



Angelo State University

The Effects of Literacy Strategies
on Mathematics Performance



Presenters

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Research Questions

- ➔ How does the teaching of literacy strategies affect TAKS mathematics scores?
- ➔ How does the teaching of literacy strategies affect ELLs' TAKS mathematics scores?



Theory to Practice

- ➔ Innovative teachers can make writing an invaluable part of math instruction--
Marilyn Burns
- ➔ Written communication should be nurtured--NCTM



NCTM

- ➔ Math instruction should enable all students to:
 - Organize and consolidate their mathematical thinking through communication
 - Communicate their mathematical thinking coherently and clearly to peers, teachers, and others



NCTM

- ➔ Analyze and evaluate the mathematical thinking and strategies of others.
- ➔ Use the language of mathematics to express mathematical ideas precisely.



Summer Institute Goals

- ➔ To apply research based literacy strategies to teach math
- ➔ To develop peer-coached demonstrations of math/literacy practice
- ➔ To conduct case studies of ELL learners



Summer Institute Program

- ➔ TEKS vertical alignment
- ➔ Analysis of TAKS reading and math scores
- ➔ Developing literacy strategies for the math classroom
 - Math Communication



Products

- ➔ Peer-coached demonstrations
- ➔ Literacy strategies for the math classroom
- ➔ Literature review of research based strategies
- ➔ Cadre of teacher consultant leaders



Products

- ➔ Classroom research findings
- ➔ Case studies of English Language Learners and the effect of literacy strategies on math performance
- ➔ Web page to disseminate information



References

➔ Writing to Learn Mathematics by Joan Countryman; Heinemann
ISBN 0-435-08329-5

Writing in Math by Marilyn Burns in
Educational Leadership, October 2004,
Vol. 62 no. 2



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