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**HOMOGENEOUS GROUPING VS.
CLUSTER GROUPING:
WHICH MODEL OFFERS
MORE ACADEMIC GROWTH
FOR GT STUDENTS?
GRADE 3 READING STUDY C-FB ISD**

Introduction to the Problem

- ⦿ Differences in yearly academic growth rates in Grade 3 reading for gifted students in 2 distinct GT programs in C-FB ISD: LEAP and ACE
- ⦿ Texas accountability requires annual growth rates for all students, including gifted and talented students with focus on annual growth for gifted students
- ⦿ Absence of research on evaluating gifted grouping practices for annual growth.



Purpose of the Study

- ✓ Examine differences in academic growth based on the grouping of gifted and talented students.
- ✓ The participating school district's gifted and talented students participated in one of two programming models
 - homogeneous
 - heterogeneous

Background of the Study

- ✓ Gifted students, by virtue of their early reading ability, may already enter Grade 3 with high achievement.
- ✓ To evaluate the two different programs, a growth measure will capture the impact of the educational setting on the student.



Heterogeneous vs. Homogenous Reading Growth for GT students



- Similar growth by both groups of gifted students
- Both grouping practices of homogeneous and heterogeneous produced increases in reading for Grade 3 gifted students.
- No significant differences between LEAP and ACE groups measuring their fall to spring reading growth for Grade 3.
- Both groups reached similar academic growth

Conclusions

- ⦿ The current study's results report that gifted students continue to grow in academic skills in both grouping models
- ⦿ The results do indicate that both homogenous and heterogeneous classes produce academic growth
- ⦿ For the highly gifted student, a homogenous grouped classroom offers the same growth as gifted and moderately gifted students achieve in a heterogeneous cluster grouped model.
- ⦿ The gifted continuum may require different grouping practices to maintain the same growth measures between models.
- ⦿ Several models may meet the needs of gifted students and the one best model theory for gifted programming may be a myth.

Literature Review: Grouping



- ◎ “Equity respects individual differences in readiness to learn and recognizes the value of each student” – impetus for individualization even within GT programs

Reasons FOR Grouping

- Teacher can teach to a more homogeneous set of needs
- Teacher can identify curricula and instructional strategies that are research-based that work effectively for GT learners (whole to part, flipped classroom, eliminate repetition, pacing, complexity, depth, PBL, inquiry, choice, individual projects, contracts, etc)
- Teacher can differentiate more strategically
- Students find others who process similarly and understand them
- Students have “true peer” comparison group so self-perceptions are more grounded (big fish – little pond effect)

Rogers, Karen Baylor University Presentation

Reasons AGAINST Grouping

- Classrooms have no role models, leaders, or discussion raisers
- Creates an “in” group, causing self-esteem damage to “outs”
- Does not prepare students for the “real world”
- Creates low and “normal” tiers in classrooms based on managing bad behavior, not pro-academic
- Once a student is in a group, they cannot get out (tracking)

Grouping doesn't matter
unless you differentiate and do
something different

District decisions on GT service models are influenced by:

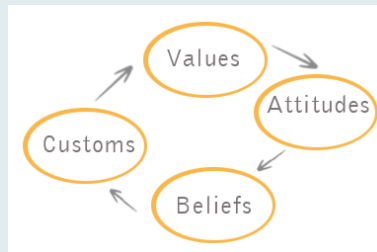
- ⦿ Ethical: Does being GT mean you are better than?



- ⦿ social-political: democratic ideals vs. individualism and self-determination



- ⦿ Cultural:



- ⦿ pragmatic considerations: \$\$\$



Which Grouping Options are Practical for your school setting?

- ⦿ Separate school for the gifted
- ⦿ Advanced course sequences (AP, IB)
- ⦿ Cluster grouping by ability
- ⦿ Cluster grouping by performance
- ⦿ Pull-out program
- ⦿ Separate ability grouped or performance group advanced classes

Author/Researcher	Author's Profile/Philosophy
Van Tassel-Baska's (2002) Integrated Curriculum Model for Gifted Learners (ICM; p. 46)	Research based and aligned to characteristics of the gifted and talented learner Uses constant and on-going revision and review Calls for constant updating based on standards and outcomes Influenced by Adler and Paidaeia: Academic Rationalist Discipline specific with some inter-disciplinary focus
Renzulli's (1988) Multiple Menu Model (MMM) for Differentiated Curriculum for the Gifted and Talented (p. 1)	Teacher is autonomous with ultimate freedom for design of curriculum having choices from a menu of options for each curricular unit Outcomes should be concrete and abstract for summative assessment Relies on curriculum developer to determine degree of complexity as appropriate to age and content area Teachers select their instructional techniques from a menu Creative products are a personal reflection of the student learning and thus are authentic in nature Teacher passion is translated into student engagement and success
Gagne's (2002) Differentiated Model of Giftedness and Talent (DMGT; p. 1)	Distinguishes a difference between gifts and talents Performance is valued over potential Many catalysts spur individuals to talent Natural abilities may remain dormant if catalysts are not encountered Complex model of why some students achieve and some do not Recognizes that a gifted student may not be talented and a talented student may not be gifted Asks if classes be created for gifted or talented instead of gifted and talented Upper 10% of students hold the gifts and talents Uses a once-gifted perspective as an always-gifted approach to course entrance requirements
Wiggins & McTighe's (2012) Understanding by Design (UBD; pp. 2-20)	Begins with the end in mind Allows for enduring understanding and works outward from central content to less central content Implements a backward design with assessments aligned to instruction Works backward from skill-based expectations Performance tasks and projects are well-designed, open-ended, complex, and authentic
Tomlinson & Kaplan's (2002) Parallel Curriculum Model (PCM; p. 15)	Four facets are core, connections, practice, and identity Foundations are steeped in current gifted research and characteristics are appropriate Ascending level of intellectual demand is needed even within the gifted community of learners

Synthesis: GT Program Models

Model	Strengths	Weaknesses
Pull-Out Model	<ul style="list-style-type: none"> Built-in opportunities for peer interaction Focus on in-depth study or new area of learning One instructional plan required 	<ul style="list-style-type: none"> Limited contact time Part-time differentiation of curriculum Lack of integration with regular classroom work
Push-In Model	<ul style="list-style-type: none"> Integration into the regular classroom Focus on in-depth study or new area of learning Flexibility to group and regroup based on instructional need 	<ul style="list-style-type: none"> Gifted peer interaction limited to same grade level Limited contact time
Cluster Grouping	<ul style="list-style-type: none"> Full-time opportunity for curriculum differentiation Build-in peer group Flexibility to group and regroup based on instructional need Full-time grouping 	<ul style="list-style-type: none"> Assumes students represent the same level Gifted peer interaction limited to same grade level Multiple instructional plans required
Full time Classes	<ul style="list-style-type: none"> Ability to deliver comprehensive differentiated curriculum and programs Intellectual peer group interaction Flexibility to group and re-group based on several variables Teacher can focus on talent development Teacher can focus on talent development Curriculum can be individualized to a high degree 	<ul style="list-style-type: none"> Perceived as more extreme than other forms May not differentiate curriculum sufficiently

C-FB ISD

- ◎ Gagne: programming bifurcation model: two tiers



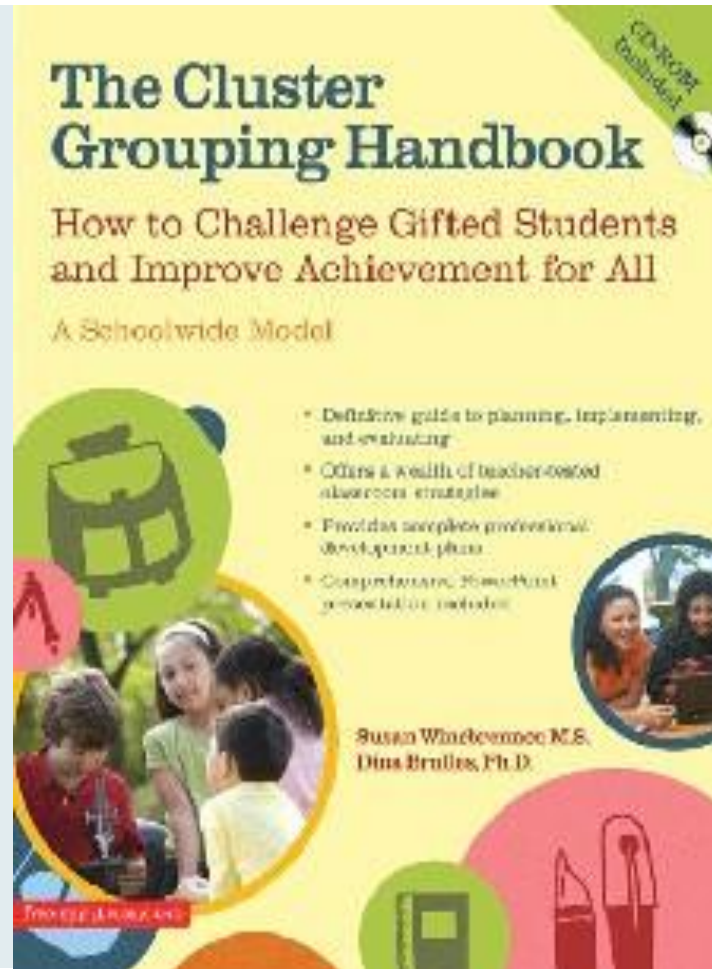
Synthesis of Research: GT Program Effect Sizes

Data adapted from Rogers (1993, p. 3-4).

Academic Effect Sizes of Program Options for Gifted Students

Option	Academic Effect Size
Early Entrance to School	.39
Subject Acceleration	.49
Curriculum Compaction	.45
Grade Skipping	.78
Enrichment (pull-out)	.65
Enriched Classes Ability Grouped	.33
Cross-grade Grouping (reading, math)	.45
<u>Nongraded Classes</u>	.38
Concurrent Enrollment	.36
Regrouping for Specific Instruction (reading, math)	.43
Advanced Placement	.29
Credit by Examination	.75
Cluster Grouping (specific differentiation)	.33
Cooperative Learning Johnsons "Learning together"	.0
Enriched Classes Ability Grouped	.33

Heterogeneous Grouping: Cluster



Direct Comparison: Grouping Models

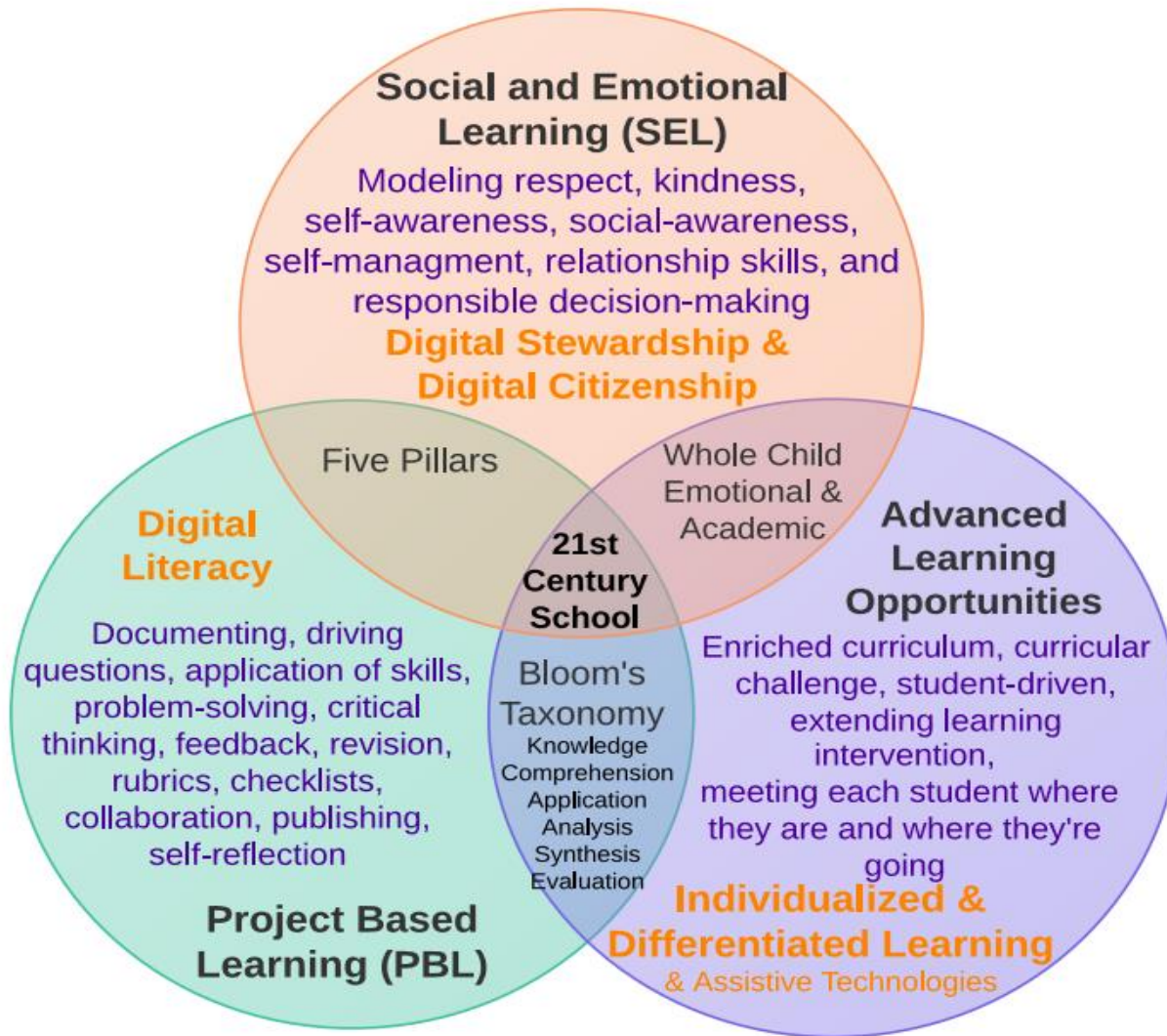
- ◎ The average teacher adjusts their teaching pace to the learning pace of students close to the 25th percentile (Gagne, 2007, p. 104).



Differentiation ?



Cluster Grouping with Differentiation



Guidelines for Effective Cluster Grouping



Recent Trends



Last Words

- ◎ The evidence does not support the charge that ability grouping is inherently harmful, and there is no clear evidence that abandoning tracking for heterogeneously grouped classes would provide a better education for any student...High achieving students are the exception. For them, ability grouped classes with an accelerated or enriched curriculum are superior to heterogeneously grouped classes.

(Loveles, T. (1998). The tracking and ability grouping debate. Washington, DC Fordham Foundation, p. 17)

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