## **GL2 STEM Education Demonstration Program**

Building a Community-wide Approach to Ensure Improved Competitiveness of Students and the Economic Vitality of Communities

## **Key Principles of Operation**

Building an initiative to address the needs of participants and the community

Provide quality professional development, leadership enhancement and direct continual community engagement



Emphasize unique workplace experiences and hands-on applications during after-school and summer STEM programs to improve learning

STEM specialists support instructors in the design and delivery of activities for engineering concepts, 21<sup>st</sup> Century skills, STEM practices with exposure for occupations in high demand within the region and nationally

Use new communications and information processing technology during inquiry-based activities on-site and for virtual interaction



Connect students with peers and supporters across the region and nationally to interact as individuals and to participate on joint highly engaging diverse projects

Prepare students to be "World Ready" to compete successfully vs. their global peers by emphasizing use of the best of U.S. company's technologies and services with the best of our nation's federal agency capabilities

Participants: Park Districts and Libraries, Pilot Schools, Major Corporations, Small and Mid-Size Enterprises, Local/Regional/Federal Government Agencies, Community Leaders, Parents, National Research Laboratories, Colleges/Universities, Union Trades, International Partners, Industry Plants, Entrepreneurs, and Industry and Community Advisory Boards

## **Steps, Actions and Activities**

- 1. Conduct Assessment of STEM Activities provided by Park District, Local Library and for Pilot School(s)
- 2. Establish Community STEM Program Leadership Team (PTL) supported by Industry and Community Advisory Boards and civic organizations
- 3. Conduct STEM Summer Institute for Instructional Staff to improve practices
- 4. Provide Job-embedded Coaching/Support on-site during the year
- 5. Establish Network of STEM-related Community Links through engagement of business and industry, college, labor trades, and government agencies
- 6. Map Local and Regional Industry competencies to CCSS, NGSS and state academic standards
- 7. Meet with PLT and Advisory Boards during the year to review operation
- 8. Ongoing Relationships with Partners to include Job Shadowing, Internships, Classroom Presentations, and much more
- 9. Conduct End of Year Program Evaluation and Define Next Steps





Students today must be shown the integrated nature of all subjects, not a siloed approach. The world today does not operate in a silo. What is truly needed are new STEM Programs that augment traditional education with integrated approaches that emphasize learning methods based on exciting inquiry-type activities to trigger stronger interest in STEM.

The GL2 STEM Structure and modes of operation ensures building internal capacity, program sustainability, and replication within a reasonable cost for program sponsors.

GL2 is committed to Building Community-wide Approaches to Ensure the Improved Competitiveness of Students and the Economic Vitality of Communities