Accommodations for Students who are Gifted and Learning Disabled in Math

- Student will require extended test time in the area of math.
- Student will require flexible scheduling to allow for small-group or individual instruction in math, and small-group or individual advisement in the area of Advanced Educational Services.
- Student will require higher order thinking curriculum across his or her curriculum areas.
- Student will require compacted or differentiated curriculum in his or her areas of giftedness.
- Student should be helped to "visualize" mathematics problems, i.e. they can draw visual aides, and utilize all visual aides available within the assignment.
- Allow problems to be read out loud, possibly multiple times to utilize student's auditory strengths.
- Use real-learning learning to teach math.
- Use rhythm and music to teach basic math facts.
- Allow for assistive technology, i.e. calculators, color-coding.

Online Resources

- http://help4teachers.com/
- <u>http://www.ldonline.org/ld_indepth/math_skills/garnett.</u>
 <u>html</u>
- <u>http://www.dyscalculia.org/</u> <u>DIC.html</u>
- <u>http://www.awesomegrades.</u> <u>com/?10050</u>
- <u>http://www.dozenlilacs.com</u> /dyscalculia.htm
- <u>http://www.as.wvu.edu/~sci</u> <u>dis/dyscalcula.html</u>
- <u>http://www.dyscalculia.org/</u> teacher.html
- <u>http://www.hoagiesgifted.or</u> g/twice_exceptional.htm
- <u>http://journals.sped.org/EC/</u> <u>Archive_Articles/VOL.38NO.1</u> <u>SeptOct2005_TEC_vol.38no.1</u> <u>septoct2005_tec_article9.pdf</u>

Teaching Students who are Gifted and Learning Disabled in Math

Prepared By: Amy Himelright

Dyscalculia (or dyscalcula) "Dyscalculia" is a lessorknown learning disability that affects mathematical calculations. It is derived from the generic name "mathematics difficulty".



Characteristics of Students who are Gifted and Learning Disabled in Math

- Student is likely to demonstrate a noticeable discrepancy between intellectual potential and performance in math on standardized tests.
- Student is likely to become frustrated and/or seemingly disengaged in math while remaining enthused about other learning activities not related to his or her disability.
- If student is being successful in math, it is likely that he or she is spending extraordinary amounts of time with in or out of school assistance to maintain his or her success.
- Student is likely to demonstrate outstanding performance and/or passion in his or her areas of giftedness, i.e. he or she may have an exceptional ability to organize thoughts quickly into profoundly exceptional speech.
- Student may have visual-spatial problems, i.e. difficulty aligning numbers in proper columns.
- Student may be **unable to memorize** basic math facts.

Program/Service Needs of Students who are Gifted and Learning Disabled in Math

- Student will benefit from an individualized educational plan that emphasizes his or her gifts, i.e. acceleration or enrichment in his or her area of giftedness, higher order thinking assignments in areas of high potential.
- Student will benefit from socialemotional support from an individual advisor, and in the form of a support group that includes other twiceexceptional learners.
- Student should be assigned case management by staff trained in his or her learning disability.
- Student may require small group instruction in math, reduced work load in math, math instruction delivered in a wide variety of forms, and extended test time in the area of math.
- Student should be trained in how to utilize his or her unique gifts to in part compensate for his or her disability in the area of math.

Strategies for Differentiating Instruction for students who are Gifted and Learning Disabled in Math

- Assignments across the curriculum could be "layered" as described by Kathy Nunley on her website www.help4teachers.com
- Student should be encouraged to engage activities that include higher order thinking / application of skills across all curriculum, including math once basic skills are obtained.
- While student may require instruction in multiple forms for math, he or she may require reduced instruction time in other areas; thus allowing for more higherorder-thinking time.