Definition of High Ability Students

"High Ability Student" is one who: "performs at, or shows the potential for performing at, an outstanding level of accomplishment, in at least one domain when compared to other students of the same age, experience, or environment; and is characterized by exceptional gifts, talents, motivation, or interests."

- The Indiana Code

Characteristics of High Ability Learners

- Greater understanding of own thinking (metacognition)
- Advanced and varied interests
- Highly curious
- Multi-potentiality
- Overexcitability
- High intellectual and physical activity level
- Sense of morality, justice, empathy
- Highly developed sense of humor
- Reflective

Characteristics of High Ability Learners

- Early and rapid learning
- Superior language abilities - verbally fluent, large vocabulary
- Enjoyment of learning
- Large knowledge base
- Superior analytic ability
- Keen observation
- Excellent Memory
- Superior reasoning, problem-solving
- Abstract, logical thinker
- Insightful
- Sees "big picture"
- Recognizes patterns and makes connections
Characteristics of High Ability Learners that Can Be Considered Negative

- Uneven mental, physical, emotional, social development
- Interpersonal difficulties due to intellectual differences
- Underachievement especially in areas of noninterest
- Extreme perfectionism
- Excessive self-criticism
- Self-doubt; poor self-image
- High levels of frustration/anger
- Depression

Learning Needs Based on Characteristics

- Higher levels of abstraction earlier
- Longer work time for indepth study
- Faster pace for instruction through basic skills and standards
- Exposure to multiple viewpoints and many subject areas
- Acceleration
- Concept-based curriculum with interdisciplinary connections

Basic Needs of High Ability Students – Dr. John Feldhusen

- Maximum achievement of basic skills
- Learning activities at appropriate levels and pace
- Creative thinking and problem solving experiences
- Development of convergent abilities, especially in logical deduction and convergent problem-solving
- Stimulation of imagery, imagination, spatial abilities
- Development of self-awareness and acceptance of own capacities, interests, and needs
- Stimulation to pursue higher level goals and aspirations
- Exposure to a variety of fields of study, professions/occupations

Basic Needs of High Ability Students – Dr. John Feldhusen (cont.)

- Development of independence, self-direction, and discipline in learning
- Experience relating intellectually, artistically and affectively with other high ability students
- A large fund of information about diverse topics
- Access and stimulation to reading

High Ability Learners Are:

- A very diverse group and are found in all SES, ethnic and cultural groups
- Have definite academic, social, and emotional needs
- Need to have their needs met if they are to achieve their potential

Identifying High Ability Learners

- Indiana recommends using at least 3 different criteria
  - Ability measures (group/individual tests e.g. Otis-Lennon, CoGAT, etc.)
  - Achievement measures (NWEA, ITBS, CTBS, MAT, etc.)
  - Checklists (teacher and parent)
Identification Considerations

- Cast a wide net: use measures that consider ALL students (screening vs. identification)
- Use a multifaceted assessment process:
  - Performance and potential (Achievement and ability)
  - Multiple criteria with no single criteria excluding a student
  - Avoid use of a matrix
  - Do not use “cut scores” (all tests have a standard error of measurement)
  - Consider a case study approach
  - Consider performance assessments

Identification Considerations

- Identification must match the program and services
- Giftedness, high ability, and talent are often domain specific
- Check your demographic proportionality
- Allow for exceptions, trials, alternate pathways
- Avoid having one chance to be identified, identify early and often (Sorry, you missed the high ability bus)
- Avoid deciding in advance the percentage or number of students who can be identified; rather, identify and serve those who need services (Sorry, the high ability bus is full)

Identification Considerations

- Must have an appeals and exit procedure
- Can allow for student self-selection in high school, but be careful not to dumb down the curriculum
- Realize that there is no perfect system, put a system in place that makes sense, then build in the ability to make exceptions to an imperfect system and constantly evaluate it and try to improve

A Word About Standardized Tests

- Account for Standard Error of Measurement
- Realize that group tests aren’t as reliable as individual tests
- Avoid using cut scores (+ or − s.e.m.)
- Consider discrepant scores and have additional measures to retest to get more data

ID Measures (examples)

- **Ability measures:**
  - **Group:** Otis-Lennon School Ability Test; CogAT; Naglieri (elementary/middle school)
  - **Individual:** K-BIT-2; Naglieri; Slosson
  - **Off Level:** Taking the PSAT or SAT early

ID Measures

**Achievement Measures:**
- SAGES (K-8), TOMAGS (math K-8), NWEA, Acuity (tests designed above grade level), MAT, Stanford Achievement tests, Terra Nova, ITBS

**Considerations:**
- Time to administer, difficulty grading, cost, age of students
Serving High Ability Students K-12

- Consider a range of services not just a Program
- Consider the strengths and limitations of your corporation
- Consider flexible policies:
  - Early entry
  - Grade skipping
  - Subject skipping
  - Dual enrollment
  - Credit by examination

Things We Know

- Gifted learners require 1-2 repetitions to master a new concept compared to 7-8 for an average student.

- The instructional pace used in whole-class teaching is equal to that of students in the 23rd percentile of the class distribution.
  
Rogers, 1992

The National Research Center on the Gifted and Talented conducted a Classroom Practices Survey that found 61% of the third and fourth grade public school teachers surveyed said they had no pre-service or in-service training that addressed any gifted education topics.

Archbould, Westberg, et al. 1992

In core subject areas, students with high ability received no differentiated experiences in 84% of classroom activities.

Jackson, et al. 1993

For each year in school, gifted students should be given the chance to accomplish fifteen to eighteen months of work in academic content areas as compared with the regular curriculum.

Rogers, 2002

“Approximately 40-50% of traditional classroom material could be eliminated for targeted students in one or more of the following content areas: mathematics, language arts, science, and social studies.”

Reis, Westberg, Kulikowich & Purcell, 1996

Developing Talent

- Start early
- Consistent practice
- Instruction at their level
- Put them with others of similar ability
- Give them a good coach
- Teach them to work hard
Service Options for Elementary (partial list)

- Ability grouping - between and within class
- Cluster grouping
- Self-contained classes
- Magnet schools
- Mentorships
- Served in a "regular classroom"
- Resource rooms
- Pullout Programs
- Independent study/courses
- Acceleration options

Secondary Options

- Honors classes
- AP classes
- IB
- Dual Credit
- Seminars
- Mentorships
- Academic Competitions
- Option to test out of classes
- Early graduation
- Waive prerequisites if student can prove mastery
- Summer Programs
- Cluster grouping

Teaching and Serving High Ability Students Is…

- HARD WORK!!!!
- Creating a differentiated, enriched, accelerated curriculum delivered at an appropriate pace
- Recognition that not ALL high ability students are the same...there is a range of high abilities
- Providing coaching, teaching, mentoring, and facilitating to make sure these students grow socially, emotionally, and academically.

Teaching and Serving High Ability Students Is NOT…

- More work, math problems, projects, etc.
- Busy work
- Grading high ability students "harder" than other students
- Taking the regular curriculum and moving through it faster
- Just assigning projects
- Assuming these students can 'get it on their own'
- Just letting students work in groups
- Letting students do the teaching and presenting all the time
- Turning students loose with little teaching, guidance, or direction

Teaching and Serving High Ability Students Is...\

- Lots of pre-assessing to find out what students have already mastered
- Using a variety of teaching strategies: inquiry, Socratic Seminars, critical and creative thinking, problem-based learning, etc. to ensure student engagement.
- Collecting and using a VARIETY of teaching materials at different levels
- Assigning meaningful homework that will cause students to think and learn

Teaching and Serving High Ability Students Is...

- Ensuring grade level standards are mastered but that students are stretched and moved beyond
- Ensuring students learn something new every day
- Having a passion and enthusiasm for what you teach and for these students
- HARD WORK!!!!
What is Best Practice?

- High Ability Licensure for all teachers, coordinators, other teachers, and administrators.
- Continued professional development for teachers in characteristics, needs, and best practices for serving high ability learners.
- Providing a range of services for K-12 students.
- Identifying and serving students K-12 to meet high ability student needs.
- A K-12 articulated curriculum for high ability students.
- Provisions for meeting the affective needs of ability learners.

Resources


