

Gifted and Talented Primary-age Students: Recommendations for Identification and Service



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Introduction

Currently, most school districts in Idaho identify gifted and talented (G/T) students and provide services commencing in the third or fourth grade. According to the 2000 G/T Child Count Data, only 1.3% of Idaho students in grades K-2 were identified for gifted and talented services, whereas seven percent of fifth graders were identified. In response to this practice, The Gifted and Talented Primary-age Task Force was created to survey literature, examine current best practices and provide recommendations and supporting research for G/T administrators, G/T facilitators, and classroom teachers throughout the state.

The purpose of this booklet is to offer the task force's recommendations concerning identification of primary-age G/T students, and to improve and increase services offered to this population. The task force acknowledges that school districts must prepare teachers to intervene early by addressing G/T primary-age students' needs beginning in kindergarten. Idaho's G/T mandate supports early intervention: "Public school districts in the state shall provide instruction and training for children between the ages of five (5) years and eighteen (18) years who are gifted/talented" (Idaho Code §33-2003). The task force supports good teaching practices, including assessment and differentiation of curriculum. Finally, it encourages parents of G/T primary-age students to become actively involved in their children's education.

This document is established as a framework for best addressing the needs of the primary-age G/T population. It is not intended to provide practical classroom examples for meeting the needs of primary-age G/T students. Technical assistance and supplementary materials are being developed to address specific classroom strategies. This information will soon be available on the Idaho Gifted and Talented homepage: <http://www.sde.state.id.us/GiftedTalented/> or through State Department presentations.

The following topics are addressed in this booklet:

- ✓ **Early Intervention**
- ✓ **Identification Guidelines**
- ✓ **Service Guidelines**
- ✓ **Professional Development**
- ✓ **Parents as Partners**

Please keep in mind that this booklet supplements *The Best Practices Manual for Gifted and Talented Programs in Idaho* and references to the latter are made periodically.

Section One: Early Intervention

The literature emphasizes the need to identify and serve G/T students at an early age. The purpose of early intervention is to ensure the enhancement of optimal brain development and to invest in Idaho's future.

The task force recommends:

- G/T primary-age students' needs be addressed beginning in kindergarten.
- School districts educate teachers and parents of primary-age children about characteristics of gifted children in order to recognize and encourage early intervention in public schools.

Research

- Children's brains are highly sensitive and susceptible to new experiences; this is especially true through age five. If young children do not receive appropriate recognition and response during this sensitive period, potential skills may deteriorate (Cohen, 1990).
- There are strong indications that much of a person's mature intelligence is developed between conception and four years of age. Therefore, it is important that the young gifted and talented child be exposed to a high quality learning environment as soon as possible. Learning environments should be designed to meet the unique needs of each child, and the child's indication of readiness to learn should be a determining factor in the type of challenge presented (Hanninen, 1978).
- The period from five to six years of age marks a turning point in the cerebral cortex. The brain's energy consumption—a surrogate for its overall activity level—reaches an all-time high between four and eight years of age, after which it gradually declines to adult levels (Elliot, 1999).
- Some gifted children do not fare well in kindergarten because they are forced to underachieve. This may lead to social, motivational, and emotional problems. Kindergarten children may be forced to underachieve when teachers are of the opinion they are already doing so much for the child (Mooij, 1999).
- In one study, district-offered parenting classes resulted in parents becoming more cognizant of their gifted children's needs (Sittler & Stapleton, 1988).
- The American Association for Gifted Children produces a pamphlet for parents of preschool children, listing characteristics of giftedness and what parents can do at home to enhance their preschool G/T child.

References

- American Association for Gifted Children. Your Preschooler Might Be Gifted! [Brochure]. Duke University: Durham, North Carolina.
- Cohen, L. (1990). Teaching Gifted Kindergarten and Primary Children in the Regular Classroom. Meeting the Mandate. OSSC Bulletin, 33, 7-8.
- Elliot, L. (1999). What's Going on in There? How the Brain and Mind Develop in the First Five Years of Life. New York, NY: Bantam Books.
- Hanninen, G. (1978). Office of Gifted and Talented and the Council for Exceptional Children. Preschool Gifted and Talented Child. Washington, DC.
- Mooij, T. (1999). Integrating Gifted Children into Kindergarten by Improving Educational Processes. Gifted Child Quarterly, 43(2), 63-74.
- Sittler, N. & Stapleton, R. (1988). Effects of Parenting Classes on Anxiety Reduction in Gifted Children. The Creative Child and Adult Quarterly, 7(1), 17-29.

Section Two: Guidelines to Identify Primary-age G/T Students

The process of identifying primary-age G/T children requires following specific guidelines as supported by research, Idaho Rules and Regulations, the state G/T mandate and the *Best Practices Manual for Gifted and Talented Programs in Idaho*. Classroom teachers will administer informal assessment instruments to identify the instructional needs of all their students. Those who demonstrate “extreme need” for services will be administered formal instruments.

The task force recommends:

- The identification process be perceived as a “needs assessment” performed by classroom teachers to improve services to students rather than as only a means to qualify students. Therefore, the identification process can help teachers improve instruction for all students in the classroom.
- The needs of high-achieving/high-potential primary-age children be addressed in grades K-2, whether a label has been assigned or not.
- A screening process be implemented to provide each primary-age student, including underrepresented populations, with an opportunity to be considered for G/T services.
- Multiple assessments be administered during identification, including informal and formal instruments. Data then needs to be collected and analyzed. Placement decisions should not be determined by a single criterion. (See list of assessment instruments and screeners on pages 21-27 in the *Best Practices Manual for Gifted and Talented Programs in Idaho*.)
- Students be identified and served in all five mandated talent areas: specific academic, intellectual, creativity, leadership and visual and performing arts.
- Primary-age students who are topping out on most tests be administered tests with high ceilings in order to assess their full potential.
- Primary-age children be formally tested individually or in small groups instead of with the entire class.
- Parents be involved in the identification process. Community members may also be a valuable resource during identification.
- Districts “formally” identify students as gifted and talented, whose assessment data reveals needs not ordinarily addressed in the classroom. These are students who demonstrate “extreme need” for services. This is defined as “markedly above grade-age peers in one of the five mandated talent areas.”

Research

- Identification should provide information that is useful for planning instruction (Rimm, 1984).
- It is important that services in the regular classroom be designed to motivate and stretch all learners to reach their maximum potential, that is, to provide a challenging curriculum that develops the abilities, skills and talents of all students (Coleman & Harrison, 1997). Therefore, classroom teachers should consistently assess and identify the needs of all students, including their abilities, skills and talents.
- Some tests are less culturally biased than others. When a child from outside the mainstream culture is tested, the results of standardized intelligence tests should not be used as an absolute sign of cognitive ability (Smutny, 1998).
- Identification should include multiple indicators, such as aptitude, achievement, performance, observable behavior, and student interest and motivation (Coleman, Gallagher, Harrison & Robinson, 1996).
- The literature reveals a wide variety of instruments administered to identify students for G/T primary-age programs. Informal instruments may include teacher-generated assessment instruments, checklists, interviews, portfolios, questionnaires, product scoring guides and screeners; formal instruments may include achievement, cognitive and intelligence tests (Swanson, 1995; Leibowitz & Starnes, 1993; Schack, 1993).
- The Buros Institute Test Reviews provide reviews of testing instruments appropriate for younger children.
- The physical setting for formal testing, whether a school classroom or office in a clinic or school, can affect the child's performance. To prevent distractions and interference, conduct the testing in a quiet, adequately lit, well-ventilated room. As a rule, no one other than you and the child should be in the room during testing (The Psychological Corporation, 1992).
- Parents are excellent identifiers of giftedness in their children: 84% of the children, whose parents say they fit three-fourths of the identifying characteristics, score at least 120 IQ (the superior range). Over 95% show giftedness in a least one area (Silverman, 2000).
- Services at the highest level usually involve radical adaptation of either content or the environment. To plan appropriately to meet these needs, referred students should be assessed through an individual case study that includes samples of work, social-emotional data and an individual psycho-educational evaluation. Comprehensive information on the student's needs should be carefully reviewed by a school-level

team and the parents prior to formalizing a service recommendation (Coleman & Harrison, 1997). (See Table 1 of Coleman & Harrison, 1997, for complete data.)

References

Coleman, M.R., Gallagher, J., Harrison, A. & Robinson, L. (1996). Planning Components for the Education of Gifted Students: Suggested Guidelines for Plan Development. Chapel Hill, NC: The University of North Carolina.

Coleman, M.R. & Harrison, A. (1997). Programming for Gifted Learners : Developing a System Level Plan for Service Delivery. Chapel Hill, NC: The University of North Carolina.

Idaho Code §§ 33-2001, 33-2003. (2000).

Leibowitz, D., & Starnes, W. (1993). Unmaking Young Children's Gifts. Gifted Child Today, 16(5), 28-32.

Rimm, S. (1984). The characteristics approach: Identification and beyond. Gifted Child Quarterly, 28(4), 181-187.

Rules of Idaho State Board of Education. IDAPA § 08.02.03.456. (2000).

Schack, G. (1993). Research in Progress: Development of Giftedness in the Multi-Age, Mutli-Ability Primary School. Gifted Child Today. (ERIC Document No. ED 357 514)

Silverman, L. (2000). "What Have We Learned About Gifted Children 1979-1997."
<http://www.gifteddeveopment.com/Whatwe'velearned.html>

Smutny, J.F., Walker, S.Y., and Meckstroth, E.A. (1997). Teaching young gifted children in the regular classroom: Identifying, Nurturing, and Challenging Ages 4-9. Minneapolis, MN: Free Spirit Publishing, Inc.

Smutny, J. F. (Ed.) (1998). The young gifted child: Potential and promise, an anthology. Creskill, NJ: Hampton Press, Inc.

Swanson, J. (1995). Project SEARCH: Selection, Enrichment, and Acceleration of Rural Children. (ERIC Document Reproduction Service No. ED 417 562)

The Psychological Corporation (1992). Wechsler Individual Achievement Test (WIAT).

Section Three: Guidelines to Serve G/T Primary-age Students

The process of serving primary-age G/T children requires following specific guidelines as supported by research, Idaho Rules and Regulations, the state G/T mandate and the *Best Practices Manual for Gifted and Talented Programs in Idaho*.

The task force recommends:

- Serving G/T primary-age children in the general education classroom with appropriate modifications, such as curriculum compacting, problem solving and acceleration. Some G/T primary-age children may need interventions such as mentorships, grade advancement and/or pull out programs, depending on the degree of need.
- The primary-level curriculum be differentiated by ability, interest, developmental level and appropriate levels of complexity to meet the needs of G/T primary-age students.
- G/T primary-age students be provided opportunities to work with other students of similar ability and interest in the classroom or in pull out programs.
- G/T students be challenged and served at the appropriate level of complexity and rate throughout the school day. The consequence of not providing appropriate services may be underachievement. Teachers need to reexamine accommodations in order to maximize student achievement.
- Districts “formally” identify students as gifted and talented whose assessment data reveals needs not ordinarily addressed in the classroom. These are students who demonstrate “extreme need” for services. This is defined as “markedly above grade-age peers in one of the five mandated talent areas.”

Research

- The following strategies and activities are appropriate for G/T primary-age students: curriculum compacting, learning centers, clustering, cubing, tiered activities, competitions, inquiry thinking, problem solving, independent studies and mentorships (Rogers, 1991; Tomlinson, 1999). (See Table 1 of Coleman & Harrison, 1997, for complete data.)
- Teachers should use tiered activities so all students focus on essential understandings and skills, but at different levels of complexity, abstractness and open-endedness. By keeping the focus of the activity the same, but providing routes of access at varying degrees of difficulty, the teacher maximizes the likelihood that (1) each student

comes away with pivotal skills and understandings, and (2) each student is appropriately challenged (Tomlinson, 1999).

- Gifted learners must be given stimulating educational experiences appropriate to their level of ability if they are to realize their potential. Giftedness arises from an interaction between innate capabilities and an environment that challenges and stimulates to bring forth high levels of ability and talent (National Association for Gifted Children).
- A two year study of 284 primary students, advanced in mathematics, found that students maintained their levels of achievement when the curriculum allowed them to conceptualize math broadly, pose problems and make sense of the mathematical system (Waxman, Robinson & Mukhopadhyay, 1996).
- Students who are academically or intellectually gifted and talented should spend the majority of their school day with others of similar abilities and interests (Rogers, 1991).
- A National Research Center study found that primary teachers made only minor modifications in the regular curriculum to meet the needs of gifted students. The same study found that gifted and talented or high ability students experienced no instructional or curricular differentiation in 84% of the instructional activities in which they participated (Archambault et al., 1993).
- Pringle's study of children entering school found that boredom most often characterized the gifted child's attitude toward school. Children lost interest or rebelled against what many consider to be useless activities. This led to behavior difficulties and/or underachievement. Most schools do not formally identify children as "gifted" until third or fourth grade. By then, some of the brightest children have become bored, resentful underachievers (Smutney, Walker & Meckstroth, 1997).
- Not recognizing young gifted children is a danger. Even though bright children may be aware of their abilities, they may regress to match the behavior of their age-mates. Children may learn to hide or deny their abilities in order to fit in with classmates and avoid feeling isolated (Gross, 1993).
- Treffinger identifies four levels of programming for gifted education—**all**, **many**, **some**, and **few**—that he believes should be available in every school system. Services at the "**few**" level usually involve radical adaptation of either content or the environment. Options under this level of service might include "across-grade," "in-school," "between schools" and "beyond school" alternatives. Comprehensive information on a student's needs should be carefully reviewed by a school-level team and the parents prior to formalizing a service recommendation (Coleman & Harrison, 1997). (See Table 1 of Coleman & Harrison, 1997, for complete data.)

References

- Archambault, F., Westberg, K., Brown S., Hallmark B., Emmons, C., & Zhang, W. (1993). Regular Classroom Practices With Gifted Students: Results of a National Survey of Classroom Teachers. [Brochure]. Storres, CT: University of Connecticut.
- Coleman, M.R. & Harrison, A. (1997). Programming for Gifted Learners: Developing a System Level Plan for Service Delivery. Chapel Hill, NC: The University of North Carolina.
- Gross, M. (1993). Exceptionally Gifted Children. New York: Routledge.
- Idaho Education Laws Ann. § 33-2003. (2000).
- National Association for Gifted Children. Why Should the Public Support Gifted Education? Washington, D.C.
- Rogers, K. (1991). The Relationship of Grouping Practices to the Education of the Gifted and Talented Learner. University of Connecticut: The National Research Center.
- Smutny, J.F., Walker, S.Y., and Meckstroth, E.A. (1997). Teaching young gifted children in the regular classroom: Identifying, Nurturing, and Challenging Ages 4-9. Minneapolis, MN: Free Spirit Publishing, Inc.
- Tomlinson, C. (1999). The Differentiated Classroom: Responding to the Needs of All Learners. Alexandria, VA: Association for Supervision and Curriculum Development.
- Waxman, B.; Robinson, N. & Mukhopadhyay, S. (1996). Teachers Nurturing Math-Talented Young Children. (ERIC Document Reproduction Service No. ED 410 726)

Section Four: Professional Development

Professional development is essential to ensure that general classroom teachers meet the needs of G/T primary-age students. At a minimum, teachers are trained to observe and identify specific characteristics of giftedness among primary-age gifted and talented students and to implement appropriate strategies to meet their needs. Other training may include administering informal assessment instruments and understanding specific social-emotional issues.

The task force recommends:

- Professional development for teachers of primary-age students to increase awareness of the five mandated talent areas, and to identify and serve students who display characteristics in the talent areas in the general education classroom.
- Professional development for teachers of primary-age students to utilize “everyday” assessment instruments to recognize student needs and to use the data to drive and improve instruction.
- Professional development that will assist teachers of primary-age students in implementing appropriate strategies for G/T students in the classroom.
- Course work for pre-service teachers in Idaho, that includes practical applications for addressing the needs and services of G/T students, such as curriculum compacting, differentiated instruction, identification, characteristics and social-emotional needs of gifted students.
- A variety of professional development approaches, including consultation and collaboration with personnel experienced in G/T education, resource materials and software.
- Professional development for teachers of primary-age students be funded by the legislative-approved G/T Training Grant or by other funding sources.

Research

- Two surveys on gifted education conducted by Boise State University found that the most essential need for general education teachers was how to meet the needs of G/T students in their classrooms (Rogien, 1995, 2000).
- According to the 1998-99 State of the States Report, improving teacher preparation and professional development was the most essential concern reported nationally (Council of State Directors, 1999).
- As a result of Idaho's G/T Training Grant, 86% of general education teachers surveyed implemented new curriculum strategies and activities appropriate for G/T students (Idaho Department of Education, 2000).
- The system's Personnel Preparation Program should show how the district plans to support the development of regular classroom teachers, administrators, support staff and [G/T] specialists through additional personnel preparation in gifted education (Coleman et al., 1996).
- G/T students with trained teachers reported greater emphasis on higher-level thinking skills and discussion, and less emphasis on lecture and grades, than did students of untrained teachers (Hansen & Feldhusen, 1994).
- Specialized course work in gifted education provides teachers with the means to deliver appropriate instruction for the gifted (Hansen & Feldheusen, 1994).
- G/T facilitators assuming the role of consultants share responsibility for students in the teacher's class and dispense knowledge to which the teachers do not have access (Armstrong, Kirschenbaum & Landrum, 1999).

(See list of characteristics of primary age G/T students on pages 50-51 in the *Best Practices Manual for Gifted and Talented Programs in Idaho*.)

References

- Armstrong, Kirschenbaum, & Landrum. (1999). Resource Consultation Model in Gifted Education. Gifted Child Quarterly, 43(1), 39-47.
- Coleman, M.R., Gallagher, J., Harrison, A. & Robinson, L. (1996). Planning Components for the Education of Gifted Students: Suggested Guidelines for Plan Development. Chapel Hill, NC: The University of North Carolina.
- Council of State Directors of Programs for the Gifted. (1999). The 1998-99 State of the States Gifted and Talented Education Report.
- Hansen, J.B. & Feldhusen, J.T. (1994). Comparison of trained and untrained teachers of Gifted students. Gifted Child Quarterly, 38(3), 115-121.
- Idaho Department of Education. (1997). The Best Practices Manual for Gifted and Talented Programs in Idaho.
- Idaho Department of Education. (2000). G/T Training Grant.
- Idaho Department of Education. (2000). G/T Training Grant Survey.
- Rogien, L. (1995, 2000). Statewide Survey for Gifted & Talented Educators.

Section Five: Parents as Partners

Parents of G/T students can help enhance services to primary-age students in the general education classroom and in other accommodations. Parents can volunteer and facilitate activities, provide extensions outside the classroom and/or support local and statewide initiatives for G/T students.

The task force recommends:

- School districts educate parents of primary-age children about characteristics of gifted children.
- Parents and families become essential partners in schools to ensure that appropriate services are provided for G/T primary-age students. Partnerships may include mentoring, locating resources and facilitating enrichment activities.
- Parents provide extensions outside the classroom and at home to expand classroom activities and broaden their children's areas of interest and talent.
- Parents be informed and actively involved in local and state G/T efforts to ensure appropriate services for G/T students. This may include ITAG, PTA, parent groups and conference attendance.

Research

- District-offered parenting classes result in parents becoming more cognizant of their gifted children's needs (Sittler & Stapleton, 1988).
- Parents can accomplish a great deal through forming groups of advocates for gifted and talented children, coordinating services of community resources and sharing ideas for games and activities that spark creativity and children enjoy (Alvino, 1985).
- Parents said activities involving athletics, music, competitions and church shaped their children's lives (Beisser, 1996).
- Whether parents are interested in getting new legislation for gifted education passed at the state level or are interested in making their local school boards aware of the needs of gifted children, they must be prepared to enter the political arena. All decisions made to appropriate or not appropriate funds for certain educational programs are political (Bostick, 1979).

References

- Alvino, J. (1985). Parents' Guide to Raising a Gifted Child. New York, NY: Ballantine Books.
- Beisser, S. (1996). Giftedness is a Family Affair. Parenting for High Potential. (Winter, National Association of Gifted Children).
- Bostick, Lorraine. (1979). Parent Advocacy. California Association for the Gifted.
- Sittler, N. & Stapleton, R. (1988). Effects of Parenting Classes on Anxiety Reduction in Gifted Children. The Creative Child and Adult Quarterly, 7(1), 17-29.

TABLE 1. ELEMENTARY SCHOOL SERVICE DELIVERY OPTIONS

| Service Level | Academic Development | | Talent Development | | |
|--|---|---|--|---|--------------------------------|
| | Learning Environment | Content Modification | Interest/Talent Development | Special Programs Instructional Strategies | |
| Level I <i>ALL</i> Developmental Stage Within Class | Individualized Class Balanced Heterogeneous Group Continuous Progress Cross-age Grouping In-class Flexible Grouping | Mastery Learning Units Differentiated Instructional Units Individualized Program Learning Centers Computer-based Instruction Tiered Assignments | Classroom Centers General Exploratory Activities Interest Development Activities Enrichment Clusters School-wide Enrichment (Type I / Type II) | Saturday Classes | Higher Order Questioning |
| | | | | Summer Opportunities | Seminar Teaching |
| Level II <i>MANY</i> Within Class | Individualized Class Continuous Progress Cross-age Grouping Cluster Grouping Within the Regular Class Resource Support | Differentiated Units Tiered Assignments Curriculum Compacting Learning Centers Computer-based Instruction Remediation Services Structure of the Intellect Prog. | Classroom Centers Enrichment Clusters Resource Room Mini Courses School-wide Enrichment (Type II) | Camps | Critical and Creative Thinking |
| | | | | Fine Arts Activities MAP Program | Research Skills |
| Level III <i>SOME</i> Within School or Grade | Cluster Grouping Within the Regular Class Resource Class Subject Grouping Cross-age Grouping Part-time Special Class Cross-grade Grouping | Differentiated Units Tiered Assignments Curriculum Compacting Contracts Independent Study Advanced Content Individualized Program Computer-based Instruction | Special Electives Advanced Enrichment Clusters School-wide Enrichment (Type III) | Contests and Competitions | Socio-drama |
| | | | | Odyssey of the Mind | Problem-based Learning |
| Level IV <i>FEW</i> Beyond School or Grade | Resource Services Grade Skipping Subject Skipping Full-time Special Class with Individualization Early Admission Magnet Program (Center) Special School | Differentiated Units Curriculum Compacting Contracts Independent Study Advanced Content Telescoped Content Individualized Program Computer-based Instruction | Resource Program Mentor Programs | Battle of the Books | Cooperative Learning |
| | | | | Future Problem Solving Invent America | Group Investigation |
| | | | | | Multiple Intelligences |
| | | | | | Creative Problem Solving |

Support Services: Special attention should focus on the early identification of strengths, learning styles, and interest of all students. Counseling opportunities should be available at all levels. Focus should be on parent training and personal-social needs. A materials center should be available to teachers, as well as assistants in curriculum differentiation and individualized planning.

Note: From Coleman, M.R. & Harrison, A. (1997). *Programming for Gifted Learners: Developing a System Level Plan for Service Delivery*. Chapel Hill, NC: The University of North Carolina. Reprinted with permission.