javits Gifted and Talented Education programs, stage and structure in child development, home environments, social development, and gifted teachers. Commentaries address creativity and young gifted children. (DB)

NRC G/T

The National Research Center on the Gifted and Talented

NEWSLETTER

June 1991

THE UNIVERSITY OF CONNECTICUT•THE UNIVERSITY OF GEORGIA•THE UNIVERSITY OF VIRGINIA•YALE UNIVERSITY

NRC/GT Newsletter: *Purpose and Scope*

The staff of the National Research Center on the Gifted and Talented is pleased to present the premier issue of our newsletter. The newsletter will serve various audiences. The first audience consists of all persons involved in our Collaborative School Districts. The second audience is general education and gifted education professionals and parent groups that have expressed an interest in our activities. The third audience is the community of scholars engaged in research on the gifted and talented. We have created a forum for scholars and practitioners to present abstracts of research in progress, brief articles and commentary, and summaries of books, articles, and research reports. In this way, the newsletter serves more than just our immediate need to disseminate information about the Center.

In this issue, we have highlighted the overall organization and the mission of the Center. And, we have presented brief summaries of the current research studies in progress. Beyond the Center activities, we solicited contributions from members of our Consultant Bank in these three categories:

- **Research in Progress**
  Abstracts of approximately 200 words describing research activities. These abstracts may also contain requests for sites/subjects, information about identification and program development, or any other material that might enhance research in progress.
- **Brief Articles and Commentary**
  Material in this category should deal with some aspect of research or the application of research in practical situations. Articles should be approximately 500 words in length, and they should also contain invitations for further contact with the researcher.
- **Just Off the Press**
  Articles in this category should highlight books, articles, and research reports recently completed. Journal references, publishers' addresses, or procedures for obtaining these materials should be included. Emphasis should be given to translating research findings into practice. Articles in this category should be approximately 500 words and include invitations for additional contact.

We are pleased to present submissions in these categories from our initial request of Consultant Bank members. We also extend an invitation to our readers to prepare materials for our newsletter and forward them to our editorial staff.

We have entertained suggestions for other columns for future newsletters. If the following are of interest to you, please send us your submissions:

- Dr. Enid Zimmerman of Indiana University would like to see a column highlighting successfully implemented identification systems, curricula, evaluation procedures, and school/ community collaborations. Articles should be approximately 500 words in length, and they should contain invitations for further contact with you.
- Dr. Zimmerman would like a column which is interactive: questions about topics of interest would be submitted and responses would be sought from our constituents.
- Dr. Carolyn Callahan, Associate Director of the NRC/GT at the University of Virginia, thinks a point/counterpoint column entitled "On the One Hand .....On the Other Hand" would be of interest to readers. Commentary of 100 words in length would present one side of an issue and this would be forwarded to another person for a response from another perspective.

Send your newsletter submissions to:
The National Research Center on the Gifted and Talented
NRC/GT Newsletter
The University of Connecticut
362 Fairfield Road, U-7
Storrs, CT 06269-2007

Rationale for The National Research Center

The history and culture of a nation can be charted to a large extent by the contributions of its most gifted and talented citizens. America has enjoyed a long and rich history of creative productivity. However, in recent years our nation's preeminence has been placed at risk, as much by decaying standards and performance in our educational system as by intensified competition from abroad. If we are to continue to maintain a position of world leadership, it is imperative that a significant portion of our educational resources be invested in those young people who have the highest potential for making creative contributions to the arts and sciences and to all fields of human endeavor in which imagination, invention, and unique solutions to pressing problems are required. It is also imperative that opportunities for the development of high potential be extended to the vast number of young people that frequently have been excluded from traditional programs for the gifted because of race, gender, socioeconomic background, or limited conceptions about the nature and development of giftedness.

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What is the Mission of the National Research Center on the Gifted and Talented (NRC/GT)?

The National Research Center on the Gifted and Talented (NRC/GT) is a collaborative effort of The University of Connecticut, The University of Georgia, The University of Virginia, Yale University, 54 state and territorial departments of education, over 260 public and private schools, over 100 content area consultants, and stakeholders representing professional organizations, parent groups, and businesses. The funding for the Research Center has been provided by the Office of Educational Research and Improvement, United States Department of Education, under the Jacob K. Javits Gifted and Talented Students Education Act of 1988.

The mission of The National Research Center on the Gifted and Talented is to plan and conduct theory-driven quantitative and qualitative research that is problem-based, practice-relevant and consumer-oriented. Our mission includes a broad-based dissemination function, and the formation of a nationwide cooperative of researchers, practitioners, policy makers, and other persons and groups that have a stake in the psychology and education of high-potential youth from preschool through post-secondary levels. Emphasis will be placed on identifying the research needs of economically disadvantaged youth, individuals of limited English proficiency, individuals with handicaps, and other special populations that traditionally have been underserved in programs for gifted and talented students. The Center will also serve as a vehicle for providing the kinds of intellectual leadership necessary for the further stimulation, advancement and improvement of theory, research and practice in the field. In this regard, the Center will serve as an integrated forum for scholars and practitioners to come together and to pool their resources. Moreover, it will welcome contributions from, and output to, scholars in cognate fields, in order to enhance communication and interchange between scholars in multiple disciplines whose interests relate to giftedness.

How Will the Mission of the NRC/GT Be Carried Out?

To accomplish the Center's mission, the following components presented in Figure 1 are as follows:

The Directorate. The Directorate, located at the University of Connecticut, is the major administrative, coordinating, and dissemination unit for all activities.

Participating Universities. The four universities that comprise The National Research Center on the Gifted and Talented are the Universities of Connecticut, Georgia, Virginia, and Yale University. The Associate Directors at the respective universities are Dr. Francis X. Archambault, Dr. Mary M. Frasier, Dr. Carolyn M. Callahan, and Dr. Robert J. Sternberg. They are involved in several studies focusing on identification, program development, program evaluation, culturally diverse populations, classroom practices, curriculum modifications for gifted students, and cognition and learning.

Collaborative School Districts. Over 260 public and non-profit private elementary and secondary school districts representing various ethnic, demographic and socioeconomic groups throughout the country serve as the major research sites.

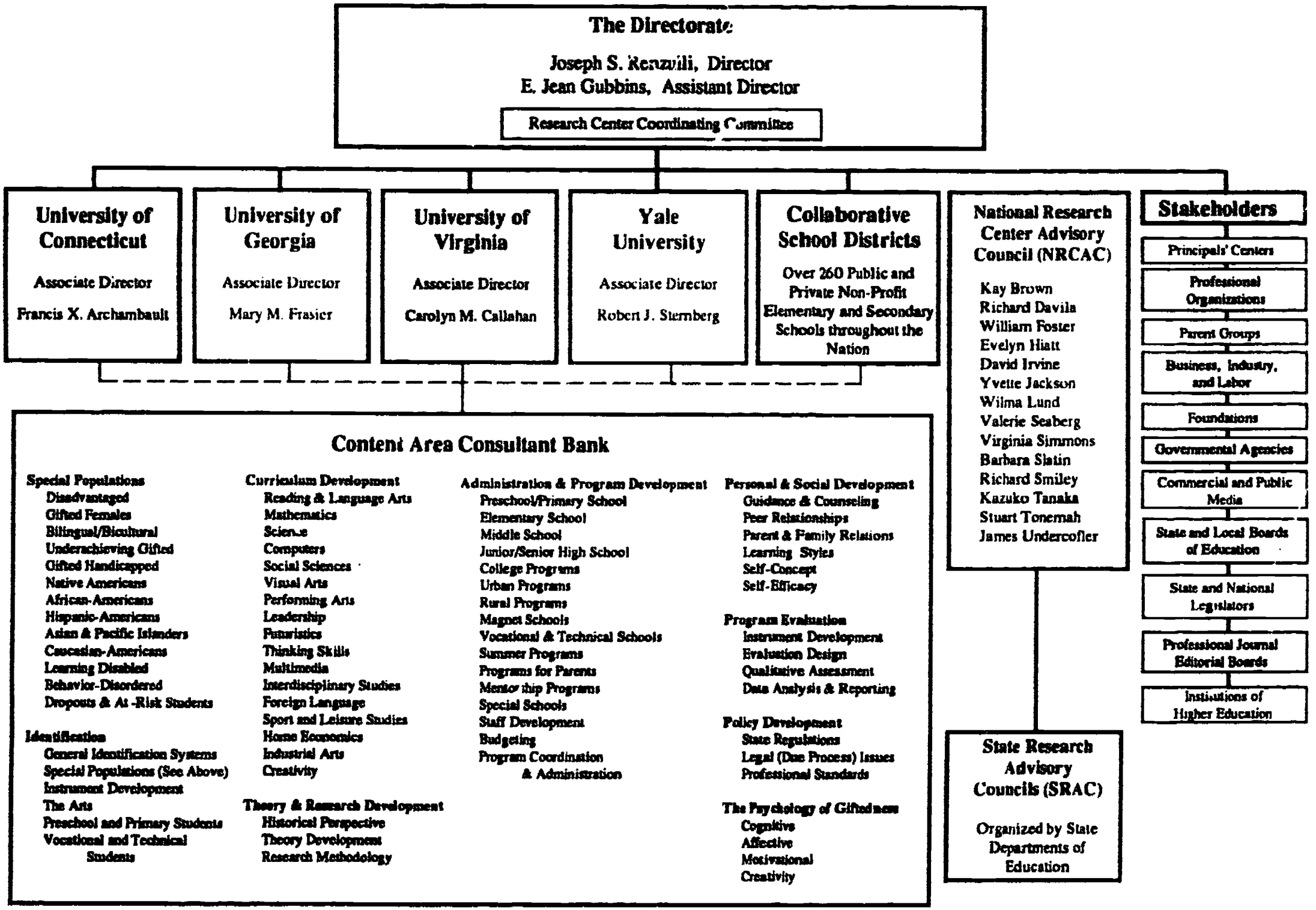
Advisory Councils. State and National Advisory Councils synthesize research needs assessment information from school districts, state departments, the Collaborative School Districts and the Stakeholders. The major leadership in the advisory process is provided by state department of education consultants in the area of education for the gifted and talented.

The Research Center Coordinating Committee. The Directorate, Associate Directors, representatives from the Collaborative School Districts, and a representative from the National Advisory Council are members of the Research Center Coordinating Committee. The major function of this committee is to make recommendations for the Center's future research agenda.

Stakeholders. Representatives from professional organizations, parent groups, private sector groups, governmental agencies and policy makers who have an interest in the education of gifted and talented students provide input into the needs assessment, advise the Center on related issues such as restructuring and policy making data needs, and assist in dissemination though their publications and conferences.

Content Area Consultant Bank. Individuals with specialized backgrounds in all areas of psychology, education, and related disciplines serve as consultants, and they have the opportunity to participate in research projects.

Figure 1. The National Research Center on the Gifted and Talented



What is the Research Agenda of the Center?

The Research Center has adopted a mission that demands the interaction of scholars and practitioners from various disciplines to plan and implement problem-driven research. The research studies for Year 1 are described below.

Research Needs of the Gifted and Talented Through the Year 2000

The University of Connecticut — *Principal Investigators: Dr. Joseph S. Renzulli and Brian D. Reid*

This study deals with a comprehensive assessment of research needs in the 50 states and territories. Local and state level groups that are representative of the full range of educational personnel and representatives of parent groups, policy making groups, and members of the private sector have been asked to respond to a survey instrument organized around factors that define the field (e.g., Identification, Curriculum, Policy Development). In order to ensure representativeness of subgroups within the population such as ethnic minorities, non-public schools, vocational/technical schools, and the arts, a stratified random sample was used to gather and analyze needs assessment data. The results will be reported by various sub-populations, demographic characteristics, and the 10 factors around which the survey instrument was developed. The needs assessment results will become the basis for creating future research projects for the Center.

Regular Classroom Practices with Gifted and Talented Students

The University of Connecticut — *Principal Investigator: Dr. Francis X. Archambault*

This study inquires into the nature of regular classroom practices used with gifted and talented students through an extensive national survey of 7,000 teachers and intensive observation of 50 classrooms. The national survey will provide information on the frequency with which certain instructional practices are used with traditionally identified gifted students as well as less frequently identified students who are economically disadvantaged, have limited English proficiency, represent certain ethnic groups, or have particular handicapping conditions. The survey will also provide data on the extent to which practices used with gifted students differ from those used with other students located in the same classroom, and whether these differences relate to characteristics of the district, the classroom, or the teacher providing the instruction. The classroom observation portion of the study replicates some of the data acquired through the survey, thereby providing a validity check. It will also provide more detailed information on classroom dynamics, teacher/student interactions and teaching modifications than is permitted by the survey.

A Theoretical Plan for Modifying the Regular Curriculum for Gifted and Talented Students

The University of Connecticut — *Principal Investigator: Dr. Sally M. Reis*

Since research indicates that the challenge level of textbooks is declining and that teachers often use whole-class instructional techniques, curriculum modification is necessary to meet the needs of gifted and talented students in regular classroom settings. One technique that has been designed to accomplish this goal is entitled curriculum compacting (Renzulli, Reis, & Smith, 1981) which involves elimination of skills students have already mastered and replacement of more challenging work that is often selected by the students. The research study concerning curriculum compacting uses three experimental groups of classroom teachers involved with different methods of training in the compacting technique (i.e., handbook, videotape, inservice training, simulations, and peer coaching) and a control group of classroom teachers that continues with their normal teaching practices. The effects of personal variables, professional variables and participation in training sessions on teachers' use of curriculum compacting will be examined. Other variables to be studied include student achievement, attitude toward learning and subject area preference.

An Investigation of Giftedness in Economically Disadvantaged and Limited English Proficient Students

The University of Georgia — *Principal Investigator: Dr. Mary M. Frasier*

The University of Georgia will investigate distinguishing characteristics of Economically Disadvantaged (ED) and Limited English Proficient (LEP) students who display various potentials but who are not identified for gifted programs. The purposes of this study are to: (a) approach the identification of gifted economically disadvantaged and limited English proficient students from an intensive investigation of gifted behaviors within and across cultural groups; (b) examine giftedness in target students by analyzing the development of intellectual processes and functioning within the cultural context; and (c) focus on the strengths in children from diverse cultures in order to understand their gifts and talents.

Investigations into Instruments and Designs Used in the Identification of Gifted Students and the Evaluation of Gifted Programs

The University of Virginia — *Principal Investigator: Dr. Carolyn M. Callahan*

The University of Virginia will establish a National Repository for Instruments and Strategies used in the Identification of Gifted Students and the Evaluation of Gifted Programs. Existing instruments, systems and designs used in identification and evaluation will be collected through a nationwide survey. In addition, a paradigm will be created for evaluating the identification instruments in light of the wide variety of definitions and conceptions of giftedness. Non-traditional and product/performance instruments currently in use in evaluation of gifted programs will also be reviewed for their usefulness. Potentially useful instruments will be investigated through formal validation processes.

Evaluation of the Effects of Programming Arrangements on Student Learning Outcomes

The University of Virginia — *Principal Investigators: Dr. Dewey Cornell and Dr. Marcia A. B. Delcourt*

This study represents the first major national attempt to assess the effects of gifted and talented programs on learning outcomes for elementary students. Academic and affective learning will be evaluated within four popular types of program grouping arrangements: within-classroom programs; pull-out classroom programs; separate classroom programs; and separate schools. The sample of students includes those from a variety of geographic locations as well as individuals representing minority and disadvantaged populations. Data collection sources include students, teachers, and parents, while results focus upon assessments of achievement, attitudes toward school, self-concept, intrinsic-extrinsic motivation, student activities, and behavioral adjustment.

A Theory-Based Approach to Identification, Teaching, and Evaluation of the Gifted

Yale University — *Principal Investigator: Dr. Robert J. Sternberg*

Three major aspects of gifted education will be studied -- identification, teaching, and student evaluation -- within one integrated investigation. The study is based on Sternberg's Triarchic Theory (1985), which postulates three aspects of intellectual ability: analytic, synthetic-creative, and practical-contextual. Identification of students who are gifted in one of each of these areas (as well as those who are balanced among the three abilities, and a control group) will be followed by instruction tailored to the various abilities. In order to determine the effects of these interventions, equal numbers of students with each kind of giftedness will receive each kind of instruction, and all students will be evaluated through all assessment methods. First year activities include development of the alternative versions of introductory psychology materials, and establishing the construct validity of the Sternberg Triarchic Abilities Test for use with gifted populations.

Basic Tenets of Our Research

We believe we can develop empirically sound identification instruments and systems that will more effectively include students not identified by traditional assessment methods. Accordingly, one of our priorities will be to seek and create multiple assessment techniques, such as new tests, qualitative and performance-based assessment systems and tools, such as inventories and student profiles, and other non-traditional identification methods.

We believe that we can improve existing programs by conducting research that will assess the impact of various curriculum approaches, methods of grouping gifted and talented students within classrooms and schools, and various ways of meeting the affective needs of these students. We will gather evidence of what works best for the diverse group that constitutes our nation's gifted and talented students.

We believe that results of effective research should be used to guide policy development for the education for traditionally identified and underserved gifted and talented students. Sound, validated policy is needed at the local, state and national level to implement and maintain programs for this population. The research we conduct will be helpful in developing such policy.

Continued on page 12

The Collaborative School Districts: Sites for Our Research

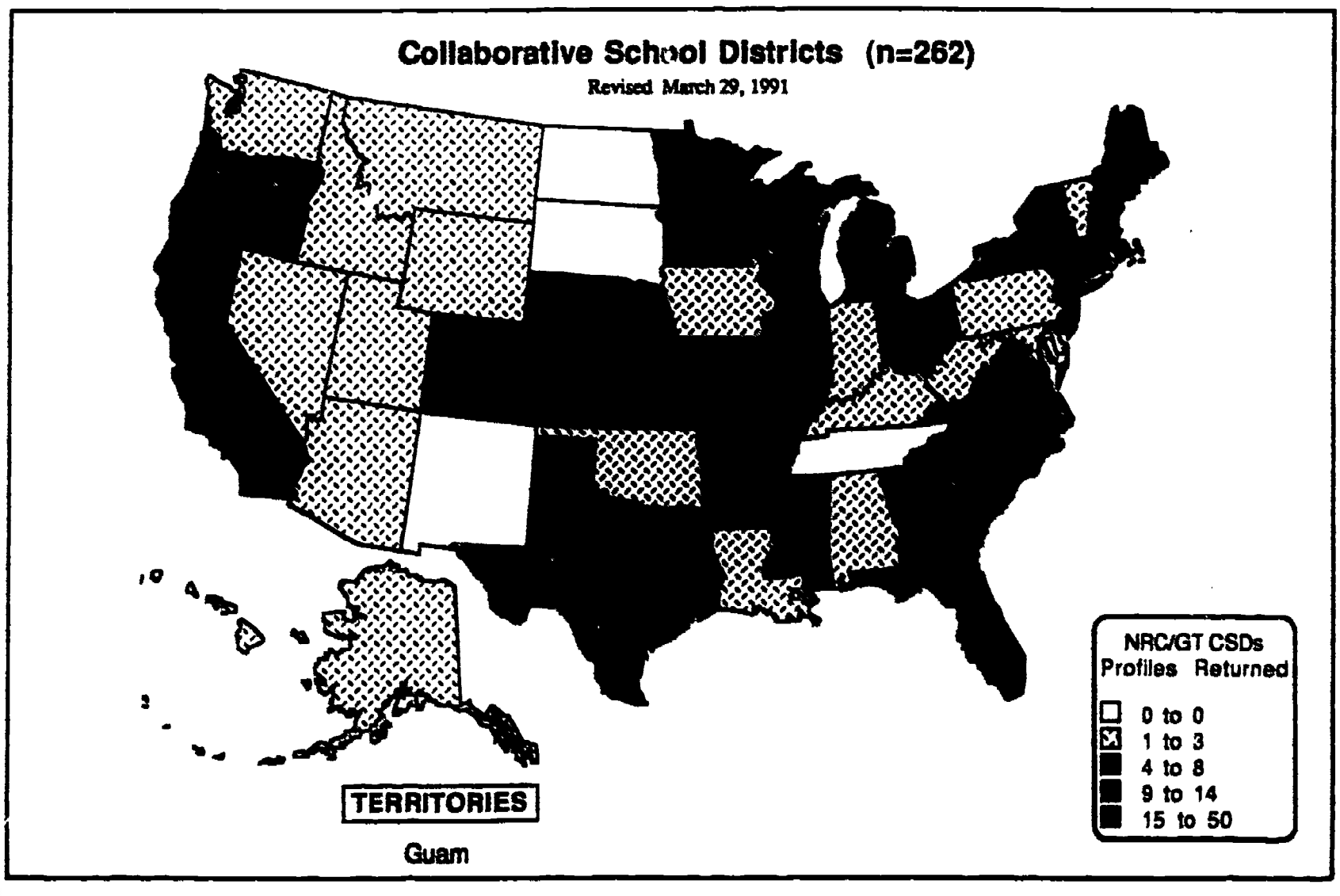
The National Research Center on the Gifted and Talented is engaged in a "new brand" of educational research and dissemination with the needs of the practitioners guiding the studies. The multi-site, single year and longitudinal research studies are possible because of the cooperation of Collaborative School Districts. The Collaborative School Districts are the sites where the research will be conducted. Additional school districts may become involved in present or future research studies. The specific responsibilities of Collaborative School Districts follow:

1. To serve as locations at which research data can be gathered.
2. To provide co-investigators who will participate in the design of research studies and who will serve as on-site managers of individual research projects.
3. To provide locations where visitations can be arranged to observe successful practices in operation, to participate in the preparation of consumer-oriented guidebooks and video training tapes, and to provide technical assistance to the school districts that express interest in replicating successful practices.
4. To assist in the documentation of biographical information about subjects so that contacts can be maintained for longitudinal follow-up studies.
5. To participate in the overall process of evaluating the effectiveness of the Center.

The Collaborative School Districts will be involved in state-of-the-art research studies emanating from the perceived needs of practitioners and research scholars. The type of and extent of involvement will vary from study to study. Collaborative School Districts will benefit from the opportunity to:

1. Receive announcements of materials and staff development opportunities for teachers and students;
2. Participate in experimental curriculum;
3. Network with other school districts throughout the country;
4. Access an electronic bulletin board on the latest research information in the field;
5. Receive copies of the NRC/GT newsletter summarizing the latest research activities;
6. Provide guidance and direction for the establishment of state and national policies for gifted and talented education;
7. Receive copies of all products produced by the Center on a cost-recovery basis; and,
8. Access national databases for research purposes.

Some studies evaluate program outcomes, others experiment with different teaching techniques, and still others involve an assessment of classroom practices. Whatever the extent of involvement in a study, districts are making a contribution to the future directions of the field. As of March 1991, there are over 260 districts, representing 45 states and 1 territory, that have agreed to participate in the Center's activities. We would like to have every state and territory involved with some aspect of our work over the next four years. If you know of a contact in a school district from one of the following states or territories, please contact us: Delaware, North Dakota, New Mexico, South Dakota, Tennessee, Puerto Rico, Virgin Islands, American Samoa, and Trust Territory.



Content Area Consultant Bank Members

As of March 1991, the following people have been invited to participate in the Content Area Consultant Bank based on their research and leadership in the field. The activities in which Consultant Bank members might participate include: research project consultation, consultation referrals, national research needs assessment, and principal investigators of special topics.

Dr. Willard Abraham
Arizona State University

Dr. William Asher
Purdue University

Dr. Susan Assouline
The Univ rsity of Iowa

Dr. Susan Baum
College of New Rochelle

Dr. Camilla Benbow
Iowa State University

Dr. John Borkowski
University of Notre Dame

Dr. James Borland
Columbia Teachers College

Dr. Janet Boyle
Indiana University/Purdue Univ.

Dr. Paul Brandwein
Unionville, NY

Dr. Norman Breyer
Vernon, CT

Ms. Ruthan Brodsky
Roeper City & Country School

Dr. Linda Brody
Johns Hopkins University

Dr. Nina Kay Buchanan
University of HI at Hilo

Dr. Kyle Carter
University of Northern Colorado

Dr. Raymond Cattell
University of Hawaii

Dr. Richard E. Chandler
Math & Science Summer Inst.,Texas

Dr. Barbara Clark
CA St. Univ. at Los Angeles

Dr. LeoNora Cohen
University of Oregon

Dr. Sanford Cohn
Arizona State University

Dr. Gary L. Confessore
The University of Oklahoma

Dr. Anne Borland Crabbe
St. Andrew College

Dr. Rita Culross
Louisiana State University

Dr. James Curry
University of Southern Maine

Dr. Gary Davis
University of Wisconsin

Dr. James Delisle
Kent State University

Dr. Peggy Dettmer
Kansas State University

Dr. Margaret Ann Dirkes
Indiana University/Purdue University

Dr. Linda Emerick
University of St. Thomas

Dr. Carolyn Falk
Mattatuck Community College

Dr. John Feldhusen
Purdue University

Dr. David Feldman
Tufts University

Dr. David Fetterman
Stanford University

Dr. Marvin J. Fine
University of Kansas

Dr. Howard Gardner
Harvard University

Dr. Ingrid Grossberg
Counselling Assoc., Inc.

Dr. Patricia Haensley
Texas A&M University

Dr. Eleanor Hall
Ann Arbor, MI

Dr. Myrliss Hershey
Friends University

Dr. Constance L. Hollinger
Cleveland State University

Dr. Patricia Hollingsworth
University of Tulsa

Dr. Nancy Jackson
University of Iowa

Dr. Paul James
University of Washington

Dr. Reva Jenkins-Friedman
University of Kansas

Dr. Lannie Kanevsky
McGill University

Dr. Frances Karnes
University of Southern Mississipi

Dr. Cathy Kass
Oklahoma City University

Dr. Felice Kaufmann
Lexington, KY

Dr. Sandra Kay
Pine Tree School, NY

Dr. Dorothy Kennedy
University of Wisconsin - Stevens Point

Dr. Barbara Kerr
Arizona State University

Dr. Joe Khatena
Mississipi State University

Dr. M. K. Kitano
San Diego State University

Dr. Penny Kolloff
Cranbrook Schools, MI

Dr. Karen Lee
Boston University

Dr. Janice Leroux
University of Ottawa

Dr. Susan Linnemeyer
University of Illinois

Dr. Mary Meeker
S.O.I. Systems, Oregon

Dr. Bruce Mitchell
Eastern Washington University

Dr. Sidney M. Moon
Purdue University

Dr. Alan D. Moore
University of Wyoming

Ms. Nancy Moore
Richmond, VA

Dr. Kathleen Noble
University of Washington

Dr. Frances Settle O'Tuel
University of South Carolina

Dr. Richard Olenchak
The University of Alabama

Dr. Paula Olszewski-Kubilius
Northwestern University

Dr. Beverly Parke
Wayne State University

Dr. Jeannette Parker
University SW Louisiana

Dr. Harry Passow
Columbia University

Dr. Philip Perrone
University of Wisconsin-Madison

Dr. Michael Piechowski
Northland College, WI

Dr. Barbara Pilon
Worchester State College

Dr. Marion Porath
University of British Columbia

Dr. Michael Pyryt
University of Calgary

Dr. Cecil Reynolds
Texas A&M University

Dr. Susanne Richert
Clearinghouse/Gifted, NJ

Dr. Sylvia Rimm
Educational Assessment Service, Inc.

Dr. Ann Robinson
University of Arkansas at Little Rock

Dr. Nancy Robinson
University of Washington

Dr. Karen Rogers
University of St. Thomas

Dr. Jonathan Rubin
Boston Children's Hospital

Dr. Mark Runco
California State University

Mr. Irving Sato
NSLTI, California

Dr. Gina Schack
University of Louisville

Dr. Ellie Schatz
WI Ctr. /Academically
TalentedYouth

Dr. Carol Schlichter
University of Alabama

Dr. Beverly Shaklee
Kent State University, OH

Dr. Linda Kreger Silverman
University of Denver

Dr. W. Thomas Southern
Bowling Green St. University

Dr. Alane Starko
Eastern Michigan University

Dr. Morris Stein
New York University

Dr. Emily Stewart
Dallas Independent Schools

Dr. Carol Story
Johnson St. College

Dr. Rena Subotnik
Hunter College, CUNY

Dr. Raymond Swassing
Ohio State University

Dr. Carol Addison Takacs
Cleveland State University

Dr. Abraham Tannenbaum
Columbia University

Dr. Terry Thomas
California State University

Dr. Ellis Paul Torrance
GA Studies of Creative Behavior

Dr. Donald Treffinger
Ctr. for Creative Learning, FL

Dr. Herbert Walberg
University of Illinois at Chicago

Dr. Joseph Walters
Harvard University

Dr. James Webb
Wright State University

Dr. Shirley J. Weddel
Cherry Creek Schools, CO

Dr. Joan Wolf
University of Utah

Dr. Enid Zimmerman
Indiana University

National Research Needs Assessment Process

Brian D. Reid, University of Connecticut

The National Research Center on the Gifted and Talented (NRC/GT) was conceived as a vehicle to bring together all segments of the gifted education community to develop a consensus regarding research needs, and to work collaboratively to plan and conduct research deemed to have the greatest significance to the field. In accordance with this objective, a national research needs assessment process was developed to determine the research needs of practitioners in the field.

Research in the field of gifted education, and educational research in general, has been initiated by the interests of individual researchers and graduate students rather than practitioners in the field (Renzulli, et al, 1989). According to Weaver & Shonkoff (1978), however, little thought has been given to whether educational research has addressed the immediate concerns or needs of practitioners. If the research carried out by the NRC/GT is going to have an impact on the field, it had to be viewed as relevant by the consumers of research in education. In order to pursue this goal of greater impact through the enhancement of consumer relevance, it was important to allow practitioners to have a part in determining the most important research to be conducted within the field (Kagan, 1989; Husén, 1984). As Moore (1987) has pointed out, "Planning for organizational change should involve those who are likely to be affected by the change" (p. 30).

If educational practice is to be changed or modified by research, practitioners must become partners in making decisions about important areas of research needs as well as in the planning and conducting of research directed toward the improvement of school and classroom practices. However, a history of poor relationships between schools and universities has created a rift that has made collaborative research difficult. Researchers build theories and seemingly lack empathy for the problems encountered by teachers. Teachers tend to discount educational research because of the researcher's unwillingness to provide practical solutions to problems (Renzulli, in press). The rationale for collaboration was plainly evident. Teachers possess important knowledge about the classroom milieu that researchers often do not understand, and researchers are better able to provide a systematic approach that practitioners are usually not aware of through their own experiences (Floden & Klinzing, 1990). A process that melds these two disparate perspectives should provide better research and better implementation of the research. Moore (1987) describes several reasons for using groups in conducting research. Most importantly, he believes that a group was more likely to accept research findings if they have participated in the process, especially if the research has political implications. "If you want to effect policy, it was wise to include those responsible for acting on the policy" (p. 16).

The plan of operation of the NRC/GT was to use the results of the needs assessment as a starting point to provide input for local, state, and national groups of practitioners that are directly and indirectly involved in programming for the gifted and talented. The NRC/GT intends to create a network of stakeholders and practitioners who, having participated in the research process, are better able to use the information provided.

The intent of the needs assessment study was to include as many people as possible in the process. According to McKillip (1987), the use of multiple methods of assessing needs in the human services and education is essential. This requirement dictates the use of a multilevel and multitechnique assessment. The needs assessment process was a departure from previous needs assessments and was made up of several different stages. As a result of the decision to include very large numbers, a mailed questionnaire was used to gather data. The data were collected from the survey and "filtered" through the State Research Advisory Council (SRACs) to the National Research Center Advisory Council (NRCAC) (see Figure 1). The final product was a list of recommendations prepared by the NRCAC.

The first step in the process of developing research recommendations through this advisory process was to identify key groups that should respond to the research needs assessment survey. This survey was designed for teachers of the gifted, classroom teachers, school administrators, parents, school board members, and others active in the delivery of services to bright students. The next step was the dissemination of surveys to the targeted groups. Surveys were mailed to the Collaborative School Districts (CSD), and distributed in a systematic manner to teachers of the gifted, classroom teachers, administrators, parents, and others involved in the gifted program. Surveys were also mailed to a random sample of teachers of the gifted stratified by state as well as national parent groups, state department of education personnel and SRACs, national educational organizations, and others as located.

The second step in the needs assessment process was to use the data from the surveys to create a list of state research needs. After the surveys were returned, a summary of the responses was distributed to State Research Advisory Councils. The members of these councils represent the arts, vocational and technical education, private schools, urban and rural programs, gifted females, ethnic minorities, handicapped gifted, preschool and primary students, at-risk students and any other population present in the state. These councils were charged with the responsibility of clarifying the research priorities within the state based on the surveys. Each SRAC generated a list of research topics that were of the highest importance in their respective states.

The data from the SRACs were provided to the National Research Center Advisory Council. This group was composed of 12 persons who are recognized leaders in education. They represent minority populations, non-public schools, the arts, and vocational and technical students. Five members of this group are regionally elected representatives of the state departments of education. Representatives also participated from Collaborative School Districts, the Consultant Bank and the Office of Educational Research and Improvement. This group used the state research priorities and the actual data from the survey to develop a national list of research priorities.

The final NRCAC list of recommendations for research is included in Table 1. These topics were determined to be the most important topics for research in gifted education. These recommendations were used in planning the research for the second year of the National Research Center. In addition to the continuation of these first year projects: *Investigations into Instruments and Designs Used in the Identification of Gifted Students and the Evaluation of Gifted Programs*, and *Evaluation of the Effects of Programming Arrangements on Student Learning Outcomes* (University of Virginia); *A Theory-Based Approach to Identification, Teaching and Evaluation of the Gifted* (Yale University), several new studies were planned. These studies will be *A Study of Successful Classroom Practices, Longitudinal Study of Classroom Practices, Case Studies of Gifted Students with Learning Disabilities Who Have Achieved*, and *Cooperative Learning and the Gifted* (University of Connecticut Site); *A Research-Based Assessment Plan (RAP) for Assessing Giftedness in Economically Disadvantaged Students* (University of Georgia Site); *Qualitative Extension of the Learning Outcomes Study* (University of Virginia Site); and *Motivation and Underachievement in Urban and Suburban Gifted Preadolescents* (Yale University Site).

Figure 1. Needs Assessment Process NRC/GT

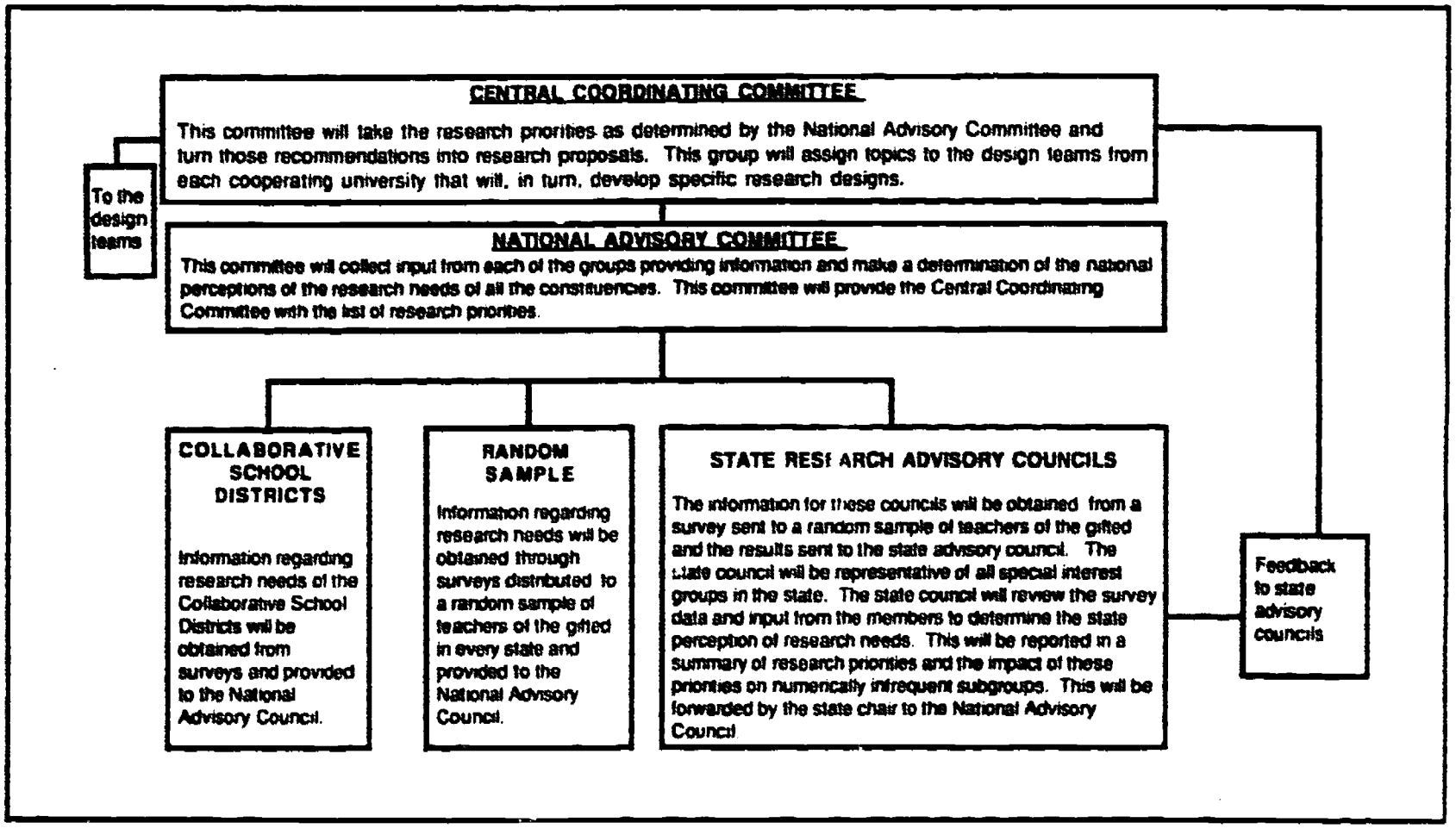


Table 1
NRCAC List of Prioritized Recommendations

1. Impact of gifted programs on student outcomes (longitudinal)
2. Regular curriculum modifications
3. Teaching training/staff development necessary for curriculum modification or development
4. Grouping patterns and impact on learning outcomes
5. Individual vs curriculum approaches to education
6. Motivation
7. Effectiveness of differentiated programs for economically disadvantaged, underachieving and other special populations

8a. Self efficacy
8b. Cultural/community reinforcement
10. Policy implications
11a. Teachers as assessors
11b. Grouping by special populations
13. Program options in relation to student characteristics, settings, training, articulation
14. Process vs content
15. Use of research in assessment
16. Impact understanding of gifted/talented "differences"
17. Effects of grouping on all students when gifted are grouped
18. Assumptions/stereotypes of underachievement
19. Student characteristics associated with success
20. Cooperative learning
21. Relationship between community and program

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Talented and Gifted Education in Rural Alaska: A Universal Model

Linda L. Manwill, Lower Kuskokwim School District, Bethel, Alaska

The Lower Kuskokwim School District covers an area of 44,000 square miles and is located in Southwestern Alaska. The school system consists of twenty-six schools; three in the City of Bethel and twenty-three located in outlying villages. All school sites are accessible by air except one. There are no highway systems and the only access to the area is by airplane year round and by boat for four months out of the year.

Of the student population of approximately 2,900 one-third attend schools in Bethel, a city of about 5,000 inhabitants. The student composition is: 75% Yup'ik Eskimo, 20% Caucasian, 5% is Native American Indian/Black/Hispanic/Asian/other. The composition of students in the villages which range in size from two to six hundred is: 95% Yup'ik or Chupik Eskimo and 5% other.

The majority of villagers depends on fishing and hunting (subsistence lifestyle) for survival. This type of lifestyle impacts directly on the education system in a cultural and a practical manner.

Therefore, during the 1988-89 school year the Plan of Service for Talented and Gifted Education was revised to more fully meet the needs of students who live in this area. The essential factor in the redesign was to cross over cultural boundaries and take the bias and horrendous stress which can be a monumental inhibitor to the identification process out of the Plan of Service. The new design is a radical departure from a standardized system typically used to identify those possessing outstanding abilities.

Six ability areas are investigated through the identification criteria. These areas are intellectual, Academic, Task Commitment, Creativity, Leadership and Artistic or Performing Arts. The Characteristic Checklists (Renzulli, et. al.) were modified in order to reflect the cultural values and language differences by a Revision Committee of primarily Alaskan Natives. They have been previewed in all twenty-six schools within this District and were found to be an effective part of the identification criteria which works as well with the non-Native population as with the Native population. The adopted process for identifying students with outstanding abilities for a Talented and Gifted Program has increased the numbers of students identified for inclusion by fifty (50%).

The document was designed to address cultural/language differences and is meant to be used...not stored on a shelf. It is broad based and flexible enough to be inclusive rather than exclusive and is being used as a working reference and model in this district and in school districts throughout Alaska.

Because this is a growing changing document that will accommodate new aspects of culture as they are manifested, indications are that, with slight modifications, this model can be used for identification for programming which will reflect cultural variance anywhere in the world.

I am very pleased that the plan has been so well received. Anyone interested in finding out more should write or call:

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(907) 543-4871

From Afghanistan to Zimbabwe: Gifted Education in the World Community (Epilogue)

Dr. Bruce Mitchell, Eastern Washington University

Looking at educational development in the world community over the past century, it is obvious that one of the major forces in almost all countries has been the move to a more egalitarian society. As has been previously shown, the expansion of educational opportunity to all social and economic classes has been an integral part of this movement. Capitalist or socialist, communist or democratic, developed or developing, equality of educational opportunity has been an ideal for which all countries have reached.

In such an egalitarian climate and with such a history of social and educational elitism and privilege, it is understandable that most countries of the world have approached gifted/talented education with hesitancy and skepticism. Yet, gifted/talented programs exist world-wide and they continue to develop. Why? We conclude there are five major reasons why this has occurred.

First, countries with a major internal or external threat have turned to gifted/talented education as a way to aid the state in developing the necessary resources for survival. It is no accident that countries such as Israel, South Africa, and Taiwan, nations facing immediate internal or external threat, have some of the most highly developed gifted/talented programs in the world.

Closely aligned with the concern for survival is the interest many countries have in economic and technological development. International political and economic competition have caused many countries to see their welfare tied to the development of their scientific and technological potential. Gifted/talented education is seen as a necessary component of this drive for modernization. The efforts in establishing gifted/talented programs in the Soviet Union, the United States, West Germany, the People's Republic of China and indeed most of the developing countries can be seen as a major outgrowth of this concern.

A third factor contributing to the development of gifted/talented programs is the realization that mass education has in many cases become mediocre education and that many of the brightest students are disinterested and bored in an educational process that teaches to the average. Both laymen and professional educators in many developed countries have come to this conclusion. This realization has caused countries such as the United Kingdom, Australia, Canada and the United States to attempt individualized, enrichment models which provide special attention to the gifted/talented student while still maintaining the egalitarian nature of the educational system. Many countries, as they have expanded their secondary systems to include all, have retained or developed special curricula for students with advanced intellectual, artistic or athletic abilities. West Germany, Japan, the Soviet Union, the People's Republic of China, France, and even the Scandinavian countries have made some special provisions at the secondary level for those who exhibit special gifts or talents.

The fourth factor contributing to the growth and development of gifted/talented education has been the efforts of the private sector. Private schools, youth organizations, and

Continued on page 14

JUST OFF THE PRESS

Rembrandt to Rembrandt: A Case Study of a Memorable Painting Teacher of Artistically Talented Students *Abstract*

Enid Zimmerman, Indiana University

The purpose of this study was to describe and analyze characteristics of a memorable teacher of 20 artistically talented 13 to 16 year old students in a two-week painting course at the Indiana University Summer Arts Institute. In this on-site case study, classroom observation, interviews with students and their teacher, time sampling, and analysis of student application forms and two observer journals, were used to collect data. These data were analyzed by content, comparative, and time sampling analyses.

The objective of the teacher, who was the subject of this study, was to have the students in his painting class learn about themselves and their art work. His emphasis on both cognitive and affective skills was evident throughout all phases of his teaching. He wanted his students to understand what it is like to be an artist and to paint adequate self-portraits. His belief that painting is a skill that can be taught was a pervasive factor in all his teaching practices. He was able to recognize when students were bored and frustrated and not performing adequately and he helped them reach their potential.

This painting teacher's success due to his planned teaching strategies, individual attention to all students, positive attitude in public and private contexts, knowledge about art, and ability to make art class challenging and interesting through humor and storytelling contrasts with the popular misconception that if art teachers provide talented students with art materials they will create art.

Students were unanimous in their approval of this painting teacher. Compared to instruction from their regular art teachers, students felt they learned a lot more in this teacher's class. Most students mentioned his stories as informative, serving to introduce history, humor, and facts into the painting class, thus keeping the students alert and reducing tension. The students also felt that when they were bored this teacher was able to help them continue working and complete their art projects

In this study, the importance of having artistically talented students study art in an accelerated program was evident. It was suggested that as artistically talented students progress at higher levels of achievement in the visual arts, they might be encouraged to attend college level-type classes and study with a mentor so that their knowledge, skills, and values are developed beyond what is normally possible at the junior high and high school levels.

This case study provides one model of successful teaching of artistically talented young adolescents. Information about other case studies of art teachers of talented students, undertaken at different sites with different populations, are requested so that generalizations from this study can be accepted or refuted.

To be published in *Roeper Review* (Winter 1991).

The Scientific Hypothesis Formulation Ability of Gifted Ninth-Grade Students *Abstract*

Steven M. Hoover
Department of Applied Psychology
St. Cloud State University

John F. Feldhusen
Department of Educational Psychology
Purdue University

An exploratory study was conducted to compare selected cognitive and noncognitive variables' relationships with highly intelligent ninth-grade students' ability to formulate hypotheses about realistic, ill-defined situations. Three hypotheses were tested in this study: Whether boys' and girls' abilities to formulate hypotheses differed; whether significant relationships existed between hypothesis formulation ability and cognitive and noncognitive factors; and the extent to which there was a relationship between the quality and the quantity of students' responses. Results indicated that there were no differences between male and female subjects' abilities to formulate hypotheses. The results of a principal-component analysis indicated that the ability to formulate hypotheses may be independent of intelligence for high-ability students. Finally, a positive relationship was found between the quality and the quantity of subjects' responses.

Journal of Educational Psychology
1990, *82*(4), 838-848

Predictive Significance of Early Giftedness: The Case of Precocious Reading *Abstract*

Joseph R. Mills
University of Washington

Nancy Ewald Jackson
The University of Iowa

Results of a longitudinal study of 59 10-12 year olds who had been precocious readers when first tested at 5-6 years of age suggest that extraordinary early achievement in reading predicts above-average, but not necessarily extraordinary, ability in reading and related skill areas during the middle elementary school years, as measured by performance on Level 18 of the California Achievement Test (CAT). Median CAT subtest scores were between 1 and 2 SDs above age-appropriate norms. Verbal Ability at 5-6 years of age predicted individual differences in precocious readers' later reading comprehension accuracy as well or better than initial reading skills did. General Reading Ability, reading Speed, and letter naming speed at 5-6 years were associated with speed to compete the reading comprehension subtest of the CAT. This study illustrates theoretical and methodological issues that must be addressed in other investigations of early development of giftedness.

Journal of Educational Psychology
1990, *82*(3), 410-419

Are Early Readers Gifted?

Nancy Ewald Jackson, Ph.D., Educational Psychology, The University of Iowa

Whenever we counsel parents, identify children for special programs, or try to understand the nature of giftedness in children, we need to deal with the issue of the developmental continuity of giftedness. If a child performs in a way that we would define as gifted at the age of five or six years, what is the likelihood that the child will continue to be a gifted performer in future years? If the child does maintain a pattern of superior achievement, will the accomplishments be predictable in content? The study of children who begin to read at unusually early ages highlights these issues.

Children who are reading fluently before beginning first grade are likely to be perceived by both parents and teachers as intellectually gifted. This precocious mastery of a complex skill certainly merits the label "gifted" and calls for differentiated programming. A six year old who has worked her way independently through *Charlotte's Web* does not need to spend many hours each week being instructed in basic word identification skills. On the other hand, we cannot be certain that precocious readers will continue to demonstrate gifted performances through and beyond their elementary school years.

A comprehensive prospective study of the later accomplishments of precocious readers has not been done. Recent research deals only with the narrower question of the extent to which precocious readers continue to be exceptionally good, i.e., gifted, readers. The answer to this question depends on the standard one sets for defining continued giftedness. The results of several longitudinal studies have confirmed that precocious readers continue to be good readers. By the fifth or sixth grade, the typical precocious reader has continued to achieve in reading at a level well above the national norms, and precocious readers who are cognitively normal virtually never turn into below-average readers. However, many precocious readers do not continue to read at levels that would be considered gifted according to most program guidelines.

Given what we know about the development of reading skill, the finding that an early start in reading does not guarantee continued exceptional performance is plausible. One important factor is the shift in the skills required to be a good reader as word identification becomes more automatic, text comprehension rather than word identification becomes central to the definition of good reading, and books begin to challenge the reader's general vocabulary and world knowledge to a greater extent. Some children may begin reading at an exceptionally early age because they are especially adept at breaking the code of print. These same children are not always especially well endowed with the aspects of verbal intelligence that underlie comprehension of sophisticated texts. A second factor that keeps precocious beginning readers from continuing to stand out as distinctly exceptional readers is simply that, with time and instructional support, many later bloomers catch up.

There may be some ways in which an early start in reading does give a child a lasting advantage. Precocious readers seem to be especially well able to read text rapidly, which facilitates comprehension. Children who achieve well despite coming from the disadvantaged backgrounds often associated with reading failure are likely to have started reading early. However, the nature of giftedness changes as skills and children mature. We need to balance the need to celebrate and support each child's current accomplishments against recognition that new challenges are encountered as development progresses; the same children may not always meet those challenges most successfully.

This report is based primarily on the article referenced below, in which other relevant studies also are cited.

Mills, J. R. & Jackson, N. E. (1990). Predictive significance of early giftedness: The case of precocious reading. *Journal of Educational Psychology, 82*, 410-419.

Soviet Exchange of Information

David M. Fetterman
Stanford University and Sierra Nevada College

Professors Yuri Tarantov and Vladimir Trusov from Leningrad State University were recently guests of David Fetterman for a series of meetings and discussions at Stanford University. George and Louise Spindler also participated in some of the meetings. The focus of the meetings was on gifted and talented education. There is a rekindled interest in the field in the Soviet Union. The Soviet Consulate delivered a copy of David Fetterman's book *Excellence and Equality: A Qualitatively Different Perspective on Gifted and Talented Education* to President Gorbachev during his visit to Stanford. This official interest in the field helped facilitate the Stanford meeting. Information was exchanged about the current economic and political upheaval in the U.S.S.R., including the resurgence of anti-Semitism and ethnic tensions. The role of democratic reforms and a market economy were also discussed. The discussions concluded with a variety of plans for the future, including the development of exchange programs - for students and academic colleagues. Please contact David Fetterman, School of Education, Stanford University, for additional information about the meetings and proposed exchange programs.

Basic Tenets of Our Research

From page 5

We believe that evaluation can contribute to the improvement of identification practices and program effectiveness. By developing improvement oriented and useful techniques and instruments for evaluating identification and program practices, we will provide instruments, strategies, and supporting documentation for the modification of existing practices.

We believe that future research efforts should be responsive to the needs of a diverse group of consumers. To enable us to respond to these needs, a practitioner-responsive advisory network that provides for systematic input about a future research agenda has been developed. This network will encourage the cooperative efforts and participation of state and local education agencies, institutions of higher education, and other public and private agencies and corporations, including business, industry and labor groups.

RESEARCH IN PROGRESS

Longitudinal Study of PACE

Abstract

Sidney M. Moon, John F. Feldhusen, Purdue University

What are the long range effects of participation in an elementary, enrichment, pullout program on gifted students? In order to investigate this question we are beginning an ongoing longitudinal study of gifted students who participated in the Program for Academic and Creative Enrichment (PACE) (Feldhusen & Kolloff, 1979, 1986; Kolloff & Feldhusen, 1981).

In the first phase of our research, twenty-three twelfth graders who had participated in the PACE program for at least three years during elementary school were asked to complete a follow-up questionnaire. Parents of these students completed a parallel form of the questionnaire. In addition, ten of the twenty-three families were selected by criterion-based sampling procedures for in-depth family interviews. Using constant comparative data analysis methods (Glaser & Strauss, 1976; Goetz & LeCompte, 1984), several categories of program benefits (cognitive, affective, and social) and one category of program hindrances (pullout format) were derived inductively from the data. In addition, grounded theory was developed about the role of PACE in developing academic talent and about interactions between the PACE program and the family systems of participating students.

The findings suggest that (1) both students and parents perceived that the PACE pullout program had a moderately positive impact on participating students, (2) the PACE program was moderately effective in achieving program goals, (3) PACE was an effective "early years" talent development experience for most participating students, and (4) PACE created subtle changes in the family systems of most participating students.

The next phase of our research will be directed toward the development of a standardized questionnaire that can be administered to subsequent cohorts of twelfth graders who participated in PACE while in elementary school. We would be interested in sharing information with other investigators who are conducting longitudinal studies of gifted programs in school settings. We would also be interested in hearing from school corporations that have implemented the PACE program and would be interested in participating in our research.

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Early Assessment for Exceptional Potential and Cooperative Alliance in Gifted Education

Abstract

Dr. Beverly D. Shaklee, Kent State University

Two major research projects in gifted child education are underway at Kent State University. Funded through the auspices of the Office of Educational Research Improvement, U.S. Department of Education, the Early Assessment for Exceptional Potential project and Cooperative Alliance in Gifted Education are providing unique opportunities for study to graduate students, university and school-based faculty.

The Early Assessment for Exceptional Potential in Young Minority and/or Economically Disadvantaged Students (Shaklee, 1989) was funded by the Jacob Javits Gifted and Talented Students Education Act. This three year project is using computer-assisted analysis of videotaped samples of representative behaviors as the basis for identification of exceptional intellectual potential. Currently videotaping in five classrooms representing K-3, the videographic data is analyzed using VIDATA and DA*TA (Zuckerman, 1986). These computer programs allow research analysts to determine examples of key identifiers of intellectual potential as evidenced by young minority and/or economically disadvantaged children while engaged in challenging lessons in science and social studies. Additional analysis permit the user to examine the videographic data for frequency, duration, patterns of occurrence and/or cycles of occurrence. Phases II and III of the project are designed to prepare regular primary classroom teachers to: employ observational analysis to identify exceptional potential; modify and individualize instruction appropriately; and, create a cohort group of primary classroom teachers who are able to instruct others in the use of this model.

The Cooperative Alliance in Gifted Education (Shaklee, 1990) was funded through the Educational Partnerships Act. This four year project, designed in collaboration with IBM and Cleveland Public Schools Kennedy-Marshall Cluster, has targeted: the creation of a cooperative alliance among public schools, higher education and the private sector; the expansion of the Early Assessment non-traditional assessment model to grades 4-8; the creation of a computer network between gifted education and regular education classrooms with further links to community agencies; the creation of joint inquiry oriented classroom curriculum which is delivered through the use of technology; and, the thorough examination and evaluation of all components including the impact of collaborative efforts between business, public schools and institutions of higher education. Major research questions being examined for this project include: attitudinal development and change for all stakeholders; reliability and validity of the non-traditional assessment methodology; curriculum development from both student and teacher perspectives; and, technological assessment of student progress.

For further information on either project please contact:

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National Center for Research on Cultural Diversity and Second Language Learning

Eugene Garcia, Barry McLaughlin, University of California, Santa Cruz

The National Center for Research on Cultural Diversity and Second Language Learning has been funded by the Office of Educational Research and Improvement, U.S. Department of Education, effective January 1, 1991. The University of California, Santa Cruz (UCSC), through the university's statewide Linguistic Minority Research Project, received the award to coordinate this Center and will collaborate with the Center for Applied Linguistics (CAL) in Washington, DC and other institutions to conduct the research and provide dissemination activities.

This new national research center is designed to promote the intellectual development, literacy, and thoughtful citizenship of language minority students, and an appreciation of the multicultural and linguistic diversity of the American people. The Center will initiate new projects as well as build on and expand to the national level ongoing research, dissemination, and teaching efforts. The Center's work will involve researchers from a variety of disciplines, include participants from throughout the country, and address the needs of students from a variety of language minority groups in pre-K to grade 12 classrooms.

Several of the research projects deal with the relationship between first and second language learning, and between cultural and linguistic factors in the achievement of literacy. Other projects focus on teaching strategies to assist children from diverse cultural backgrounds in gaining access to content material. Studies that develop alternate models of assessment for these students are also included as are studies that examine various instructional programs for language minority children, and how modifications in the social organization of schools affect their academic performance.

Dissemination will be a key feature for the Center as a whole as well as for each project. The dissemination efforts will be directed to the parents and teachers of language minority students, and to the resource centers, policymakers, advocacy groups, researchers, and professional organizations concerned with their needs.

The new Research Center on Cultural Diversity and Second Language Learning will undertake a dynamic, process-oriented research program that places language learning within a broader social and cultural context. Because it is inherently applied and contextual, this approach should produce lasting practical consequences, assisting parents, practitioners, and policymakers in better educating our nation's culturally diverse children.

For more information about the individual research projects and/or to join the mailing list, please contact the Center at this address:

National Center for Research on Cultural Diversity and Second Language Learning
Dr. Eugene Garcia or Dr. Barry McLaughlin
Kerr Hall
University of California, Santa Cruz, CA 95064
Phone: (408)459-3501
Fax: (408)459-3502

From Afghanistan to Zimbabwe: Gifted Education in the World Community (Epilogue)

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entrepreneurial endeavors all exist which serve gifted/talented youth. Private schools, as centers of excellence, have had a long history in a number of countries. Also a host of countries such as Canada, the United States, Australia, West Germany, and the Philippines has a number of private organizations which cater to the gifted/talented. Parents and other interested individuals have banded together in organizations which sponsor a variety of enrichment activities for gifted and talented youth.

Finally the focus on egalitarianism and fear of elitism has caused many countries to design gifted/talented programs for disadvantaged youth. Individuals regardless of background are given special attention if they reveal special talent. By providing these programs, governments cannot be accused of perpetuating a social or economic elite. This concern for the disadvantaged gifted has caused countries such as Israel to create special schools for them, the United States to begin organizations dedicated to advancing the talents of this group, and the Soviet Union to search the rural hinterlands in hopes of locating gifted/talented youth. From Australia to Brazil, fledgling programs have been designed specifically for the disadvantaged gifted.

Thus, although many of the problems related to gifted education, such as difficulties with identification, and lack of money and qualified teachers, seem universal, what also seems universal is the interest all nations display in providing special programs of some sort for their gifted/talented young people. Perhaps what is most heartening is that many nations not only see their own survival tied to gifted/talented education but also the survival of the planet. Such enlightened thinking is to be applauded for indeed the welfare of all humanity may in large measure be dependent on the careful nurturing of its best young minds.

A Statewide Model Bridging Research, Theory, and Practice

Sidney M. Moon, Purdue University

The Indiana Association for The Gifted (IAG) is currently sponsoring a new initiative -- the creation of a statewide model for research that would complement existing statewide models for training and service sponsored by the Indiana Department of Education.

In January, 1990, Sidney Moon was appointed the first Chair for Research on the executive board of the Indiana Association for the Gifted. Sidney was asked to form a committee that would encourage research on the nature and nurture of gifted children that would be relevant to the needs of practitioners -- research in the schools, action research, research into the special needs and characteristics of highly gifted students, research that will help parents understand and guide their gifted children.

In the spring of 1990, the IAG Research Committee developed the following vision statement, purpose statement, and goals:

Vision Statement
One of the goals of the Indiana Association for the Gifted is:

> ...to encourage scholarly research and the dissemination of information pertaining to gifted children in school and society.

The Indiana Association for the Gifted (IAG) believes that educational progress for gifted/talented students is contingent upon the effective blending of research, theory, and practice. The IAG Research Committee will encourage excellence in research by and for practitioners and will model statewide coordination of cooperative research efforts.

Purpose Statement
The IAG Research Committee will develop a model for bridging research, theory, and practice in gifted/talented education at the state level.

Goals
1. To encourage research into the nature and nurture of gifted/talented children in the state of Indiana
2. To encourage the dissemination of research information
3. To develop linkages among researchers, educators, counselors, and parents of gifted/talented children
4. To facilitate training of educators, counselors, parents, and students in the interpretation and application of the research literature on the nature and nurture of gifted/talented youth
5. To promote increased funding for research on the gifted and talented in the state of Indiana

Next, the Committee wrote measurable, pragmatic, one-year objectives for 1990-91. These objectives are listed below in order of priority.

Objectives for 1990-91
1. To develop a three year plan for accomplishing the goals of the IAG research committee
2. To sponsor regular columns in IMAGES and IDE's GT newsletter
3. To develop a research strand for the 1991 annual IAG convention
4. To create a linkage between the IAG Research Committee and the IAG Coordinator's Network
5. To develop guidelines for an IAG research award and introduce the new award at the convention
6. To explore the possibility of creating an IAG research foundation
7. To initiate planning for a mini-grant program with the aid of a special projects grant from IDE

Readers interested in developing a similar initiative in other states can call or write Sidney for more information:

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Purdue University
Department of Child Development and Family Studies
MFT Building
523 Russell Street
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Office phone: (317)494-8448

Information About Tests

Approximately 200 annotated test bibliographies in specific subject areas are available from Educational Testing Service. An extensive library of 16,000 tests and other measurement devices includes descriptions of each test, title, author, publication date, target population, publisher or source, and an annotated description that includes the purpose of each instrument. A brochure describing the categories and procedures for obtaining specific bibliographies may be obtained by writing to:

Test Collection, Educational Testing Service, Princeton, New Jersey 08541 or calling (609) 734-5686. Each categorical bibliography costs $11.00, and a catalog describing all 200 bibliographies can be obtained for no cost.

NRC/GT Research-Based Decision Making Series

Forthcoming Publications

details in future newsletters

Dr. Karen Rogers, The University of St. Thomas, *The Relationship of Grouping Practices to the Education of the Gifted and Talented Learner: Research-Based Decision Making*

Dr. Ann Robinson, The University of Arkansas at Little Rock, *Cooperative Learning and the Academically Talented Student: Research-Based Decision Making*

Dr. Robert D. Hoge, Carleton University, *Research on the Self-Concept of Gifted Students: Implications for Teachers and Students*

Dr. James A. Kulik, University of Michigan, *Effects of Ability Grouping on Bright Students*

Dr. Gilbert Clark and Dr. Enid Zimmerman, Indiana University, *Programming Opportunities and Alternatives for Talented Arts Students*

Dr. Gilbert Clark and Dr. Enid Zimmerman, Indiana University, *Identification of Talented Students in the Arts*

The National Research Center on the Gifted and Talented

NRC/GT N·E·W·S·L·E·T·T·E·R

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NRC G/T

The National Research Center on the Gifted and Talented

NEWSLETTER

November 1991

THE UNIVERSITY OF CONNECTICUT • THE UNIVERSITY OF GEORGIA • THE UNIVERSITY OF VIRGINIA • YALE UNIVERSITY

NRC/GT: *Update of Year 2 Activities*

E. Jean Gubbins, The University of Connecticut

Year 2 of The National Research Center on the Gifted and Talented has begun with as much energy and speed as our initial "jump start" on the research projects in Year 1. So much happened during the first year of operation that it is hard to believe that several research projects described in our June NRC/GT Newsletter are ending, others are continuing, and seven projects are being initiated. Right now, we are completing or starting fourteen national studies. Applied research of this scope is incredible! Results from Year 1 are being interpreted everyday and most Center hallway conversations revolve around:

"Did you hear about the effects of the treatment in this study?"

"Do you think we should analyze the data another way?"

"How soon will another few pages of the analyses be written?"

"Students involved in the treatment groups for the Curriculum Compacting Study outperformed the control group students on the post achievement tests in science and in math concepts."

"During the observations for the Classroom Practices Study, we found that teachers posed a small number of higher-level questions (application, analysis, synthesis, and evaluation) to elementary school students."

Such comments are heard throughout the Center at The University of Connecticut. Questions are raised, responses are entertained, and then it is back to our respective offices to see if the data should be distilled another way.

We are stretched because of all the research activity. But the excitement surrounding the studies provides the motivation to keep pushing. We can't wait to release the results from the Curriculum Compacting Study and the Classroom Practices Study at The University of Connecticut. We have already shared the results of the Needs Assessment Study in the June newsletter. Now, we are preparing a monograph entitled *Setting an Agenda: Research Priorities for the Gifted and Talented Through the Year 2000.* When the monograph is available, we will let you know.

Our research would not be possible without the funding from the Jacob K. Javits Gifted and Talented Students Education Act from the United States Department of Education, Office of Educational Research and Improvement. The money, however, only makes the researchers available for what they do best. Where the Year 1 research was implemented would have been a major problem without the network of Collaborative School Districts. Our network has grown to 277 districts as of November 1, 1991. Since our March listing of the districts in our Center brochure, we have added the following sites:

Ashford Public Schools
Ashford, CT

Harford County Schools
Bel Air, MD

Glendive Public Schools
Elementary District #1
Glendive, MT

Contoocook Forks Central Schools
Peterborough, NH

Chenango Forks Central Schools
Binghamton, NY

Meigs County Schools
Decatur, TN

Donna Independent School District
Donna, TX

Williamsburg-James City Country Schools
Williamsburg, VA

Fort Dodge Catholic Schools
Fort Dodge, IA

Montgomery County Public Public Schools
Rockville, MD

School District #30
Four Winds Elementary School
Fort Totten, ND

Zuni Public School District #89
Zuni, NM

Hamilton County Department of Education
Chattanooga, TN

Sevier County Schools
Sevierville, TN

Ector County Independent School District
Odessa, TX

Wetzel County Schools
New Martinsville, WV

There are only two states that are not represented in the Collaborative School District network: South Dakota and Delaware. Also, we have not been able to recruit schools in the following territories: Puerto Rico, Virgin Islands, American Samoa, and Trust Territory. We will keep trying to get the word out.

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What Happens to Students in Programs for the Gifted?

The Learning Outcomes Project

Marcia A.B. Delcourt, Dewey G. Cornell, Lori C. Bland, Marc D. Goldberg
The National Research Center on the Gifted and Talented, University of Virginia

Why do we place students in programs for the gifted? According to educators, theorists, and other authorities in gifted education, we place high ability students in special programs for several reasons. First, we believe that special programs will help them to learn more and to achieve their potential. Second, we believe that challenging and enriching programs will stimulate creativity and foster positive attitudes toward learning. Finally, we believe that placement in a gifted program will have a beneficial effect on socio-emotional adjustment, enhancing self-concept or ameliorating problems stemming from lack of challenge and absence of contact with peers of similar ability and interests. Broadly speaking, we might say that the reasons for instituting programs for the gifted are Achievement, Attitudes, and Adjustment: the three A's.

Although these reasons make sense, and we may believe them to be true, there has been no large-scale research study focusing on both cognitive and affective learning outcomes of high ability students from different types of programs. The need to investigate learning outcomes leads to another important question arising from discussions of gifted programs-- "Which type of program for the gifted has the greatest impact on students?" The Learning Outcomes Study is one study conducted by The National Research Center on the Gifted and Talented and is a two-year longitudinal study of student achievement, learning attitudes, and general interest in over 1,100 2nd, 3rd, and 4th grade students from 16 districts in 10 states. School districts were selected to represent rural, urban, and suburban communities. They were also selected so that we could examine the effects of programs on students from minority populations and disadvantaged backgrounds. The researchers will investigate the relationship between four general strategies for delivering services to high ability students: within-class programs, pull-out programs, special classes, and special schools. The purpose of the study is also to compare the achievement, attitudes and adjustment of students in these programs to non-gifted students and to students of high ability who do not attend gifted programs.

In the fall of 1990, the researchers completed the first round of data collection by administering a series of educational and attitudinal tests to a sample of elementary school students across the country. These students had either just started their involvement in one of the programs listed above or were students not in programs. Teachers and parents completed questionnaires assessing the children's learning characteristics, interests, and behavioral adjustment. More specifically, to assess student achievement, scores from a group achievement test were collected, as were grades. In addition, attitudes about learning, self-concept and self-motivation are being assessed in all students. Teachers completed surveys about each student's creativity, learning, motivation and adjustment while parents indicated the types and frequency of student activities and completed a survey of student adjustment. All tests and surveys were administered in the spring of 1991 and will be administered during 1991-92 to assess what changes have taken place.

What happens when elementary school students are first placed in gifted programs? Does achievement or do attitudes change over time? How does placement influence self-concept or behavioral adjustment? How are students from minority groups affected by different types of programs? These are some of the key questions we are addressing. The researchers are also collecting information on each program's identification criteria, curriculum, teaching methods, and goals, as well as the background and training of program teachers. The long-term effects of participating in different types of gifted programs and program characteristics associated with positive learning outcomes will be examined.

NRC/GT: Update of Year 2 Activities

E. Jean Gubbins, The University of Connecticut

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Our Content Area Consultant Bank is expanding. We are in the process of preparing a directory which contains listings of 134 consultants interested in providing workshops for teachers or parents; consulting on policy issues, program development, evaluation, or clinical evaluation and intervention; or conducting projects with the NRC/GT. We would like to welcome the following Consultant Bank Members as of November 1, 1991:

Dr. Susan Demirsky Allan
Dearborn Public Schools
Dearborn, MI

Dr. Donald L. Beggs
Southern Illinois University
Carbondale, IL

Dr. Gilbert A. Clark
Indiana University
Bloomington, IN

Dr. Nicholas Colangelo
Connie Belin National
Center/Gifted Education
Iowa City, IA

Dr. Dorothy Armstrong
Grand Valley State University
Grand Rapids, MI

Dr. Jeanne M. Burns
Southeastern Louisiana
University
Hammond, LA

Dr. Robert E. Clasen
University of
Wisconsin-Madison
Madison, WI

Dr. Nancy R. Cook
RMC Research Corporation
Hampton, NH

Ms. Sally M. Dobyns
Mary Baldwin College
Staunton, VA

Dr. Shelagh A. Gallagher
Illinois Mathematics &
Science Academy
Aurora, IL

Dr. Leslie Garrison
San Diego State University
Calexico, CA

Dr. Barry Grant
Center for Talent & Development
Evanston, IL

Dr. M. Gail Hickey
Indiana-Purdue University
Fort Wayne, IN

Dr. Marcia B. Imbeau
University of Arkansas
Fayetteville, AR

Dr. Elyse S. Fleming
Cleveland State University
Cleveland, OH

Dr. Leonore Ganschow
Miami University
Oxford, OH 45056

Dr. David Goldstein
Duke University
Durham, NC

Dr. Howard Gruber
Columbia University
New York, NY

Dr. Steven Hoover
Saint Cloud State University
Saint Cloud, MN

Dr. David F. Lohman
The University of Iowa
Iowa City, IA

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What is the Research Agenda of the Center for Year 2?

The Research Center is initiating seven new studies based on the priorities that emerged from the National Research Needs Assessment Process. In addition to those described below, three Year 1 studies are continuing: *Investigations into Instruments and Designs Used in the Identification of Gifted Students and the Evaluation of Gifted Programs*, *Evaluation of the Effects of Programming Arrangements on Student Learning Outcomes* (The University of Virginia), and *A Theory-Based Approach to Identification, Teaching, and Evaluation of the Gifted* (Yale University).

A Study of Successful Classroom Practices

The University of Connecticut *Principal Investigators: Dr. Karen L. Westberg and Dr. Francis Archambault, Jr.*
Implementation: 1991-92

This study will provide a description of the conditions necessary to meet the needs of the gifted and talented and the strategies used to modify instructional approaches and regular curriculum materials in the classroom. The research questions that will guide this study include: (1) What factors contribute to classroom teachers' effective use of differentiated teaching strategies? (2) What environmental factors within the classroom and school contribute to effective use of differentiated teaching strategies? (3) How does the presence of a gifted education specialist affect the instructional strategies and materials used in the regular classroom? (4) How does the presence of a resource room or pull-out program affect the students' need for instructional and curricular differentiation in the regular classroom?

This research will be an ethnographic study of a few classrooms identified as exemplary in their implementation of curriculum modification and curriculum differentiation. Purposive sampling will be used to identify classrooms that are outstanding examples of this approach while also providing maximum variation in types of districts, such as a predominately white middle-class area, a multi-ethnic area, and, if the data permit, an economically disadvantaged, area. Participant observation will be the major data-gathering technique for this study. Additionally, in-depth, open-ended, tape recorded interviews will be conducted with the classroom teachers observed, the principals of the schools, the curriculum coordinators, the teachers of the gifted and talented students, and possibly other interested parties, such as parents.

Longitudinal Study of Successful Practices

The University of Connecticut *Principal Investigator: Dr. Francis X. Archambault, Jr.*
Implementation: 1991-95

This study will formulate plans for a longitudinal assessment of the impact of "most successful practices." These practices will be gleaned from other studies conducted by the NRC/GT. We envision that the study will be implemented in Years 3 through 5 (and beyond if funding can be secured) and that it will employ a true experimental design (i.e., students or classes will be randomly assigned to treatment conditions). One or more Collaborative School Districts and schools within them will be selected to ensure ethnic and economic diversity. The study will be conducted in both regular classroom and resource room settings.

During the planning year the data from the Classroom Practices Study, the Compacting Study, the Successful Practices Study, the Cooperative Learning Study, and the Learning Outcomes Study will be reviewed to determine the most successful practices and how they can be integrated into regular classroom and resource room environments. Other studies funded by OERI will also be reviewed, literature reviews will be conducted, and, where necessary, position papers will be written by University of Connecticut site staff and distinguished researchers at other institutions not directly involved in the NRC/GT. Instructional materials will be selected or produced, instruments will be adopted, adapted or developed, and procedures for implementing the experimental design will be formalized.

Case Studies of Gifted Students with Learning Disabilities Who Have Achieved

The University of Connecticut *Principal Investigators: Dr. Sally M. Reis and Dr. Joan McGuire*
Implementation: 1991-92

This study will investigate the factors that enable some gifted students with learning disabilities to succeed in an academic setting. The perceptions of the persons investigated in this study may provide information that helps to identify this population and suggest specific educational interventions designed to meet the unique needs of this group. Specifically, we will investigate the following areas with college students or recent college graduates who were identified as having a learning disability:

The self-perceived strengths and weaknesses of gifted students with learning disabilities;
The specific educational intervention and assistance necessary to succeed in an academic environment;
The types of counseling strategies necessary to help gifted students with learning disabilities realize their potential;
The collective view of this population regarding their treatment by others and others' perception of them (parents, teachers, peers, guidance counselors);
Whether modifications were made in the instructional practices and educational programs designed for this population;
The positive and/or negative effects of labeling (either gifted and/or learning disabled) on this population; and,
The specific nature of the learning disability of the individuals in this study.

What is the Research Agenda of the Center for Year 2?

Cooperative Learning and the Gifted

The University of Connecticut — *Principal Investigators: Dr. David A. Kenny and Bryan W. Hallmark*
Implementation: 1991-92

The study is designed to assess the effects of cooperative learning methods on gifted students, and their non-gifted peers. Outcome measures will include achievement, attitudes towards self and school, and students' perceptions of others' ability, support, appreciation, leadership, likability and acceptance. Both boys and girls representing various ethnic groups will be included. The researchers will work with intact classes selected from a single grade level, grade 4. Students will be assigned to four-person learning groups of Gifted (G) and Non-Gifted (N) students. Three group compositions will be analyzed: a gifted homogeneous group (GGGG), a non-gifted homogeneous group (NNNN), and a heterogeneous group (GNNN). All groups will work on two types of cooperative learning tasks: a group oriented math task and a more traditional cooperative learning task in science. For each of the tasks, students will participate in multiple one-hour learning sessions in the regular classroom environment.

Three measurement periods will be used. The first will occur immediately after group assignment and prior to any group interaction; the second will be after the first series of learning sessions; and the third will occur after the second series of learning sessions. During measurement period one, students will complete a peer rating questionnaire, an attitude toward school questionnaire, an attitude toward session-specific subject questionnaire, and a self-efficacy measure. Measurement periods two and three will repeat the measures taken during period one, but will also involve the evaluation of task-specific achievement. The following questions will be addressed: Do gifted students learn more than children who are non-gifted? Do gifted children assist the learning of the other children in the group? Does achievement differ in homogeneous versus heterogeneous grouping? These effects can be investigated separately for different ethnic groups, as well as for males and females.

A Research-Based Assessment Plan (RAP) for Assessing Giftedness in Economically Disadvantaged Students

The University of Georgia — *Principal Investigator: Dr. Mary M. Frasier*
Implementation: 1991-92

The major objective of this study will be to determine the effectiveness of a research-based assessment plan (RAP) in increasing the identification of gifted students from economically disadvantaged populations. To accomplish this objective, two models will be developed and piloted: (a) the RAP and (b) a Staff Development Model (SDM). A secondary objective will be to conduct follow-ups on selected case study students from the first year study. Data from these follow-up case studies will be used to enrich the development of the RAP and the SDM.

Content for the RAP and the SDM will be based on the identification paradigm developed during the first year of The University of Georgia research study to describe giftedness within and across a variety of cultural groups. Additional input on content and procedure will be provided by a panel of expert members and collaborative researchers who participated in the Georgia Study; National Research Center Needs Assessment Survey results; and State Research and National Research Center Advisory Council members. Relevant literature on assessment and staff development will also be used to formulate the models.

Extension of the Learning Outcomes Project

The University of Virginia — *Principal Investigator: Dr. Marcia A. B. Delcourt*
Implementation: 1991-92

Learning outcomes are broadly defined to include both academic and affective effects of participating in a program for the gifted and talented. For the purposes of this study, academic effects include: performance on standard achievement tests, grades, teacher ratings of student learning behaviors, and student attitudes toward learning. Affective outcomes include: student self-concept and self-motivation, and both parent and teacher ratings of behavioral adjustment. Data will be collected at four stages. Approximately 1,100 2nd, 3rd, and 4th grade students will be assessed upon their entrance into one of the four types of programs, at the end of their first year in the program, and at the beginning and end of their second year.

Researchers among the participating universities in the NRC/GT agree that a need exists to add a qualitative dimension to the study of the four types of programming arrangements [(1) within classroom programs; (2) pull-out classroom programs; (3) separate class programs; and (4) special school programs] in the Learning Outcomes Project. This need has evolved during the first year implementation. More specifically, what characterizes a program that is identified as an "exemplary" model of a given program type? What are the influences of such exemplary programs on student achievement and effort? What distinguishes an exemplary representative model in terms of its ability to serve diverse populations of students? A qualitative study to address these questions has been proposed in which one district from each of the four types of programming arrangements will be selected for a thorough investigation. Observing classroom practices, and receiving responses from state-level administrators, selected classroom teachers, parents and students about characteristics and overall effects of the program will serve as the sources of data.

Motivation and Underachievement in Urban and Suburban Gifted Preadolescents

Yale University — *Principal Investigator: Dr. Pamela R. Clinkenbeard*
Implementation: 1991-95

What creates or inhibits a "gifted" level of performance, both in those who have been identified as gifted and in those who have not? This project will address two important factors in the gap between potential and performance: motivation and disadvantage. This project will describe in qualitative fashion the motivational patterns found in both suburban and economically disadvantaged urban classrooms of gifted preadolescents. Research on achievement motivation has been moving toward discovering and developing more methods for fostering learning goals, or task commitment: that is, a love of learning for its own sake and a desire to persevere on tasks of interest. The goal is equally important for those who have been overlooked in the identification process.

This project will directly address several of the important topics for research on the gifted, as selected by the National Research Center Advisory Council, including motivation; effectiveness of differentiated program for economically disadvantaged, underachieving and other special populations; self-efficacy; and assumptions/stereotypes of underachievement. It would indirectly address many other items, since motivation and underachievement were concerns that arose within the discussions. Expected knowledge includes some answers to these questions: Do suburban classrooms for gifted preadolescents reveal different motivational patterns from those in urban classrooms? Are motivational patterns of students identified as gifted different in kind and/or degree from motivational patterns of other students? Does the experience of being labeled "gifted" cause a shift in motivation-related behavior?

NRC/GT: Update of Year 2 Activities

E. Jean Gubbins, The University of Connecticut

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Dr. Ann E. Lupowski
University of North Texas
Denton, TX

Dr. Marian Matthews
Eastern New Mexico University
Portales, NM

Dr. James A. Middleton
University of Wisconsin-Madison
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Dr. Kevin R. Rathunde
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University of Alabama
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Dr. Robert N. Sawyer
Northwestern State University
Natchitoches, LA

Dr. Isaiah Sessoms
Clarion University
Clarion, PA

Dr. Carolyn Yewchuk
University of Alberta
Edmonton, Alberta, Canada

Dr. Anne J. Udall
Tucson, AZ

Several Content Area Consultant Bank members have been commissioned to write papers in our Research-Based Decision Making Series. The abstract of Dr. Karen Rogers' paper entitled, *The Relationship of Grouping Practices to the Education of the Gifted and Talented Learner* is featured in this newsletter. A complimentary copy of the Executive Summary for this paper and future papers will be mailed to Collaborative School Districts, Consultant Bank members, State Departments of Education, National Research Center Advisory Council members, Regional Educational Laboratories, Educational Research and Development Centers, Parent Organizations and Javits Grants Recipients. A copy of the full-length paper is available on a cost-recovery basis (see the newsletter message).

In addition to the papers listed in our last newsletter on Ability Grouping (Dr. James Kulik), Self-Concept (Dr. Robert Hoge and Dr. Joseph S. Renzulli), Identification of Art Students and Programming for Art Students (Dr. Gilbert Clark and Dr. Enid Zimmerman), we have commissioned papers on the following topics:

- Creativity
  Dr. Mark Runco
  California State University
- Mathematics
  Dr. William H. Hawkins
  Mathematical Association of America
- Reading
  Dr. Nancy Jackson
  University of Iowa

  Science
  Dr. Paul Brandwein
  Science Consultant
  New York

We are excited about this Research-Based Decision Making Series. The series extends the range of topics of interest to practitioners involved in the NRC/GT. More topics will be announced in the future.

The United States Department of Education, Office of Educational Research and Improvement, our funding agency, recently requested information on the relationship of The National Research Center on the Gifted and Talented mission to The National Education Goals, America 2000, and Core Subject Areas. The major elements of each research study were analyzed and recorded in a matrix. Two examples of studies and their major elements follow:

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	National Education Goals						America 2000				Core Subjects				
	Goal 1 Ready To Learn	Goal 2 School Completion	Goal 3 Achievement/ Citizenship/ Prob. Solving	Goal 4 Science Math	Goal 5 Literacy/ Learning	Goal 6 Safe/ Disciplined/ Drug-free	Track 1 Improve Schools	Track 2 New Schools	Track 3 Post School Learning	Track 4 Communities Families	Mathematics	Science	English	History	Geography
1 National Needs Assessment	-	-	-	-	-	-	X	X	-	X	-	-	-	-	-
2 Classroom Practices	-	-	X	X	X	-	X	X	-	-	X	X	X	X	-
3 Curriculum Compacting	-	X	X	X	X	-	X	X	-	-	X	X	X	X	-
4 Investigation of Giftedness							X	X	-	X	-	-	-	-	-
5 Learning Outcomes	-	X	X	X	X	-	X	X	-	X	X	X	X	X	-
6 Investigations into Instruments and Designs	-	X	X	-	-	-	X	X	-	-	X	X	X	X	-
7 Theory-Based Approach - Identification, Teaching, Evaluation	-	-	X	-	X	-	X	X	-	-	-	-	-	-	-
8 Successful Classroom Practices	-	-	X	-	-	-	X	X	-	-	X	X	X	X	-
9 Longitudinal Study of Successful Practices	-	-	-	-	-	-	X	X	-	-	-	-	-	-	-
10 Gifted Students with Learning Disabilities	-	X	-	-	X	-	X	X	-	X	-	-	-	-	-
11 Cooperative Learning and the Gifted	-	X	X	X	X	-	X	X	-	-	X	X	X	X	-
12 Research-Based Assessment Identification of Gifted Students	-	-	-	-	-	-	X	X	-	X	-	-	-	-	-
13 Qualitative Extension of Learning Outcomes Study	-	-	X	-	-	-	X	X	-	X	-	-	-	-	-
14 Motivation and Under-achievement in Gifted Preadolescents	-	X	X	-	-	-	X	X	-	-	-	-	-	-	-

The Collaborative School Districts: What did it mean for us?

Jann Leppien, Stuart Omdal and Del Siegle have served as Collaborative School District contacts during the past year. They recently met to discuss how the impact of their involvement with The National Research Center's Needs Assessment Survey and Curriculum Compacting Study affected their districts.

Collaborative School District contacts provide the link between the Center and the research sites. Over 270 districts from 48 states and 1 territory are currently enrolled. Leppien worked with the Lockwood School educators in Billings, Montana. Omdal participated with the staff of Minter Bridge Elementary School in Hillsboro, Oregon and Siegle was involved with the teachers at Lincoln Elementary School in Glendive, Montana. A transcript of their conversation follows:

Jann: One of the major benefits of being a Collaborative School District is that it keeps us up to date and knowledgeable about current research in the field. We were contacted and had the opportunity to participate in the initial Needs Assessment Survey in which we indicated our preference of research topics chosen for future study.

Stuart: The survey provided a link between the university "ivory tower" and the people in the trenches. Sometimes people would ask, "Why should our district take the time? What is in it for us?" Sometimes all we see are the forms to fill out and we fail to see ourselves as being a part of the bigger picture. The educational technology and curriculum in use today are all a result of somebody's past research. Participation in current research is important.

Jann: Being a Collaborative School District also gives us an opportunity to have a working relationship with the university. We have a direct link to what is happening and there is a place to go to have our questions answered and concerns voiced.

Del: Our district was part of the Curriculum Compacting Study which gave us the initiative to try something different. Compacting was something the district had been wanting to implement and the study provided us with the impetus we needed. The staff voted overwhelmingly to participate in the research.

Stuart: Yes, being involved as a research site can open doors of opportunity.

Del: The teachers felt their participation in the Curriculum Compacting Study was important and they were making a contribution toward effective teacher training in curriculum compacting. They were anxious to hear how other sites were progressing and looked forward to hearing the results of the study. They wanted feedback.

Jann: Feedback was important on the surveys, as well. The teachers completing the survey enjoyed hearing from the Center and learning the results.

Stuart: Teachers realized that their concerns were significant. They discovered that what they viewed as important issues were also the concerns of other teachers, as well as researchers.

Jann: By inviting a variety of personnel in the district to participate in the Needs Assessment Survey, I became aware of staff concerns which could be addressed through inservice. The National Research Center Needs Assessment helped me gather information about the concerns of the staff.

Del: The students were also excited about being part of a nationwide effort. When I explained to them what compacting involved, one looked at me rather puzzled and said, "Well, it only makes sense not to do the work I already know how to do." She wondered why this hadn't happened earlier in her life.

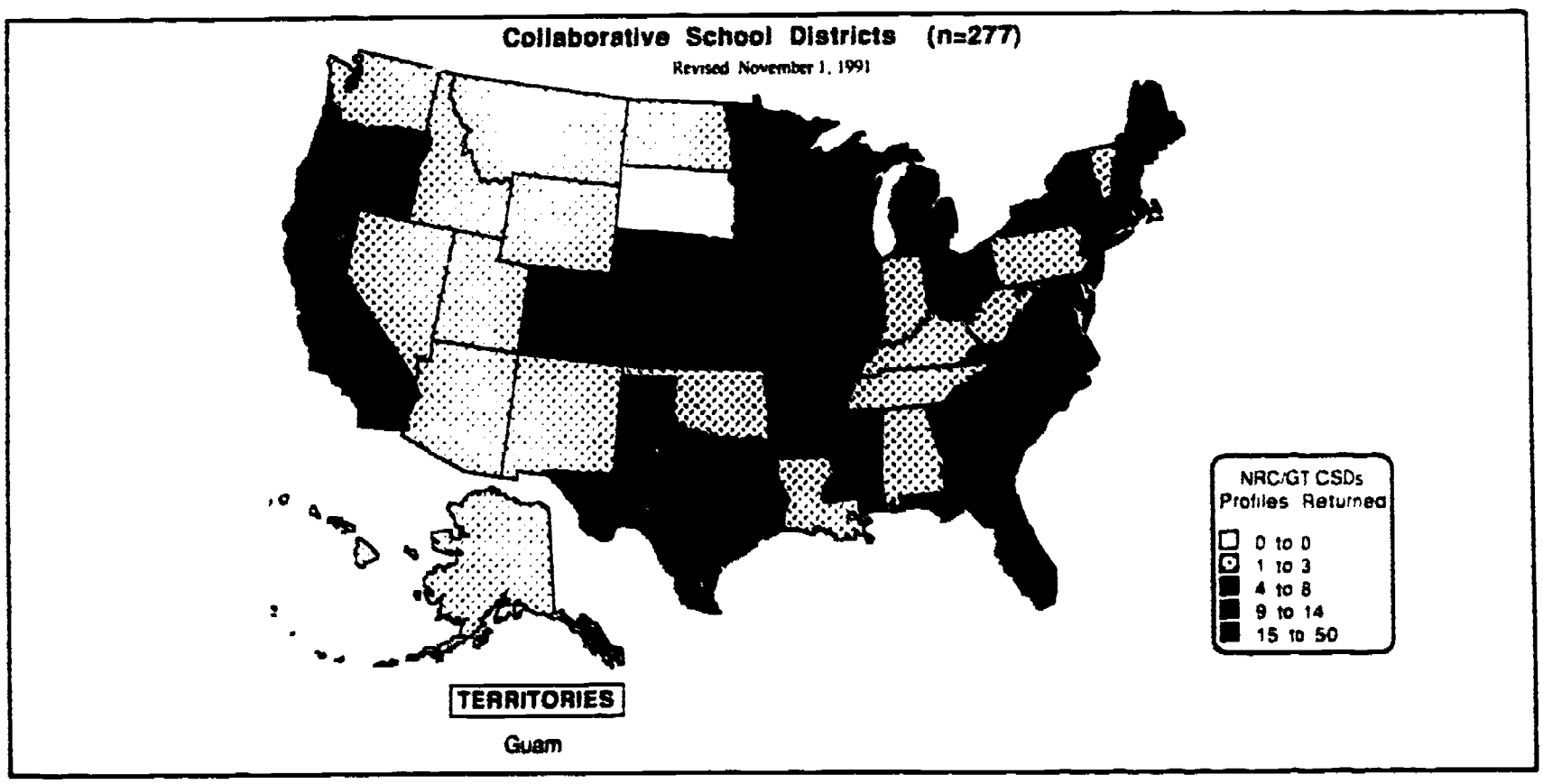
Jann: It is important to feel that what we do is important to someone else and that the work we are doing in the public schools is being recognized.

Stuart: That's right, we are hoping that our efforts will have an impact in schools throughout the country.

Del: Our classroom teachers viewed the study beyond the field of gifted education. They considered it a contribution to quality education as a whole.

Jann: When those official letters arrive from the Center, the importance of gifted education is recognized. I recall when our superintendent came down to my office and said, "I think this is something important and we need to be part of it." This helped give the gifted education movement a sense of validity.

We would like to have every state and territory involved with some aspect of our work over the next four years. If you know of a school district that might be interested in joining our growing family, contact the Center.



The Relationship of Grouping Practices to the Education of the Gifted and Talented Learner: Research-Based Decision Making

Abstract

Karen B. Rogers, University of St. Thomas, St. Paul, Minnesota

In this paper 13 research syntheses were described, analyzed, and evaluated to determine the academic, social, and psychological effects of a variety of grouping practices upon learners who are gifted and talented. Three general forms of grouping practices were synthesized: (1) ability grouping for enrichment; (2) mixed-ability cooperative grouping for regular instruction; and (3) grouping for acceleration. Across the five meta-analyses, two best-evidence syntheses, and one ethnographic/survey research synthesis on ability grouping, it was found that: (a) there are varying academic outcomes for the several forms of ability grouping that have been studied (i.e., tracking, regrouping for specific instruction, cross-grade grouping, enrichment pull-out, within-class grouping, and cluster grouping); (b) the academic outcomes of these forms of ability grouping vary substantially from the effects reported for average and low ability learners; (c) full-time ability grouping (tracking) produces substantial academic gains; (d) pullout enrichment grouping options produce substantial academic gains in general achievement, critical thinking, and creativity; (e) within-class grouping and regrouping for specific instruction options produce substantial academic gains provided the instruction is differentiated; (f) cross-grade grouping produces substantial academic gains; (g) cluster grouping produces substantial academic effects; and (h) there is little impact on self-esteem and a moderate gain in attitude toward subject in full-time ability grouping options.

For the two meta-analyses and one best-evidence synthesis on mixed-ability cooperative learning there was no research reported below the college level to support academic advantages of either mixed-ability or like-ability forms. Although no research had been directed specifically to these outcomes for gifted and talented students, there was some evidence to suggest sizeable affective outcomes. Across one meta-analysis and one best-evidence synthesis on acceleration-based grouping options, several forms of acceleration produced substantial academic gains: Nongraded Classrooms, Curriculum Compression (Compacting), Grade Telescoping, Subject Acceleration, and Early Admission to College. Moderate academic gains were found for Advanced Placement. Either small or trivial effects were found for these six options for socialization and psychological adjustment.

It was concluded that the research showed strong, consistent support for the academic effects of most forms of ability grouping for enrichment and acceleration, but the research is scant and weak concerning the socialization and psychological adjustment effects of these practices. Claims for the academic superiority of mixed-ability grouping or for whole group instructional practices were not substantiated for gifted and talented learners. A series of guidelines for practice, based upon the research synthesized was included.

The work reported herein was supported under the Javits Act Program (Grant No. R206R00001) as administered by the Office of Educational Research and Improvement, U.S. Department of Education. The findings do not reflect the position of the Office of Educational Research and Improvement or the U.S. Department of Education.

Profiles of Javits Gifted and Talented Education Programs

Project STREAM (Support, Training, and Resources for Educating Able Minorities)

Project STREAM is a collaborative effort between three Wisconsin universities and six school districts for the purpose of improving identification and programming options for gifted and talented students with major focus on students from minority populations. STREAM has five principal goals: (1) To develop multiple ways to identify the diverse talents and abilities of minority students; (2) To promote a conceptualization of giftedness which embraces the idea of multiple intelligences; (3) To increase the representation of minorities in gifted programs to the level proportionate to their representation in the population; (4) To help provide systematic and continuous programming for students in the program during middle and senior high school; (5) To increase the likelihood that students will stay in school through high school and subsequently elect to start and complete a baccalaureate degree.

STREAM is based on seven basic assumptions:
1. Talents and abilities are distributed equally without regard for gender, race or nationality.
2. Multiple talents and intelligences exist.
3. Early identification of talents and abilities is necessary.
4. Systematic and continuous attention to students is required.
5. Psychological components are as important as the academic.
6. Universities need to link with minority students, their teachers and their parents when students are at an early age.
7. Parents need to be involved in their children's education.

The Process. Each spring a number of sixth grade students in Beloit, Delavan-Darien, Kenosha, Waukesha, Racine, and Milwaukee are identified for the program. Identification is done in several ways: Traditional ways of identifying students may be used (grades, achievement scores, etc.), but focus is on developing nontraditional means of finding abilities such as creativity, problem solving, leadership, and the arts. Observational analyses are of special interest. Once in the program, students stay throughout middle and senior high school. Each year a new group is added, thus enlarging the STREAM. As talents and abilities are identified, students are integrated into existing gifted and talented school programs which meet their needs.

Student Programming. During the school year, students come to the UW-Whitewater and UW-Parkside campus at least once a semester. Emphasis during the day is on skills and psychosocial factors. One visit includes a cultural event. During the school year special programs are offered for students in their school districts. When necessary, academic assistance is provided. Mentoring is also made available. In summer, students come on campus for a week's residency. They work on skills such as writing, speech, math and on psychosocial dimensions such as self-esteem and confidence. Special talents are fortified through offerings in dance, art and theater. Students work with both minority and non-minority staff, including university faculty, live in the dorm, and learn to use university resources.

Staff Development. STREAM also sponsors staff development opportunities and provides special assistance to teachers of STREAM and other minority students. A practicum-oriented class is offered in conjunction with the Summer Institute and a class is given in Milwaukee once a year. Curriculum for meeting the needs of gifted students in the classroom is being developed, and material resources are made available to both students and staff.

Parent Programs. Programs for parents of STREAM students are also offered. Emphasis is on meeting the needs of parents with the belief that a major way to assist students is through the parents.

For more information on UW-Whitewater STREAM, please contact Dr. Donna Rae Clasen at 6038 Winther Hall, UW-Whitewater, Whitewater, WI 53190 (414-472-1960 or 472-5379) or Eve Johnson (414-475-8459). At UW-Parkside contact Dr. Barbara Shade at Box 2000, UW-Parkside, Kenosha, WI 53141 (414-553-2376).

The Gifted Education Policy Studies Program

James J. Gallagher
University of North Carolina at Chapel Hill

The Gifted Education Policy Studies Program, under the direction of James J. Gallagher at the Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill, was established to analyze and seek solutions to two major issues which interfere with providing full educational services to gifted students. These issues are: (1) state and local policies regarding eligibility for gifted programs which tend to reduce the participation of some gifted students (minority, disabled, and underachievers); and (2) educational reform efforts (cooperative learning and the middle school movement) which may reduce services designed for gifted learners.

In examining the first issue, underserved gifted students, an analysis of existing state policies is being conducted to identify specific policy barriers to identification, as well as states with model policies. A case study of three states which seem to have policies that enable broader identification of gifted students to take place will be conducted to determine how this goal was accomplished. As a result of this work, legislative designs will be developed as models for states wishing to address this issue.

The second study, an examination of the impact of school reform on gifted students, will investigate ways which reform efforts and gifted programs can work together successfully to enhance services to gifted students. A survey designed to identify the current obstacles to this cooperation, and suggested strategies to combine efforts will be conducted. Further investigation will involve the identification of sites where school reform efforts and gifted programs have been successfully interlaced to enhance services for gifted students. From this investigation a paradigm for successful collaboration between school reform initiatives and gifted programs will be developed.

Any one with information regarding cooperative learning or middle school programs which have been designed with particular attention to the needs of gifted students, please contact us:

James J. Gallagher, Director
Mary Ruth Coleman, Associate Director
Gifted Education Policy Studies Program
CB 8040, NCNB Plaza, Suite 301
Chapel Hill, NC 27599-8040

Javits 7+ Gifted Program

Joyce Rubin, Joel Rubenfeld
Community School District 18, Brooklyn, New York

Community School District 18 in Brooklyn, New York, was funded by the United States Department of Education under the Jacob K. Javits Gifted and Talented Students Education Act to develop a demonstration project that would explore ways to identify and provide appropriately differentiated curriculum for students who are usually not identified as gifted through the use of traditional assessment methods, and are often overlooked in the classroom. This includes the economically disadvantaged, students with limited English proficiency, and individuals with handicapping conditions. The theoretical foundation for District 18's project, the Javits 7+ Program, is Howard Gardner's Theory of Multiple Intelligences. District 18 created an early childhood program designed to discover and develop multiple intelligences identified by Gardner's research. Under the leadership of Joyce Rubin, Director of Gifted Programs, and Joel Rubenfeld, Project Coordinator, a team of teachers and staff developed a series of intelligence-fair performance based assessments.

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Profiles of Javits Gifted and Talented Education Programs

Identifying Underrepresented Disadvantaged Gifted and Talented Children: A Multifaceted Approach

Dennis P. Saccuzzo, San Diego State University, University of California, San Diego

A series of studies and statistical analyses are being conducted to develop the fairest possible method for selection of gifted and talented education (G.A.T.E.) students. These analyses are expected to lead to the development of a selection model that will increase the numbers of underrepresented disadvantaged gifted children in proportion to the ethnic populations enrolled in the San Diego City School District, grades 3-12. Anonymous data consisting of information on gender, ethnic background, various ability and achievement test scores and disposition concerning giftedness are being provided by the seven G.A.T.E. psychologists of the San Diego Unified School District. Approximately 5,000 children from a variety of ethnic backgrounds including African-American, Caucasian, Asian, Filipino, and Hispanic will be tested each year for three years. A major focus of the study will be to test the efficacy of the Raven Progressive Matrices Test and Locus of Control Scales in providing unbiased data pertaining to giftedness. A selection model tailored to each ethnic group will be determined utilizing both breadth and depth models. At the end of Year One, a report detailing the fairest and most equitable model will be presented. Year Two will consist of the implementation of the model. In Year Three, the model by which the giftedness in underrepresented disadvantaged children is identified and nurtured will be subject to cross-validation.

In addition, selected gifted and non-gifted African-American, Caucasian, Filipino, and Hispanic children will be given the opportunity to respond to a set of microcomputerized information-processing tasks. These tasks evaluate abilities that cannot be measured by traditional paper and pencil or standard IQ tests.

Archival data from approximately 15,000 gifted students of various ethnic backgrounds will be evaluated. The primary focus of the archival data analyses will be to determine the unique cognitive strengths and weaknesses of children of various ethnic backgrounds.

Javits 7+ Gifted Program

Joyce Rubin, Joel Rubenfeld, Community School District 18, Brooklyn, New York

Continued from page 9

The project director, coordinator and curriculum specialists conduct workshops where the teachers are presented with a variety of strategies, such as using learning centers and contracts to individualize instruction. Supervisors, teachers and visual and performing artists work collaboratively to create an appropriately differentiated curriculum which is presented through conceptual themes. These interdisciplinary units of instruction provide opportunities for students to develop their multiple intelligences, as well as their critical and creative thinking skills. The Javits 7+ teachers create a supportive learning environment, which values all intelligences equally, and enables students to recognize and appreciate their own uniqueness and that of their peers. A team of artists from Young Audiences/New York works cooperatively with program teachers to develop interdisciplinary activities. Because parents are partners in the education of their children, workshops are provided enabling parents to develop strategies which nurture their children's multiple intelligences at home.

There are four pilot classes this year: a first grade at P135; a first grade at P268; a first grade class and a first/second grade bilingual bridge class at P219. Next year the funding will serve ten classes: first and second grade at P135; first and second grade at P268; two first grade classes, a second and a third grade class at P219; and two special education classes in early childhood for youngsters with handicapping conditions (MIS IV) at P279. Additional classes will open at other schools (first grade at P233, kindergarten and first grade at P279), although they are not included in the funding for this project.

Contricipation: The Creative Process for Everyone

Commentary

Morris I. Stein, New York University

CONTRICIPATION is a term I coined to call attention to the fact that everyone is or can be involved in the creative process. A person either *contributes* to the process or *appreciates* the process. Contributors *need* appreciators and appreciators *need* contributors. All too often attention is focused solely on the problems of contributors--the creative person has difficulty getting financial support; the creative person had difficulty being recognized, etc. But appreciators have problems also. Can you imagine what the world would be like without creativity? Imagine having insomnia some night and wanting to read a good book but no one had written it! Imagine wanting to listen to a symphony, but no one had composed it! Imagine needing medicine for a loved one who is ill but no one had discovered/developed it! Appreciators also would have problems in a world without creativity.

For the past several years I have been involved in studying creative adults. A group of particular interest in my study consists of those who have been exposed to both cognitive complexity and emotional security. This would involve doing research on a larger population where one could study parent-child relationships. I don't have access to a gifted population at present. Nor do I have research funds. But, if anyone is interested and where funds would not be a barrier please write to me.

Also I am bringing my 1986 book on *Gifted, Talented and Creative Young People* up-to-date. I would appreciate it very much if anyone who has published since 1986 in the gifted area would send me copies of their papers.

All communication should be sent to Prof. Morris I. Stein, Dept. of Psychology, 6 Washington Place, NY, NY 10003. Or, call: (212)-998-7825 and if no response, call (212) 475-2428.

Young Gifted Children

Commentary

Carol Story, Johnson State College

Giftedness - There are as many definitions for giftedness as there are researchers in the field. The two more popular ones in current usage are the Federal definition and the Renzulli definition. The Federal Office of Education issued the Marland Report in 1972 which defines the gifted as those youngsters possessing intellectual ability, scholastic aptitude, creativity, leadership, talent in the visual and performing arts, and/or psychomotor ability. The Renzulli definition (1978) describes gifted behavior as the interaction of above average ability, creativity, and task commitment as brought to bear upon a special area of interest. Variations of these definitions occur from state to state and ultimately they suggest the need for special programming for the top 2 to 20% of the population.

Characteristics - Gifted children make themselves known by their observable behaviors at an early age. These behaviors include using a large vocabulary and creating metaphors and analogies, demonstrating a long attention span, beginning reading at an early age, exhibiting curiosity, sharing a sense of humor with others, learning rapidly and easily, attending to detail, and displaying a good memory. These children may also have superior physical coordination and at the same time become easily frustrated by their lack of fine motor coordination. They often have many mature, in-depth interests, a strong sense of moral values, and highly developed imaginations which allow them to create stories and songs. The children may be unusually sensitive to changes in their environments, have a heightened awareness of their own differences, and make mental connections between the past and the present. They are also sensitive to other children's needs and feelings and are often effective and efficient problem solvers in both social and academic settings.

Identification - Giftedness in young children is currently being identified through teacher and parent observations and rating scales, self-nomination via a tangible product, psychometrics, or creativity testing. An example of an observational scale for teachers is the Renzulli-Smith Early Childhood Checklist (Renzulli & Smith, 1981) and, for parents, Things My Child Likes to Do checklist (Delisle, 1979). Teachers should also note who other children follow or who directs activities, children who exhibit the characteristics mentioned above, or children who are advanced on developmental scales (see Beaty, 1986; Cohen & Stern, 1983). The most commonly used testing devices are the Stanford-Binet, the WISC-R, and the Goodenough-Harris Draw-A-Person Test (Harris, 1963). The Slosson Intelligence Test or the Peabody Picture Vocabulary Test are often initial screening measures, but are less valid. Creativity measures include the Torrance Test of Thinking Creatively in Action and Movement (1981) and the Wallach and Kogan Creative Battery (1965). Caution should be exercised in using creativity tests as a measure for giftedness because of concerns about their validity. Multiple criteria are recommended in the identification process.

A Few Examples - Young gifted children do not come wrapped in colorful paper nor do they all exhibit the musical abilities of the young Mozart sharing his first composition at the age of four or five. The following cases are more typical.

At age three, Zachary was content to spend hours experimenting with the various types of equipment available at the science table. He observed the ball rolling through the elaborate tunnel structure hundreds of times and made the water flow through the water wheel hour after hour. He tried to understand what was happening and figure out how and why these things occurred. He used his problem solving skills in social situations, also. When Dominic stumbled into the cars and elaborate road structure in the block corner, Zach simply moved the structure out of Dominic's pathway and helped Dominic begin his own building in another area.

Four-year-old Margaret sat with earphones perched on her head listening intently to a pre-recorded story. While this is not an uncommon activity in many preschool settings, Margaret's eyes followed the words on the page. Later, she read some of the book to a younger school chum. Margaret demonstrated her writing skills when she produced a complete story unassisted and with very little invented spelling. She showed her leadership abilities when she told another child, "Make a capital A like this" because he was struggling with making the lower case letter modeled on the board.

On the first day of school, Miles bounded into the first grade classroom reporting that, "At home we have a telescope and watch the stars and Mom and I feed the birds and would you like me to read to you from my book?!" Test results revealed that Miles had an above average intelligence and had mastered most of the first grade curriculum. The teacher modified the regular classroom program for Miles and allowed him to work independently at his own level. During the year, among many other activities, Miles wrote and illustrated a book about area birds, set up a bird feeding station outside the classroom windows, and made presentations to other classes about his area of interest. He also became an occasional peer tutor for less able classmates, often lead small group activities, and enjoyed the rough and tumble of the playground like any other six-year-old child.

Programming - Early childhood educators working with gifted children are often asked, "What is the best program for young gifted children?" The answer to this question is that no one program is best for every child. Finding the best program suggests developing one to meet a child's individual needs and interests which also meets parental philosophies for educating children, as well as a program that is developmentally appropriate for young children. Several options exist for meeting the special needs of the young gifted child. One choice is between homogeneous and heterogeneous grouping. Heterogeneous grouping is usually recommended since children are not generally gifted in all areas and should be with age-mate peers, as well as intellectual peers. This type of grouping allows for the development of positive self-concepts more than homogeneous grouping does, but this is not often a problem for young gifted children. A second programming choice is for acceleration and/or enrichment. Grade acceleration is effective for children who are maturationally ready. Part-time acceleration (within specific content areas, i.e. math or reading) can also be appropriate if support is given to that concept by teachers throughout schooling. Enrichment encourages the broadening or deepening of curricular content. It can be a successful way to provide for heterogeneous grouping and, at the same time, meet the particular needs of the gifted child. One concern, however, is that one classroom teacher may not be able to meet the needs of the young gifted child within the classroom setting and, at the same time, deal with all of the other children without additional assistance (aides, administrators, parents). Recommended curricular content for young gifted children includes teaching basic skills, building knowledge, developing creative and critical thinking skills and providing for affective development (Kitano, 1986). These curricular strategies are appropriate for all children. More differentiated content includes opportunities for creative productivity as previously illustrated by Miles' bird book and feeding station described above or Mozart's early compositions (Kupferberg & Topp, 1978; Sloan & Stedtnitz, 1984).

Common concerns - There are some concerns which surround young gifted children. They are addressed briefly in the following statements.

1. Early identification of giftedness is important in order that the young child will be nurtured to his/her fullest potential and does not become an underachiever.

2. Parents need to value and carefully nurture the whole child, not just the part of the child that achieves academically. Parents must also be careful not to pressure their child and create problems with perfectionism or with affective development (see also Elkind, 1987).

3. Comparisons with other children should be avoided. Caution must be used when employing the "gifted" label lest siblings or peers be made to feel "ungifted" as a result.

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JUST OFF THE PRESS

Gifted: Challenge and Response for Education

Joe Khatena, Mississippi State University

The intent of the book is to put into one place a representative sample of the most significant theory and practice on the subject. The book is solidly based on research and practice. It gives appropriate attention to subjects such as:

- the need to understand and identify the abilities of gifted children
- to get to know their developmental characteristics
- to be aware of the problems they face and how they may be assisted to overcome them
- the nature of their intellectual processes and methods that have effective productivity
- to survey various educational models designed for better learning
- to consider several of the most pertinent motivational approaches and their relevance for gifted education
- and to regard their education in terms of the past, present and future.

An unusually comprehensive treatment of diverse contributions to the field, the book captures the essences and essentials of the most innovative ideas, instructional materials, measurement approaches, theories in historical perspective, and modern technological correlates of giftedness. Rich in both psychological theory and educational philosophy and technology, the book fairly represents the many ideas and issues that have made gifted education an exciting one in recent years.

In addition, the book gives meaningful and significant examples and case studies of gifted children, guides identification of talent, provides strategies for developing creative imagination, and presents various checklists that focus attention on characteristics and attitudes, identification procedures of underachievement, and the like.

F. E. Peacock Publishers, Inc.
P. O. Box 397, Itasca, IL 60143-0397
(708) 350-0777

Stage and Structure in the Development of Children With Various Types of Giftedness. In R. Case (Ed.), *The Mind's Staircase: Exploring the Conceptual Underpinnings of Children's Thought and Knowledge*

Abstract

Marion Porath, University of British Columbia

This study investigated the cognitive development of gifted children from a neo-Piagetian perspective. Case's (1985) theory of intellectual development provided a model of executive functioning within stages of development. This model was seen as appropriate for addressing issues raised in the literature concerning the need for a process analysis of gifted children's thinking and the need to clarify to what extent a young gifted child's thinking can be considered similar to that of an older, less intelligent child. The study also sought to account for the results of Piagetian studies which are equivocal about the degree of developmental advancement evidenced by gifted children.

Children identified as gifted on both verbal and performance measures were compared to chronological and mental age control groups on measures chosen to provide a comprehensive description of gifted children's thinking within a developmental context. A group of verbally gifted children was compared to chronological and mental age control groups to test the hypothesis that the inconsistent results of Piagetian studies may be due to a disparity between verbal ability and the more spatially-loaded Piagetian tasks. In addition, a small group of spatially gifted children was compared to chronological and mental age control groups. Six-year-old gifted children were chosen for the study. Mental age controls were, on average, eight years old.

On measures which confounded learning with developmental level, gifted children performed like their MA peers. On measures which reflected development more exclusively, performance was not significantly different from their CA peers. In the case of children gifted on both verbal and performance measures, MA-equivalent abilities were demonstrated on the balance beam and letter series tasks, measures which would appear to require both verbal and spatial/performance abilities. Verbally gifted children told MA-equivalent stories and spatially gifted children drew MA-equivalent pictures. This finding suggests an alternative explanation for the findings of Piagetian studies, namely that some Piagetian tasks are learning confounded and some are not. Performance on tasks believed to be learning confounded was, however, limited to advancement of one substage. This suggests that there is an "optimal level" of development (Fischer & Pipp, 1984) which can be expected in certain problem solving situations, even for bright children.

A model of gifted children's thinking within Case's neo-Piagetian framework provided knowledge of structural level and processing capacities. Some specific abilities were also identified, such as linguistic and graphic maturity. These appeared to be independent of a general/developmental model and were much farther in advance of age expectations. Further research will address the nature of the relationship between these two types of knowledge and the implications for educational planning.

I would be pleased to hear from anyone with interest in developmental approaches to giftedness. Please contact:

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(604)822-6045 Fax (604)822-3302

References

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Fischer, K. W., & Pipp, S. L. (1984). Processes of cognitive development: Optimal level and skill acquisition. In R. J. Sternberg (Ed.), *Mechanisms of cognitive development* (pp. 45-80). New York: W. H. Freeman.

Gifted Child Registry Home Environment Study

Ray H. Swassing, Ohio State University

The purpose of the Home Environment study is to apply a systems approach for understanding the influences of home life on the development of talent, particularly in homes where there are children who are both gifted and have physical and/or sensory disabilities (hearing and vision). A second group of families will include a gifted child or children and a sibling with a disability. The current experimental instrument, The Gifted Child Registry Home Environment Survey (GCRHES) (in fourth revision) is composed of 180 items divided among two forms (A and B). The items were developed from the literature using the concept of "presses" or environmental factors that promote abilities (Marjoribanks, 1972). To define a scale that is efficient and conceptually sound, data gathered with the two sets of forms will be analyzed and one form of 40 to 60 items will be developed. The final scale will be used as the basis for home training materials and activities for fostering abilities within family life settings. Given the limited number of children that meet these criteria, the Home Environment study is seeking a national and international database. For information and participation contact the author at Ohio State University, 356 Arps Hall, 1945 North High Street, Columbus, OH 43210. Telephone requests at (614) 292-8787.

Marjoribanks, K. (1972). Environment, social class, and mental abilities, *Journal of Educational Psychology, 63*, 103-109.

A Case Study of the Childhood Art Work of An Artistically Talented Young Adult

Enid Zimmerman, Indiana University

This case study focuses on the graphic development of a highly talented art student through retrospective accounts of his reactions to his spontaneous art work done from age 3 until he was in the tenth grade. Data from this case study appear to support claims that interactions among factors of biology, culture, skill mastery, personal disposition, and modeling after images of others can be used to explain insights into talented children's development in art.

In this study, ability to depict the world realistically is viewed as only one indicator of art talent. Some artistically talented young people's depiction of objects is influenced by Western spatial conventions; others depict visual narratives using details, theme and variations, humor, paradoxes, puns, metaphors, and deep emotional involvement. It is hypothesized that artistically talented young people may choose to work in one mode or another at different phases of their art development.

I am seeking information from others who might be conducting case studies of the work of artistically talented young people to compare with this one to substantiate or refute generalizations generated in this research. It is hoped that through such case studies an understanding of how art talent develops and new ways of identifying artistically talented students may emerge.

Study of Precocious Youth

Cheryl E. Sanders, Iowa State University of Science and Technology

The Study of Mathematically Precocious Youth at Iowa State University (SMPY at ISU) is conducting a longitudinal study of individuals identified as verbally, but especially mathematically, gifted. SMPY officially started under Dr. Julian C. Stanley's leadership in 1971 at Johns Hopkins University; the longitudinal study continues under the direction of Dr. Camilla P. Benbow at Iowa State University. Youth who reason extremely well mathematically and verbally are identified in 7th and 8th grade via talent searches using tests designed for college-bound high school students, the SAT and more recently the ACT. Selected samples from these talent searches, which will cover a 20 year period, are being studied through their adult lives. The purpose of this follow-up study is to characterize the process whereby childhood potential unfolds into adult achievement and then identify the factors that impact upon that process. Investigated are the development, needs, and characteristics of intellectually able students. In addition, the longitudinal study helps evaluate the impact of various educational options upon gifted children's development. SMPY's ultimate goal is to utilize the knowledge gained through research to improve both the quality and speed of gifted students' education, as well as to gain a better understanding of the nature, nurture, and consequences of mathematical and verbal precocity.

But What About the Prom

Kathleen Noble, University of Washington

Many adults consider radical educational acceleration to be detrimental to adolescents, largely because of the perceived social benefits of attending high school. But many young people consider these benefits to be dubious, at best, and are quite happy to forego them. How do students who elect to skip high school in favor of early university entrance evaluate their choice? This study investigated the perceptions and experiences of 25 students who are currently enrolled in the University of Washington through participation in the Early Entrance Program (EEP). All entered the UW before the age of 15 without attending high school. The principal investigator, Dr. Kathleen Noble, and her research assistant, Julie Drummond (a UW junior and "EEP'er"), conducted interviews with a large sample of EEP students and all members of their preparatory faculty to answer a number of questions (e.g., why students and their families chose this option, what characteristics are needed to succeed within the EEP, how important is the presence of a peer group, how do professors and regular-age classmates relate to their presence, and what are the advantages and disadvantages of radical educational acceleration?). Data from these interviews are currently being analyzed and will be published upon completion.

RESEARCH IN PROGRESS

A Comparison of Two Painting Teachers of Talented Early Adolescent Art Students

Enid Zimmerman, Indiana University

The purpose of this study was to describe, analyze, contrast, and compare characteristics of two painting teachers to determine what factors might be crucial in successful teaching of talented early adolescent art students. In on-site case studies in the art classrooms, observations, interviews with students and their teachers, time sampling, analysis of student application forms, observer journals, and group conversations with students and observers were used to collect data.

Although art work produced in both classes was at a high level, and students evaluated both teachers positively, one teacher appears to have presented a more coherent and complete experience than the other. This conclusion is based on the observation that success in an art class is the result of more than simply teaching talented young people technical skills. The proactive teacher was able to develop an environment conducive to active learning, make significant curricula and instructional decisions, and generate an interest in learning and thinking among his students.

These case studies call into question established methods of evaluating success of teachers of talented young people through student products and interviews. I am interested in contacting others who are conducting similar research to determine if generalizations from this study might be accepted or refuted.

Improving the *Parental Evaluation of Children's Creativity*

Mark A. Runco, Diane Johnson
California State University, Fullerton

This investigation is a simple extension of social validation research reported by Runco (1989). He developed the Parental Evaluation of Children's Creativity (PECC). We intend to modify that measure, using much the same methodology as before. In particular, we plan to administer the Adjective Check List (ACL) (Gough & Heilbrun, 1980) to several groups of adults. The adults will be asked to complete the ACL once to describe a creative child, and once to describe an uncreative child. Half of the group will receive the "creative child" instructions first, and the other instructions for completing the ACL will be taken from Gough and Heilbrun (1980), with the only change being the specification of "creative" or "uncreative child." The intent is to find 20-30 adults in each of the four groups: parents who have never taught; teachers who are not parents; parents who have taught; and adults who are neither teachers nor parents. This will improve upon the earlier measure in that only experienced parents (with no teaching experiences) will be used. (Teachers' ratings can be obtained with the "socially valid" Teachers' Evaluation of Students' Creativity (TESC; Runco, 1984, 1987).) Additionally, as it stands, the PECC only contains indicative items. Theoretically, it should also include contraindicative items. Hence the questions about uncreative children.

Scoring Divergent Thinking Tests Using Total Ideational Output and a Creativity Index

Mark A. Runco, Wayne Mraz
California State University, Fullerton

Several educational theorists have suggested that divergent thinking should be encouraged in the classroom. There are, however, various problems with the scoring techniques currently used with tests of ideational creativity. The present investigation tested two possible improvements in scoring procedures. The first potential improvement involved ratings of total ideational output. This procedure is in direct contrast to the conventional scoring of single ideas. The second improvement was to score ideational sets specifically for creativity rather than for the conventional indices (e.g., originality, flexibility, and fluency). The utility of these potential improvements was determined by calculating the reliability and discriminant validity of scores based on examinees' total ideational output. Ideational output was judged by 30 college students (mean age of 27 years). The ideas that were rated were given by 24 adolescents who had received two Uses tests (shoe and tire) and two Instances tests (strong things and things on wheels). Results indicated that the ratings of total output had high inter-rater reliabilities and moderate inter-item reliabilities. There was, however, poor discriminant validity between judges' ratings of creativity and ratings of intelligence. The results are interpreted in the context of theories of creativity.

NRC/GT: *Update of Year 2 Activities*

From page 5

Learning Outcomes Study - The University of Virginia

- Self-concept assessment
- Content assessment
- Motivation assessment
- Behavioral adjustment assessment by teachers and parents

Theory-Based Approach to Identification, Teaching, and Evaluation - Yale University

- High school psychology text
- Triarchic abilities test
- Assessment of intelligence
- Problem solving/thinking skills
- Product development
- Curriculum match to intellectual style

The resulting matrix is several pages and it really illustrates how our studies reflect the educational issues of interest at the national level. An abbreviated version of the matrix, listing the studies without the major elements, is displayed in this newsletter.

Future issues of the NRC/GT Newsletter will summarize more findings from our Year 1 studies. We will also keep you apprised of the NRC/GT publications at national conventions.

The National Center for Research on Evaluation, Standards, and Student Testing (CRESST)

Eva L. Baker, Robert L. Linn, University of California, Los Angeles

The National Center for Research on Evaluation, Standards, and Student Testing (CRESST) marks its first anniversary this October. CRESST, whose primary offices are located on the UCLA campus, is involved in the improvement of educational quality through advanced assessment research and development. CRESST is committed to serving educational policymakers, practitioners, and the public through a variety of services, including an extensive research database of over 340 assessment reports, monographs, and papers. Copies of these reports are available through the Center by calling (213) 206-1512.

For other types of assistance on current CRESST assessment programs or if you would like to discuss your current program with a CRESST project director, please call the Center at (213) 206-1532. Or write to CRESST/UCLA, Graduate School of Education, 145 Moore Hall, 405 Hilgard Avenue, Los Angeles, California 90024-1522. CRESST is committed to serving anyone involved or interested in assessment research and is happy to help you in any way possible.

Congratulations to a G/T Colleague

Special congratulations go out to Dr. Gwendolyn Cooke from her friends and colleagues at The National Research Center on the Gifted and Talented and The University of Connecticut. Gwendolyn is a graduate of the Teaching the Talented Program and she has been named urban services director at the National Association of Secondary School Principals (NAASP).

Gwendolyn's role at the NAASP will be to develop programs to strengthen the leadership skills of principals and assistant principals in urban schools. As a former principal in Baltimore, Maryland, we know that she will bring her multiple talents and experiences to the nation's largest organization of school administrators.

Young Gifted Children

From page 11

4. Parents and teachers must listen to gifted children. They should allow them time to think and to play and provide the opportunities for children to expand to their fullest potential as they indicate their specific interests and abilities.

5. Gifted children need the guidance and wisdom of adults; they may possess a greater degree of ability in a given area, but they do not know everything.

6. Gifted children have the right to an education that meets their special needs; well-informed advocacy is the role of both parents and teachers.

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