

# Psychoeducational Development of Gifted and Talented Learners

Donald F. Sellin  
Jack W. Birch



AN ASPEN PUBLICATION

---

# **Psychoeducational Development of Gifted and Talented Learners**

**Donald F. Sellin, Ed.D.**

**Western Michigan University**

**and**

**Jack W. Birch, Ph.D.**

**University of Pittsburgh**



**AN ASPEN PUBLICATION**  
**Aspen Systems Corporation**  
**Rockville, Maryland**  
**London**  
**1981**

---

Library of Congress Cataloging in Publication Data

Sellin, Donald F., 1934-  
Psychoeducational development of gifted and talented  
learners.

Bibliography: p. 295.

Includes index.

1. Gifted children—Education—United States.
2. Gifted children—United States—Psychology.
3. Talented students—United States. I. Birch, Jack W.  
II. Title.

LC3993.9.S4            371.95            81-3467

ISBN: 0-89443-362-8            AACR2

Copyright © 1981 by Aspen Systems Corporation

All rights reserved. This book, or parts thereof, may not be reproduced in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system now known or to be invented, without written permission from the publisher, except in the case of brief quotations embodied in critical articles or reviews. For information, address Aspen Systems Corporation, 1600 Research Boulevard, Rockville, Maryland 20850.

Library of Congress Catalog Card Number: 81-3467  
ISBN: 0-89443-362-8

*Printed in the United States of America*

To our wives, *Lucy* and *Jane*, whose encouragement and patience made our efforts possible. We also acknowledge the lessons learned from our own children, *Andrew*, *Dee Ann*, *Elizabeth Ann*, *John*, *Mike*, and *Philip*, and grandchildren, *Andrew Tim* and *Martha Jane*.

# Overview

Do gifted and talented children and youth need special attention? Some say they definitely do, because bright, creative children, as a group, do relatively poorly in school and society. Others argue that these children already receive enough special attention because they often win the highest school grades, the top honors, the major scholarships, the most desirable jobs, and the approval of society. There is some truth in both points of view. In the resolution of that puzzling paradox is the rationale for the authors' view that special attention to giftedness and talent is very much needed.

Today's theories of child psychology and today's elementary and secondary schools do appear to be oriented toward the most able. Child development specialists emphasize "wellness." Favorable attention is drawn to early attainment of mental and physical milestones. Parents are advised to stimulate social and language development in young children. Teachers praise those who earn high grades. A member of the fastest moving school group has a great deal of prestige. Privileges, formal and informal, are reserved for high achievers. Recognition (plaudits from grandparents, honor rolls, dean's lists) and material help (awards, scholarships) go to those with the top test scores and grade point averages. In short, home and school reward systems tilt toward the achievers.

School curricular and cocurricular structures show the same bias. Prestige-laden secondary school courses are for the college-bound. Counselors direct the students with the highest grades into low-enrollment honors classes and seminars that are taught by the most scholarly teachers. Librarians happily give individual attention to the quietly thoughtful and studious. Clubs organized for such activities as forensics, dramatics, student newspaper and yearbook, chess, magic, and photography draw leading teachers as advisors and leading students as major participants. Adults held up as models by school staff and parents are those who exemplify the enormous value of "going on" to higher and higher education. From kindergarten to the

valedictorian's address, the most able seem to be the most valued and the most honored.

Yet a wave of protest rose during the 1960s and 1970s, and the nation's families and schools were challenged to improve opportunities for gifted and talented children and youth. Strong charges were lodged, alleging neglectful practices with these young citizens. For example, a major national study concluded that gifted and talented children are disadvantaged and handicapped in the usual school situation. In fact, it has been observed that, when mental age and chronological age are compared, the gifted are the most retarded group in the schools (U.S. Office of Education, 1972). A few years later a leading scholar said:

For decades, information has been amassed which depicted clearly the extent to which the gifted are retarded in light of their respective capacities. No condition is more clearly recognized by those conversant with the field of the gifted . . . (Newland, 1976, p. 333)

The indictment was repeated more recently by specialists in underachievement:

Gifted children are the most misunderstood and educationally neglected group in American schools today. No other group of American children, except the Blacks, has suffered so much from misunderstanding of their needs, from lack of interest in them as persons, and from exploitation under great pressure to perform for the benefit of society. (Whitmore, 1980, pp. 3 and 7)

Why do esteemed educational and social psychologists, as well as other professionals and scientists, make accusations like these?

Some facts refute and some support the position. Today's homes and schools have many positive conditions that nurture gifted and talented students. Most parents and teachers enjoy many of the qualities of bright children. Also, *some* such students receive very high-quality education. At the same time, many negative conditions crop up in almost all schools. It is these unsatisfactory conditions, which have been linked to maladjustment, underachievement, and excessive dropout rates among the most able young people, that are being challenged. It is these conditions that Whitmore (1980) speaks of when she says:

Gifted children, by nature, are highly inquisitive beings who normally should become "high achievers" as a result of their curiosity, experimentation, discoveries, assimilation-organization-

use of information, perception of relationships, and memory. Gifted children are made into underachievers as a result of specific handicaps; a dull, meager curriculum that destroys motivation to achieve in school; inappropriate teaching strategies that are incompatible with their learning styles; or a lack of adult assistance to the child in need of learning how to handle socioemotional conflict, to gain self-control, and to set realistic self-expectations. (p. 132)

No nation can long tolerate the loss of these extraordinary human resources. This book is designed to help educators, parents, and other community leaders respond to the problems of gifted and talented children that so many responsible investigators have found in need of correction. There is solid research evidence that the specific human handicaps, the curricular limitations, the flagging motivation, the failure to capitalize on individual learning styles, the shallow and narrow instructional goals and objectives that stand in the way of high-quality education can be corrected in most cases. There is also competent proof that confidence-building adult-student relationships can replace those that are destructive to the mental health of gifted and talented children. A point made in the 1972 U.S. Office of Education report on the gifted and talented should be emphasized:

The boredom that results from discrepancies between the child's knowledge and the school's offerings leads to underachievement and behavior disorders affecting self and others. Early identification would enable schools to prevent rather than to attempt later on to cure underachievement. (p. 12)

Probably at no other time in history has there been such an effort to ensure that the most able young people of this nation have real opportunities to fulfill themselves and to contribute, in the process, to society. One vivid example of this effort is the toll-free hotline on gifted and talented education that has been launched under the sponsorship of the U.S. Department of Education. By calling (800)424-2861 one can obtain information and literature in Spanish or in English on research projects in gifted and talented education. The service also provides referrals to experts.

## **THE KNOWLEDGE BASE ABOUT GIFTEDNESS AND TALENT**

A great deal of reliable information about giftedness and talent is available as a result of many serious and painstaking investigations. The first was in England more than a century ago (Galton, 1869). The number of psychosocial and psychoeducational studies is now estimated to be more than 1,000,

and they provide an accumulation of research of major proportions and significant value. The sifting and winnowing of this mass of information by diligent and insightful analysts make it possible today to examine the nature and needs of gifted and talented individuals from a foundation of facts, well-documented generalizations, and principles.

A major point that emerges from a study of contemporary practices and thought is that giftedness and talent can be nurtured quite well while the separation of pupils into special groups is kept to a minimum. The great majority of gifted and talented children and youth can receive optimum education in their local schools, in classes with other children. This requires, first, that these exceptional pupils be recognized and, second, that regular teachers be furnished with sufficient in-service preparation, consultation from specialists, and the requisite time, materials, aides, and volunteers. There are differences of opinion on this matter, and the book acknowledges other approaches. We are satisfied, however, that the know-how is available and needs only to be carefully and thoughtfully applied.

## **THE CONTENT**

To locate gifted and talented children and to deliver individualized education of high quality and of substance to them is an acknowledged objective in most nations today. There is now a sufficient knowledge base about the social and psychological qualities of highly able learners and about effective educational practices to reach that public objective. The thrust of this book is to provide educators and other interested groups with information regarding the nature and needs of able learners and the preferred ways to undertake their individualized education.

## **ORGANIZATION OF THE BOOK**

The book is divided into five units. Units I and II identify the nature and origins of superior abilities. Units III through V reflect the needs of gifted and talented learners. The Unit Synopsis, Key Ideas, and Prototype establish a set for the subsequent chapters in each unit. Each unit concludes with a Summing Up and an Enrichment section, which suggests activities for the application of unit content. There are several competing approaches to the nurture of superior human abilities. Our preference is for individualized education programs, i.e., the orderly matching of aptitudes to curriculum content and resources. For us, high-quality education involves managing and maintaining that optimal match. Pupil attributes must be the foundation for



program design. Their identification is the first step toward individualization.

## A STARTING POINT

There are many definitions and descriptors of gifted and talented persons. One widely used definition was advanced by the U.S. Office of Education and became part of Pub.L. 91-250. This definition, with occasional minor variations, is used by a majority of state departments of education. It refers to gifted and talented children as:

those identified by professionally qualified persons, who by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

Children capable of high performance include those with demonstrated achievement and/or potential ability in any one of the following areas: 1) general intellectual ability, 2) specific academic ability, 3) creative or productive thinking, 4) leadership ability, 5) visual and performing arts, and 6) psychomotor ability.

. . . Evidence of gifted and talented abilities may be determined by a multiplicity of ways. These procedures should include objective measures and professional evaluation measures which are essential components of identification. (p. 10)

The adequacy of this definition is examined in Chapter 3. Our purpose in this Overview is to highlight significant points where there is broad agreement about what is meant by gifted and talented persons. We propose these points, in addition:

- *Gifted* and *talented* are terms applied to persons who may possess one, several, or all the attributes listed in the Office of Education definition. Consequently, persons should be viewed in the light of their particular profiles of abilities.
- Highly able learners tend to be positively and humanely motivated, stable, and well adjusted.
- A psychological assessment of intelligence, using individual standardized intelligence tests, is a very valuable means of determining a child's range and variety of abilities. Such an evaluation is one important index of

potential or of performance. As seen in Units II and III, parent and teacher observations, as well as other data, can also be valid indicators of extraordinary ability.

- Most persons of high intelligence or talent show signs of their potential very early in life, long before starting to school. Attention to these budding abilities is highly important.
- Some children with great potential are limited by poor physical nourishment, by vision or hearing impairments, by emotional and social forces in their environments, and by neglect or abuse. Special efforts should be made to find and help these children.
- There are marked individual differences among gifted and talented persons in their backgrounds, their interests, their achievement motivation, and their attainments. The reasons for these differences are fertile fields for study.

## **THE CHALLENGE**

The identification of superior human abilities, whether artistic, athletic, or academic, is a strong tradition in all the world's civilizations. The increasing complexity of life and the heightened awareness of human interdependency bring sharply into focus the imperative that the most valuable of all material resources, the potential of children and youth, must now command attention as never before.

# Table of Contents

<b>Overview</b> .....	<b>xi</b>
<b>UNIT 1—UNDERSTANDING AND DESCRIBING HUMAN ABILITIES</b> .....	<b>1</b>
Synopsis .....	1
Key Ideas .....	1
A Prototype.....	3
<b>Chapter 1—Understanding Human Abilities as Performance and Operations</b> .....	<b>5</b>
Human Abilities as Performance: Bloom.....	6
Human Abilities as Operations: Guilford .....	18
<b>Chapter 2—Understanding Human Abilities as Adaptation</b> .....	<b>27</b>
Intelligence as Adaptation: Piaget .....	27
A View from the Top.....	33
<b>Chapter 3—Describing Gifted and Talented Persons</b> .....	<b>39</b>
Identifying Dimensions .....	39
Defining Gifted and Talented.....	43
Defining Human Ability as Adaptive Behavior .....	46
Summing Up.....	49
Understanding Human Abilities as Performance and Operations .....	49

Understanding Human Abilities as Adaptation	49
Describing Gifted and Talented Persons .....	50
Enrichment .....	50
Understanding Human Abilities as Performance and Operations .....	50
Understanding Human Abilities as Adaptation	51
Describing Gifted and Talented Persons .....	51
<b>UNIT II—UNDERSTANDING THE SOCIAL CONTEXT OF HUMAN ABILITIES .....</b>	<b>53</b>
Synopsis .....	53
Key Ideas .....	53
A Prototype.....	54
<b>Chapter 4—Understanding Life’s Sequence of Tasks .....</b>	<b>57</b>
Early Childhood .....	59
Childhood .....	60
Adolescence .....	61
Young Adulthood .....	62
Middle and Full Adulthood.....	62
<b>Chapter 5—Understanding Family and Social Influences .....</b>	<b>65</b>
Family Influences .....	65
Concerns of the Family .....	67
The Social Context of Performance .....	71
The Concept of Underachievement.....	76
Levels and Forms of Underachievement.....	77
<b>Chapter 6—Widening the Social Context of Opportunity .....</b>	<b>83</b>
Human Ability, Culture, Language, and Poverty .....	83
The Gifted Handicapped.....	90
Respecting Variations .....	97
Summing Up.....	101
Understanding Life’s Sequence of Tasks.....	101
Understanding Family and Social Influences	102
Widening the Social Context of Opportunity	102
Enrichment .....	102
Understanding Life’s Sequence of Tasks.....	102

Understanding Family and Social Influences	103
Widening the Social Context of Opportunity	103
<b>UNIT III—UNDERSTANDING NEEDS AND PRIORITIES OF GIFTED AND TALENTED LEARNERS .....</b>	<b>105</b>
Synopsis .....	105
Key Ideas .....	105
A Prototype.....	106
<b>Chapter 7—Identifying Gifted and Talented Learners.....</b>	<b>109</b>
A Leadership Perspective.....	109
A Case History Perspective.....	118
Strengthening Identification Procedures.....	121
<b>Chapter 8—Using and Adapting the Curriculum .....</b>	<b>125</b>
Selection of Curriculum Goals.....	125
Appraising the Structure of Curriculum.....	128
Selecting Content by Brainstorming.....	136
<b>Chapter 9—Matching Learner and the Curriculum .....</b>	<b>139</b>
Understanding the Preferences of Consumers.....	139
Understanding the Sufficient Conditions of Learning .	145
Decisions Regarding Matching.....	148
Elements of Planning.....	150
<b>Chapter 10—Managing and Maintaining the Match.....</b>	<b>153</b>
Using Needs Assessment.....	153
Translating Needs Assessment .....	158
Understanding Education Programming .....	161
Summing Up.....	166
Identifying Gifted and Talented Learners....	167
Using and Adapting the Curriculum .....	167
Matching Learner and Curriculum .....	168
Managing and Maintaining the Match .....	169
Enrichment .....	170
Identifying Gifted and Talented Learners....	170
Using and Adapting the Curriculum.....	170

Matching Learner and Curriculum .....	171
Managing and Maintaining the Match .....	171
<b>UNIT IV—DESCRIBING QUALITY EDUCATION .....</b>	<b>173</b>
Synopsis .....	173
Key Ideas .....	173
A Prototype.....	174
<b>Chapter 11—Defining the Educational Context of Quality.....</b>	<b>177</b>
The Meanings of Education .....	177
The Substance of Quality.....	179
A Framework for Quality Education .....	181
A Range of Options.....	182
Understanding the Attributes of Quality Teachers .....	183
<b>Chapter 12—Developing High-Quality Programs .....</b>	<b>189</b>
Common Questions about Starting Programs .....	189
Organizing for Innovation.....	190
Understanding the Tactics of Innovation.....	193
<b>Chapter 13—Developing a Confederacy for the Gifted and Talented .....</b>	<b>201</b>
An Open System.....	201
Support Systems .....	202
Building Program and Budget.....	206
<b>Chapter 14—Understanding the Impact of Quality Programs .....</b>	<b>213</b>
The Nature of Evaluation .....	213
A Model for Evaluation.....	215
Accountability and Evaluation.....	218
Summing Up.....	221
Defining the Educational Context of Quality .....	221
Developing High-Quality Programs .....	224
Developing a Confederacy for the Gifted and Talented.....	224
Understanding the Impact of Quality Programs .....	225
Enrichment .....	225
Defining the Educational Context of Quality .....	225

Developing High-Quality Programs .....	226
Developing a Confederacy for the Gifted and Talented.....	226
Understanding the Impact of Quality Programs	227
 <b>UNIT V—UNDERSTANDING AND USING INDIVIDUALIZED EDUCATION PROGRAMS.....</b>	 <b>229</b>
Synopsis .....	229
Key Ideas .....	230
A Prototype.....	231
Education Program Components .....	231
Pupil Activities .....	235
Staff and Responsibilities .....	235
 <b>Chapter 15—Providing a Rational for Individualized Educational Planning .....</b>	 <b>239</b>
The Precedent of Pub.L. 94-142 .....	239
Prior Conditions for Individualized Programs .....	240
Conditions for Preparing IEPs .....	246
The IEP As Public Policy.....	249
 <b>Chapter 16—Specifying the Content of an Individualized Education Program .....</b>	 <b>251</b>
The Scope of the Individualized Education Program ..	251
Preparing Goals and Objectives for Gifted and Talented Pupils .....	254
Services .....	256
Instructional Dimensions.....	259
 <b>Chapter 17—Assembling and Assessing Information.....</b>	 <b>261</b>
Preferred Practices .....	261
Understanding and Interpreting Data .....	263
Understanding Aptitude/Treatment Interaction .....	268
Performance Assessment.....	272
 <b>Chapter 18—Understanding the Key Role of Teachers .....</b>	 <b>281</b>
Competencies for Individualized Programs .....	281
Teachers As Parent Consultants .....	282

The Teacher As a Resource for Quality .....	284
Toward a Common Core of Practice.....	285
Summing Up.....	288
Providing a Rationale for Individualized Education Programs.....	288
Specifying the Content of an Individualized Education Program .....	289
Assembling and Assessing Information.....	290
Understanding the Key Role of Teachers.....	290
Enrichment .....	291
Providing a Rationale for Individualized Education Programs.....	291
Specifying the Content of an Individualized Education Program .....	291
Assembling and Assessing Information.....	291
Understanding the Key Role of Teachers.....	292
<b>Epilogue .....</b>	<b>293</b>
<b>References.....</b>	<b>295</b>
<b>Index .....</b>	<b>305</b>



# Understanding and Describing Human Abilities

## SYNOPSIS

Teachers, principals, parents, coaches, and recreation leaders who are responsible for instructing and counseling gifted and talented young people need an unusually thorough understanding of human abilities, including intelligence. The chief reason: the nurture of intelligence lies at the heart of every bona fide special education scheme for highly able young people.

An examination of the concept of intelligence as it is accounted for in major theories of developmental psychology can shed light on how psychoeducational scientists and practitioners arrive at definitions of gifted and talented persons that make sense in both theoretical and practical ways. Much of this unit is designed to supply the theory base of the concept of intelligence and to show the specific linkages between theory and the day-to-day work of those who guide and educate gifted and talented children and youth.

The temptation to look for common characteristics in all gifted and talented persons should be resisted. They vary in every direction, and so do their accomplishments. It should be noted that intelligence is not divorced from the rest of life; rather, it is a good indicator of a person's ability to make wise and personally profitable adaptations to the world's demands.

## KEY IDEAS

Typically, intelligence is associated with terms such as mental ability, thought, wisdom, or cognition. Cognition is a troublesome word because it can be used in two different ways, both correct. It is frequently used as a synonym for intelligence. In psychoeducational terms, however, cognition is the manipulation, in thought, of objects, symbols, rules, sequences, and concepts. In order to perform mental manipulations (i.e., to try out notions, to achieve