



# Friends of the Austin Planetarium

## The impact of a planetarium

Numerous scientific studies have documented that visits to planetariums and science museums significantly improve student understanding of astronomy and space science concepts. A survey of over 200 local educators in the Austin, Leander, Hays, and Round Rock school districts reinforces this conclusion, and demonstrates the enthusiasm teachers have for building a planetarium and science museum here in Austin.

- A study of programs offered at the Houston Museum of Natural Science for Houston ISD documented that, in association with a hands-on science lab, a planetarium program increased student understanding of related topics by 24%, and resulted in an 11% increase in the students' interest in science as a career. (Sumners, 2000)
- In a study (Hayward, 1976) of 471 6<sup>th</sup> graders on planetary motion, a planetarium proved superior to classroom instruction in teaching students to:
  - use space-time relationships
  - infer planetary motion
  - recall astronomy information
  - apply astronomy concepts
- In a worldwide survey of over 750 teachers who used a planetarium in their instruction, nearly 92% agreed that it helped make their students enthusiastic about science. (Kratzer, 1997)
- Trips to a planetarium or science museum are memorable. Over 80% of graduating college students recall specifics of trips they made to planetariums in the first, second or third grade. (Rennie & McClafferty, 1995)
- Less than half (46%) of all local educators surveyed felt that they had adequate resources and support for astronomy and space science instruction in the classroom to help them fulfill the science TEKS requirements in this area.
- Two-thirds (66.7%) of area teachers felt that they did not have adequate resources and support for science instruction in the community (museums, laboratories, etc. to take students to perform experiments) to help them fulfill the science TEKS requirements.
- Over 88% of the educators surveyed agreed that having a planetarium with additional labs for student field trips to perform their experiments with suitable exercises and modules would enable them to perform their teaching responsibilities better or easier.
- Nearly 85% of the area teachers felt it is necessary to build a planetarium here in Austin, and over 91% feel it is necessary to build a science museum here in Austin.
- Fully 94.9% of the teachers surveyed felt that having hands-on science experiments, such as would be available at the proposed planetarium and science museum, are "Very Valuable" for a student's learning experience.
- Of the over 218 educators surveyed, nearly 90% would "definitely" or "probably" take their students to the planetarium as part of their curriculum.

The educators surveyed made several points that speak for themselves:

*"It would promote interest in science for young people who never got exposed to scientific knowledge, especially for low socioeconomically disadvantaged children. These kids need it the most. The chance of their families taking them to Ft. Worth or Houston Science Museum is zero."*

**AISD elementary science teacher**

*"[Students] TAKS scores are just an indicator of what we have known all along. You have to provide meaningful relevant experiences for students to develop the deep understanding needed to retain information from year to year. We do not have enough resources to do that!"*

**Round Rock ISD elementary science teacher**

*"It is such a unique experience, the instruction and learning is unforgettable! I still remember going to a planetarium as an elementary school student where I grew up! And it instilled an interest in astronomy throughout my education."*

**Leander ISD 1<sup>st</sup> grade teacher**

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the Center of the  
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