

Summary of the Value of Education in the Planetarium



A **planetarium** is a specially-designed theater with a domed ceiling that is able to project a realistic image of the night sky indoors. First used to educate about stars, planets, and constellations, planetariums today are unique immersive facilities often used to support Science, Technology, Engineering, and Mathematics (STEM) learning and to cross learning disciplines into art, culture, and history.

Inspiration	Education	Community
Every planetarium immerses visitors in a 3-D environment that evokes realism. The sight of stars appearing in a dark sky, now being lost to light pollution in many areas, immediately captures attention and evokes awe.	The planetarium can show learners our universe in ways that flat screens do not. For example, learning Moon phases requires a person to mentally switch back and forth between Earth and space views – something possible in the planetarium.	Astronomy is an integral part of human history. Cultural constellation stories reflect how past societies viewed their world. Hunters, farmers, sailors, and other explorers all studied the sky to learn the rhythms of nature for survival and commerce.
A planetarium night sky is a powerful, memorable, and soothing image which encourages learning. Immersion sparks a viewer's creativity, interest, and engagement, aspects of education's affective domain.	The planetarium is ideally suited for learning by discovery, allowing students to see and experience the motions and changes of our universe over time.	Understanding modern astronomy helps people comprehend their place in space and time. Astronomical understandings regulate many parts of our lives today: daylight savings time, seasons, and our calendar.
Planetariums are natural multi-discipline facilities. Thousands of planetarium programs are offered across the globe and range from live artistic performances to programs that take the audience underwater to learn about topics beyond astronomy.	Research is showing that classroom learning coordinated with planetarium lessons show the most gains in knowledge and retention. The experience can be an important gateway to learning for children who dislike learning in formal environments.	The planetarium is a place where diversity and equality can be promoted, particularly when facilitators use interactive techniques. Live programming provides the opportunity for participants to connect with each other and the presenter.
Astronomers, space scientists, and others working in STEM fields were influenced to follow their careers after planetarium visits. Also, planetariums inspire current and future artists, writers, animators, and various other non-STEM professionals.	Planetariums employ digital projectors that can zoom the learner from Earth to other planets, stars, distant galaxies, and more. Seeing objects from different perspectives offers the opportunity to understand our true place in space.	The planetarium is a place for lifelong learning. Many STEM-related issues affect us today. Planetariums educate communities on these issues so guests can make informed decisions and encourage global impact.

*References and the complete paper "The Value of Education in the Planetarium," can be found at www.ips-planetarium.org/page/planetariumeducationvalue

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