



Park Districts & Libraries Can Lead the Way To Foster & Achieve STEM Proficiency in Communities

Why
GL2
is
Different...



Strategy:

- Involve entire community in the education of children
- Park Districts and Libraries support STEM education
- After school/summer programs accelerate STEM learning
- Involve community and industry advisory boards during program planning and implementation
- Broadcast STEM activities on a community-wide basis to foster participation of parents and stakeholders



Comprehensive, Unique, Highly Engaging After School Programs (ASP)

- Co-ordinated between Park and School Districts, and the full range of Community Organizations (e.g. industry, colleges, government programs)
- Supports instructional and curriculum sequence of schools (Activities are exciting, highly engaging and conducted in teams to optimize learning)
- Involves local STEM subject experts to assist with diverse topics, mentors provide support for individual and team activities including homework
- Participants are provided diverse experiences defined by curriculum specialists and offered by organizations highlighting workplace activities
- Participants gain an awareness of local and regional career opportunities
- Program operates during the entire time of the school year

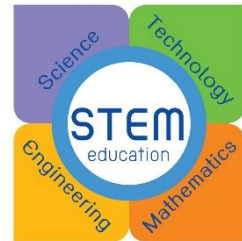


Summer Programs (SP) Build on Progress Achieved by ASP

- Builds on current programs of schools, park districts, libraries and community organizations
- Engages children and youth with local and regional businesses to demonstrate and experience real world STEM applications
- Provides summer training and employment opportunities for teachers
- Optimize the retention of STEM material during the summer months
- Provides a forum to experience STEM applications that may be difficult to conduct during the normal school day
- STEM camps and clubs arranged for age groups, boys, girls, and combined
- Program operates for 10-12 weeks during the summer

Benefits from Implementation of GL2 STEM Programs

- Extends the school day and year in an engaging manner for everyone
- Not just one day events with minimal impact
- Stronger participation by parents and stakeholders
- Longer programs ensure learning impact on students
- Encourages multiple organization cooperative approach
- Enhances the investment by sponsoring organizations
- Greater program efficiencies by cooperation among organizations
- Data give a comprehensive picture of students' STEM progress
- Fosters the development of new and stronger levels of support from business, industry, colleges, labor, civic groups and government agencies





Sample Programs *(Coordinated with Math, ELA, and Science Standards)*

VEX Robotics Program

Fun with Food

Magnificent Structures

Bio-Tech and Health

Natural Sciences in the Field

Nature in our Parks

Computer Science

Manufacturing

Environmental

Gardening

Electronics

Weather

Engineering

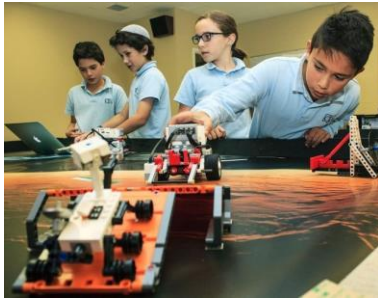
Others developed by staff

Science and Art

Rocketry

Chemistry

Hydrology



GL2 Approach to Professional Development Builds Capacity for Instructors and STEM Proficiency by Children from Experiencing Real-world Applications