## REFORT RESUMES

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24 THE RELATIONSHIPS BETWEEN CERTAIN TEACHER CHARACTERISTICS AND ACHIEVEMENT AND CREATIVITY OF GIFTED ELEMENTARY SCHOOL STUDENTS. FINAL REPORT SUMMARY. BY- MCNARY, SHIRLEY R. SYRACUSE UNIV., N.Y. PUB DATE 30 APR 67 REPORT NUMBER CRF-S-348-SUMM CONTRACT OEC-5-10-399 EDRS PRICE MF-\$0.25 HC-\$0.20 3F.

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THE RELATIONSHIP BETWEEN TEACHER CHARACTERISTICS AND THE DEGREE OF CHANGE SHOWN BY GIFTED ELEMENTARY PUPILS IN CONVERGENT AND DIVERGENT THINKING AREAS WAS INVESTIGATED. CHARACTERISTICS WERE ASSESSED BY MEASURES OF INTELLIGENCE, PERSONALITY FACTORS, AND A PERSONAL INFORMATION QUESTIONNAIRE. SIX PRE- AND POST-TESTS OF CONVERGENT AND 4 TESTS OF DIVERGENT PRODUCTION MEASURED THE GROWTH OF THE GIFTED CHILDREN OVER 1 ACADEMIC YEAR. A SERIES OF MULTIPLE REGRESSION EQUATIONS WAS CALCULATED TO ASSESS THE RELATIONSHIP BETWEEN THE CHANGES IN THE 23 CLASSES IN THE TEST SCORES AND THE 34 TEACHER, CLASS, AND STUDENT VARIABLES. FOR EACH MEASURE OF CHANGE, ITEMS SIGNIFICANT AT THE 1 PERCENT LEVEL WERE GROUPED FOR THE DEVELOPMENT OF A FINAL REGRESSION ANALYSIS LEADING TO AN INFLUENCE PROFILE. IT WAS FOUND THAT TEACHER PERSONALITY TRAITS WERE THE MOST EFFECTIVE OF THE CHANGE-PRODUCING VARIABLES AND THAT DIFFERENT TYPES OF TEACHERS INFLUENCED DIFFERENT AREAS OF GROWTH. THE CHILDREN'S READING GROWTH RELATED SIGNIFICANTLY TO A TEACHER'S VERBAL I.Q., AND GROWTH IN WRITING RELATED SIGNIFICANTLY TO A TEACHER'S ANNUAL INCOME AND THE NUMBER OF COURSE-WORK HOURS IN THE EDUCATION OF GIFTED CHILDREN. THE NUMBER OF STUDENTS FER CLASS SIGNIFICANTLY AFFECTED GROWTH IN MATH. STUDY IMPLICATIONS ARE THAT GIFTED CHILDREN SHOULD BE EXPOSED BOTH TO TEACHERS WHOSE PERSONALITY TRAITS ARE BEST SUITED TO TEACH THE DIVERGENT AREA AND TO THOSE BEST SUITED TO TEACH THE CONVERGENT AREA, WITH TEACHER SELECTION BASED ACCORDINGLY. (MS)

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FINAL REPORT SUMMARY

Project No. S-348 Contract No. OE-5-10-399

## THE RELATIONSHIPS BETWEEN CERTAIN TEACHER CHARACTERISTICS AND ACHIEVEMENT AND CREATIVITY OF GIFTED ELEMENTARY SCHOOL STUDENTS

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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## **SUMMARY**

This study investigated the relationships between the teacher characteristics of intelligence, personality, and personal information (e.g. age, sex, training, experience, marital status, etc.) and change manifested by gifted elementary students in convergent and divergent thinking areas. The characteristics of the teachers were assessed by measures of intelligence, personality factors, and a personal information questionnaire. The growth of the gifted classes were assessed by six measures of convergent production and four measures of divergent production.

The tests measuring convergent and divergent production were administered by pre- and post-testing of the children. The pre-testing took place at the beginning of the 1964-1965 school year and post-testing at the conclusion of that academic year.

A series of multiple regression equations were calculated to assess the relationship between the changes in the 23 classes in the convergent and divergent production scores and the 34 teacher, class, and student variables. For each measure of change, all items that proved significant at the one percent level (Student's t of 2.58 or higher) were grouped together for the development of a final regression analysis, leading to an influence profile for each change.

This study has shown that teacher characteristics do significantly influence the growth of fourth, fifth, and sixth grade self-contained classes with a mean I. Q. of 120 or better. However, there was no single teacher characteristic that was significantly related to all areas of convergent and divergent growth in the students.

Teacher personality characteristics were found to be more effective in producing change in the children's scores than were the other variables studied. In general, the teacher who appeared to have most significantly influenced growth in the divergent areas was emotionally mature (that is, not given to emotional outburst), energetic, persistent, friendly, and without a crystallized pattern for attaining social approval toward which one feels impelled to strive. In general, the teacher who appeared to have most significantly influenced growth in the convergent area was submissive, dependent, cheerful, alert, not a staunch guardian of morals and manners, and would have a natural warmth and liking for people.

Three items of teacher personal information did prove significant although not to the same degree as teacher personality traits. Verbal I. Q. was significantly related to growth in reading and in flexibility;

yearly income of the teacher and number of semester hours in coursework concerning the gifted both were significantly related to growth in writing.

Two class characteristics proved significant, although again not to the same degree as teacher personality traits. The number of students per class significantly affected growth in mathematics, and girls were more fluent than boys.

The implications of this study are: (1) gifted children should be exposed both to teachers whose personality traits were best suited to teach the divergent area and to those best suited to teach the convergent area; (2) the effect of teacher I. Q. cannot be fully evaluated until a broader range of I. Q. than existed in the project is studied; (3) teacher selection should be based primarily on personal information rather than on existing practices such as teacher rotation, etc.