2013 GATE Program Evaluation

A Presentation to the

District 33 Board of Education

April, 2014

Purpose of Evaluation

To examine the growth of students in District 33's GATE program as compared to that of students with comparable propensity scores not included in the GATE program.

Process and Data used in Evaluation

- Rosters of students in the GATE program from 2010-2011 and 2011-2012
- Growth on ISAT and NWEA MAP math & reading assessments in grades 4-8
- In grade 3, only reading data were used
- Due to low numbers, used students across both years to increase reliability

Methodology

In order to facilitate conversation regarding student percentile ranks and identification for the GATE program, student propensity scores (50-150) were equated with local percentiles (0-99).

A control group of non-GATE students was formed.

Control Group Formation

- Average GATE student percentile = 87.82
- Average non-GATE percentile = 46.74
- The standard deviation for GATE students is 11.
- 1.5 standard deviation of 11 is about 17.
- Thus, control group is comprised of students with percentile of 70 or greater.

Key Findings: Inclusion

- Of 310 GATE students, 292 had math percentiles greater than 70.
- 18 students had percentiles less than 70.
- The GATE analysis includes students in grades 4-8 enrolled in replacement advanced math classes.
- Students enrolled in SIA or cluster classes are not designated as GATE participants.

Key Findings: Math

- GATE students achieved significantly higher growth than students in the control group.
- Aggregate results from ISAT and NWEA MAP for grades 4 - 8 show a difference of +0.28 in Value Added Growth (VAG) for GATE students.
- GATE = +0.18 Control = -0.10

Key Findings: Reading

- Using a variety of service models, GATE students achieved higher growth than students in the control group.
- Aggregate results from ISAT and NWEA MAP for grades 3 - 8 show a difference of +0.09 in Value Added Growth (VAG) for GATE students.
- GATE = +0.22 Control = +0.13

Growth by Grades: Math

- The difference in VAG in grade 4 and 5 tends to be higher than in grades 6 - 8.
- The difference between GATE and control group VAG is greater than +0.30 in four of the seven testing events. (ISAT grade 4, 5, 8 and NWEA MAP grade 7)

Difference between Gifted and Control Math Value Added Growth

Grade	Test	Gifted VAG	Control VAG	Difference in VAG
4th	ISAT	+0.26	-0.29	+0.55
5th	ISAT	+0.10	-0.25	+0.35
6th	ISAT	+0.21	+0.01	+0.20
7th	ISAT	+0.09	-0.11	+0.20
	MAP	+0.29	-0.05	+0.34
8th	ISAT	+0.37	-0.08	+0.45
	MAP	-0.22	+0.06	-0.28
ALL	Both	+0.18	-0.10	+0.28

Growth by Grades: Reading

- The difference in VAG for reading growth tends to be more consistent across grades.
- GATE students' growth exceeds +0.30 in ISAT grades 3, 6, and 8, and NWEA MAP grade 7.
- The difference in VAG is greater than +0.30 in two of twelve testing events.

  ISAT grade 3 and 8

Difference between Gifted and Control Reading Value Added Growth

Grade	Test	Gifted VAG	Control VAG	Difference in VAG
3rd	ISAT	+0.48	+0.07	+0.41
	AIMS	-0.27	+0.17	-0.44
4th	ISAT	+0.22	+0.15	+0.07
	AIMS	+0.00	+0.10	-0.10
5th	ISAT	+0.17	+0.09	+0.08
	AIMS	+0.23	-0.02	+0.25
6th	ISAT	+0.31	+0.26	+0.05
	MAP	+0.25	+0.00	+0.25
7th	ISAT	+0.24	+0.25	-0.01
	MAP	+0.52	+0.24	+0.28
8th	ISAT	+0.71	+0.02	+0.69
	MAP	-0.13	+0.27	-0.40
ALL	Both	+0.22	+0.13	+0.09

Characteristics of Effective Gifted Programs

- Commitment to meet the needs of all learners
- Consistent definition of giftedness that fits the context, values, and beliefs of the district
- Agreement in the school and community regarding philosophy and implementation of the gifted program

Characteristics of Effective Gifted Programs

- Use of quantitative and qualitative assessments
- Continuum of services that recognizes academic giftedness and creative problem solving
- Consistent identification process

What we learned:
Phase 2

- Value Added Growth in math was significant for students in GATE replacement advanced math classes, especially in early grades.
- Valued Added Growth in reading was consistent along grade level for students receiving various service models.
- Recommend greater consistency in documentation of students and type of service they received.

What we learned:
Phase 2

- District will review identification process to include academic giftedness and creative problem solving.
- District will review elementary programming to meet the needs of high performing students.
- District will review middle school programming to meet the needs of high performing students.
- District will improve digital tagging procedures.