

The background of the slide features a close-up, slightly blurred image of a pencil writing on a document. The pencil is positioned diagonally from the bottom left towards the top right. The document has faint, illegible text and lines, suggesting a research or educational context. The overall color palette is warm, with shades of brown and beige.

THE STATE OF GIFTED EDUCATION IN TEXAS: TRANSLATING THE RESEARCH INTO PRACTICE

Presented by The Research Division
at the TAGT Leadership Conference

March 30, 2009

A Review of the Report

- THE STATE OF GIFTED EDUCATION IN TEXAS by the TAGT Research Division
- Please refer to the Texas Association for the Gifted and Talented web site for the full report.
- A PowerPoint summary of the report is also available online.

Implications for GT Coordinators

- Tools for Campus Administrators (Local Accountability)
- Quality Program Evaluations (Local Accountability)
- Effective Professional Development (Improved Practice)
- Program Design and Curriculum (Expand Services)

Tools for Campus Administrators

- **Classroom Walk-Through Tools**

What should an administrator see on a brief walk-through in a GT classroom (self-contained or cluster grouped)?

- **Tools to Make Differentiation an Expectation for PDAS**

What do your principals need to help document differentiation for gifted learners when they conduct PDAS?

- **Lesson Plan “Look-Fors” Supporting Gifted Learners**

How can we help principals use lesson plans as evidence that teachers are implementing the GT program as expected?

Quality Program Evaluations

- Could we develop a common template to help GT Coordinators across the state conduct quality annual program evaluations?
- Connect program evaluations with the State Plan to write goals and strategies for Campus and District Improvement Plans. Formalize continuous improvement of your program.
- Develop program evaluations with an increased focus on student performance rather than “how you feel” perceptions on a survey.

Quality Program Evaluations

- How can schools begin to use the Performance Standards in a meaningful way that contributes to program evaluation?

We want authentic assessments rather than tests to measure progress. The Texas GT Performance Standards are a great step in this direction, and we should look for ways to better use this program and share with our colleagues.

We want accountability based on student performance rather than accountability based on folders of administrative check points (DEC visits).

Effective Professional Development

- Commit to meeting or exceeding the state requirements for GT professional development.
- Use the National Standards to guide all professional development efforts.
- Establish ways to gather evidence that teachers are improving practice because of GT professional development (walk through observations, PDAS, lesson plan audits).
- Move away from the idea of GT training as a “check off” and treat it as a way to improve achievement for gifted students.

Program Design and Curriculum

- How can we consistently gather and share information about research-based program designs? Differentiation in the general classroom remains a common design though little research supports its effectiveness.
- Our program options have not changed much in the last ten years even though we have tremendous advances in technology. How can we use technology to expand learning options for gifted students?
- Acceleration and GT classes seem to be limited, yet both are research-supported practices.

Program Design and Curriculum

- Are our current programs truly teaching students to develop skills of thinking, research, communication, and self-directed learning through the development of advanced level products?
- Let's work on developing a coherent concept of what we mean by rigorous curriculum appropriate for gifted students across all grade levels.
- Let's not fool ourselves into believing that what is most convenient is the same as what is best for gifted students.




GETTING STARTED WITH RESEARCH IN GIFTED EDUCATION

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EDUCATIONAL RESEARCH DEFINED

- The process of asking question(s) and conducting a systematic procedure to obtain valid answers to that question.
- A systematic application of **a family of methods** that are employed to provide trustworthy information about *educational* problems.



WHY CONDUCT RESEARCH?

- ❖ To gain understanding about a topic or issue not fully understood.
- ❖ Rarely, does a single research study provide conclusive evidence regarding generalizability to the population.
- ❖ **Rather, research is an ongoing process, based on many accumulated understandings and explanations, that when summarized lead to generalizations and finally new theories.**




GOOD RESEARCH QUESTIONS


1. Define your topic.
2. Are “researchable” – there is information available that will help provide an answer.
3. Pose a problem that’s significant and interesting to your audience.
4. Are clear, straightforward & comprehensible.
5. Are well grounded in current theoretical and empirical knowledge (i.e., know the literature).
6. Are amenable to the formulation of clear hypotheses and operational definitions.
7. Are important in terms theory and application (i.e., usually weighted toward one).
8. Are focused to allow suitably deep exploration.



SOURCES OF RESEARCH IDEAS

- Everyday Life
 - The director of the gifted and talented program would like to know what happens during a typical week in an English class for advanced placement students.
 - Practical Issues
 - An elementary principal wants to determine if increasing the number of teachers with GT certification improves instruction for gifted students.
 - Past Research
 - A central administrator would like to conduct a replication study in her district of the effects of acceleration on the social/emotional development of highly gifted students.
 - Theory
 - A university researcher wants to extend the literature about measurement equivalence/invariance to instruments used to identify students as gifted.
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RESEARCH TOPICS AS RESEARCH QUESTIONS

- The director of the gifted and talented program would like to know what happens during a typical week in an English class for advanced placement students.
 - What instructional strategies are used in AP English classes that make them different from non-AP English classes?
 - An elementary principal wants to determine if increasing the number of teachers with GT certification improves instruction for gifted students.
 - Is there a relationship among the number of teachers who have GT certification and a. academic achievement of gifted students, b. the use of best practices for teaching gifted students?
 - A central administrator would like to conduct a replication study in her district of the effects of acceleration on the social/emotional development of highly gifted students.
 - What are the effects of acceleration on the social and emotional development of highly gifted students? Are these effects the same for students in my district as in others?
 - A university researcher wants to extend the theory of measurement equivalence/invariance to instruments used to identify students as gifted.
 - Are constructs on an ability measure conceptualized similarly for gifted and nongifted students?
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THE SCIENTIFIC & DISCIPLINED APPROACH TO INQUIRY

- Is systematic and combines both inductive and deductive reasoning with other characteristics.
 - The *Inductive* approach is based on developing generalizations from a limited number of specific observations.
 - The *Deductive* approach is based on developing specific predictions from general principles, observations, or experiences.
- Using a scientific and disciplined approach to inquiry is more viable than relying on tradition, experts/authority, or personal experience.
- The major purpose is to create or extend knowledge and the methods we use are a means to the end.

FOUR STEPS IN SCIENTIFIC & DISCIPLINED INQUIRY

1. Recognize and identify a topic to be studied.
2. Describe and execute procedures to collect information about the topic being studied.
3. Analyze the collected data.
4. State the results or implications based on analysis of the data.

SETTING UP A CONCEPTUAL MATRIX

| Question | Procedures | Analysis | Results |
|--|--|---|--|
| What instructional strategies are used in AP English classes that make them different from non-AP English classes? | <ul style="list-style-type: none"> •Set up sampling procedures. •Develop systematic observation tool and interview schedule. | <ul style="list-style-type: none"> •Descriptive statistics •Qualitative analysis | <ul style="list-style-type: none"> •Discussion of instructional strategies used in both types of classes; similarities and differences. |
| Are constructs on an ability measure conceptualized similarly for gifted and nongifted students? | <ul style="list-style-type: none"> •Collect two large samples (gifted and nongifted) of item level data on an ability measure. | <ul style="list-style-type: none"> •Multiple group confirmatory factor analysis •Content analysis of test items | <ul style="list-style-type: none"> •Both samples view the construct in a similar fashion. •Some item level differences. |

COLLABORATE

- Two biggest obstacles for conducting good research:
 - Time
 - Lack of analytic skills needed to conduct analysis
- Collaborate with others
 - In your district
 - Across districts
 - Within your state and national organizations
 - With universities
 - Faculty
 - Doctoral students