

Tier 2: Strategic Targeted Intervention

FOCUSING on SOME High Ability/High Potential Students

Tier 2 refers to evidence based, **targeted**, supplemental skill-building **intervention**. In the case of high ability/high potential learners, Tier 2 refers to students who require specific supports in addition to work in the classroom to make adequate progress. This is part of an ongoing decision-making process to determine the effectiveness of interventions and programming options and assessment of learning to meet the needs of students for whom general education **Tier 1** strategies do not support adequate progress.

Tier 2 instruction is systematic, explicit, and aligned with ongoing Tier 1 instruction—that is, it matches what is going on in the general classroom but takes learning to a more complex level. Tier 2 **instructional interventions** are typically delivered in small groups of students with similar strengths, interests, or needs. Instruction is based on the needs of individual students as determined by assessments and observation.

Tier 2 instruction addresses the specific needs of students who do not make sufficient progress in Tier 1. While it is important to be aware of how advanced learners' progress compares to that of their age peers, the key is observing and assessing each advanced learner's progress based on his or her potential. Once a teacher understands what progress is occurring during the high ability/high potential student's time in the classroom, recommendations can develop for additional interventions to help the student achieve his or her potential.

A commonly employed Tier 2 Intervention is a “pull-out” or “pull-together” program that happens once a week with a teacher different from the teacher in the students' usual classrooms. Frequently, this is perceived as the entirety of a school's gifted program but, in reality, it is one element of a comprehensive program to meet high ability/high potential students' needs. When high ability/high potential students come together in small groups to expand core curriculum learning, they have opportunities to advance the level of content, critical and creative thinking, and guided independent study in areas of their own interests and strengths. A Tier 2 Intervention can be a **pull-together program**, but it does not have to be. The chart on the next two pages makes suggestions for ways that a district's Tier 2 program can mesh with what's going on in the classroom and help high ability/high potential students' progress at an appropriate rate.

In a study of ... teaching mathematically talented students, one researcher found positive effects for using pull-out grouping to include:

- *good interaction between teachers and students,*
- *significant progress in level of skills, and*
- *increases in motivation.*

In a mathematics pull-out group with same-age peers, where the students were pulled from different classes other than their regular mathematics instruction, the teacher reported that the group:

- *met the needs of her students who showed more ability in mathematics,*
- *increased their motivation, and*
- *evidenced students' learning new knowledge.*

The students in the group shared positive attitudes toward the group and the chance to work with similar ability peers.

~National Association for Gifted Children

Strategies and interventions for Tier 2 high ability/high potential students

Strategy	Description	Research Gains
Ability grouping	Children of high-ability or with high-achievement levels are put into a separate group for differentiating instruction. Can be full or part-time or flexible sorting.	Studies of performance of gifted students in ability-grouped classes in which the curriculum was accelerated. The effect size was found to be 10 months (Kulik, 1992)—that is 22 months of progress in 12 months of time.
Abstraction	Going beyond surface information; use of symbolism, underlying meaning of content.	
Cluster grouping	Cluster grouping is the practice of placing the top group of students from a grade into the same classroom. This assures the teacher of having a “group” rather than just one student who is above and beyond his or her peers. The teacher of this group should enjoy working with high-performing students and have a background in differentiated instruction for high ability/high potential students. With this strategy, high ability/high potential students are working on advanced curriculum and assignments as a group within a regular classroom. It avoids the situation where a single child is always working by himself or herself, thus allowing interaction and discussion within their own group.	Current research suggests that there are several benefits of CG: Gifted students regularly interact with their intellectual peers and age peers (Delcourt & Evans, 1994). Cluster grouping provides fulltime services for high ability/high potential students without additional cost. Curricular differentiation is more likely to occur when a group of high-achieving students is placed with a teacher who has expertise, training, and a desire to differentiate than when these students are distributed among many teachers (Bryant, 1987; Kennedy 1995; Kulik, 1992; Rogers, 1991).
Competitions or advanced clubs	Examples: Math Olympiad, Destination Imagination, Math Counts, Junior Great Books, Future Problem Solving, JASON Project (see resources for additional list of competitions).	Pre- and post-test data of highly talented mathematical students in Grades 3-6 who participated in a special program offered by Johns Hopkins University gained an average of 46 percentage points (Mills, Ablard and Gustin, 1994)—that is 18 months of progress in 12 months of time.
Complexity	Providing more difficult and intricately detailed content.	
Concept-based programs	Programs such as Mentoring Mathematical Minds (M3) and Accelerated Math focus on mathematical reasoning, creativity, and conceptual understanding.	Students using programs such as M3 and Accelerated Math have shown statistically significant gains in mathematical understanding and have outperformed students in comparison groups.
Cooperative grouping with like-ability learners	Organizing groups of learners in three to four-member teams of like ability and adjusting the group task accordingly.	Grouping academically talented students together for instruction has been found to produce positive achievement outcomes when the content and instruction provided are appropriately differentiated to be challenging. (Gentry, 1999; Kulik and Kulik, 1992; Rogers, 1991)
Cross-graded classes	This is a variation of regrouping for specific instruction . In this situation the entire school must teach the same subjects at the same time so that students go to classes that are taught at their level regardless of grade level placement. At a particular time each day, students would travel to the appropriate grade (or room) for their instruction. The instruction would be delivered for their level. For gifted students, again, the focus would be on pace, depth, breadth, and complexity.	Several studies show that students who were placed in grade levels that matched their mathematical readiness had effect gains of over one (Kulik, 1992; Mills et al., 1994)—that is more than 24 months of progress in 12 months of time.

Strategy	Description	Research Gains
Curriculum compacting	Curriculum compacting is the practice of pretesting student knowledge of material before it is taught. This can be done by using end of level tests, a written narrative of what the students already know, etc. If the student has mastered or nearly mastered the material, he or she should be delivered a curriculum that is new and offers a challenge. With skill-based subjects, such as math and early reading, the end of unit tests work well. With more content-based areas, such as literature, social studies, and some science, students could have the option to take the book, study the chapter, take the test, then go on to replacement, or extension, material.	Effect size of .83 (one year and eight additional months of growth per year)—that is 18 months of progress in 10 months of time. A study of 436 second to sixth-grade high ability/high potential students revealed that even though 40-50 percent of the curriculum was eliminated, performances on standardized tests were equivalent to that of students who received regular curriculum instruction. (Reis, et al., 1993)
Diagnostic testing/prescriptive instruction model	Above level diagnostic testing is used to determine the strengths and weaknesses of gifted students and determine areas of study. Especially useful for mathematically gifted students.	
Early instruction in presentation, research, study, and organizational skills	Direct instruction in research that will allow students to pursue areas of strength and interest.	
Extra-curricular learning	Accelerated programs outside of regular school curriculum may be offered after school, on Saturday, or during the summer.	Pre- and post-test data of highly mathematically talented students in Grades 3 through 6 who participated in a program offered by Johns Hopkins University gained an average of 46 percentage points. (Mills, et al., 1994)—that is 18 months of progress in 12 months of time.
Goal setting for college planning	Early planning and goal setting for post-secondary education.	
Honors, <i>Advanced Placement</i>[®] courses	Students take courses with advanced or accelerated content (usually at the secondary level) to test out or receive credit for completion of college level course work. Although one such program is designated Advanced Placement [®] , several such programs exist, e.g., International Baccalaureate.	
Method of inquiry	Relating content to how things work; methods that are used in the field.	
Mentorship	Student(s) are placed with a subject matter expert or professional to further a specific interest or proficiency that cannot be provided within the regular educational setting.	
Organization	Changing the sequence for how content is taught; for example, teaching the “most difficult” concepts first.	
Partial day or send-out (pull-together) grouping	Removal of gifted/advanced learners from the regular classroom for a specific period each day or week to work with a trained specialist on differentiated curriculum.	When the content is sufficiently deepened, advanced, and differentiated, pull-together programs were shown to be effective (Delcourt, Loyd, Cornell and Goldberg; 1994).
Pull-in programs	See partial day/pull-together programs .	Above.
Real audiences	Presenting work to a live audience or providing an expert in the field to evaluate the child’s work.	
Real world problems	Providing learners with a problem or situation to solve that is relevant to their own lives.	

Strategy	Description	Research Gains
Regrouping by achievement for subject instruction	Students who are gifted in math or reading are grouped for instruction with similarly gifted students. This usually happens within the whole school or grade level (Walk to Read model). The students may change groups as needed, or indicated, by assessment. Schools using this strategy will have reading, math, etc., within each grade level at the same time each day. High ability students then go to the teacher teaching the curriculum at a faster pace, with more breadth, depth, and complexity.	In 25 studies where curriculum remained the same for all groups, there was only a slight gain in academic growth. There are substantial gains however when an alternative curriculum is chosen to meet the needs of mathematically gifted students (Kulik, 1992). Eleven out of 14 studies indicated that students in cross-grade programs achieved an effect gain greater than one—that is 24 months of progress in 12 months of time.
Skill-based programs	Computer programs, such as Renaissance Learning and Success Maker that allow the student to work at their own pace and give direct, immediate feedback to student and teacher.	ITBS scores of students using a skill-based mathematics program were significantly higher in skills than students who did not use the program (Ysseldyke, Tardrew, Betts, Thill, and Hannigan, 2004).
Specialized curriculum programs, intentional academic programs, groups	William and Mary curriculum, National History Day, Mentoring Mathematical Minds, Accelerated Math, Project Spring, and Project Spring II (see appendix).	2006 research on Mentoring Mathematical Minds, to cite just one example, showed gains over a similar comparison group on TIMSS, NAEP, and ITBS scores for third, fourth and fifth graders. National Center for Gifted and Talented Research.
Study of people	Relating content to the people in the field, famous people, human situations, and problems.	
Talent opportunities	Provision of experiences for an individual student with a demonstrated high performance or high potential in a specific area either through individual work or with a group of students with like talents.	
Talent searches, university program	Provision of highly challenging, accelerated learning experiences, usually on a college campus in a specific talent area for highly talented students.	
Theme-based units	Students are involved in a study of concepts through theme-based units that stress the application of reasoning to reading, writing, creating high-quality projects, and organizing learning.	A study of advanced literature groups found a significant learning advantage for groups who received theme-based instruction that emphasized the use of reasoning in reading and writing and required high-quality products compared to groups who did not receive theme-based, high-expectation instruction (Van Tassel-Baska, et al., 2002).

Adapted from Re-Forming Gifted Education: How Parents and Teachers Can Match the Program to the Child, by Karen B. Rogers, Ph.D. Reproduced by permission of [Great Potential Press](#).