



Dr. Robin Larson & Dr. Mary Eaton
The Idea Circle, Inc. Bemidji, MN

Dr. Robin Larson and Dr. Mary Eaton co-founded The Idea Circle approximately four years ago. After leading the business and industry outreach division for a five campus technical college, Drs. Larson and Eaton saw an opportunity to extend their work privately into state government and the K-12 sector through STEM education and comprehensive school reform. Today, with over 40 years of experience in education and working with business and industry, The Idea Circle provides workforce and organizational development consulting as well as training to businesses and educational institutions throughout Minnesota and North Dakota. Our areas of expertise include:

- Relationship Building Between Industry and Education;
- Assessment & Evaluation;
- Program & Curriculum Design;
- Creating STEM Education Based on Real-World Experiences;
- Quality Systems Management;
- Working with Native Americans and Reservations;
- Instructional Coaching; and,
- Data-based Decision Making for Continual Improvement.

It's rare to find educators who understand both an academic and business perspective. Even more so, to find individuals who are comfortable working with all types of individuals, organizations and systems. This is The Idea Circle.

Website: www.theideacircle.com

Workshop Topics:

Mathworks! Series of 3 Workshops

In these workshops, the Idea Circle organized a group of educators and industry experts from the Northwest Minnesota region and facilitated the discussion and development of course curriculum designed around STEM objectives. This curriculum was designed to use real-industry examples in the areas of allied health, construction technology, and manufacturing, and use them as applications and new ways to teach science and math lessons, in accordance with STEM national requirements as well as the Minnesota Department of Education requirements.

Individual Workshops include:

Manufacturing: How to Build a Playground. In this workshop, students are challenged to apply their math and problem-solving skills to build a playground. Activities included cutting wood in the correct length as well as using digital calipers to create charts to plot their accuracy.

Construction Technology: Math in Construction. In this workshop, students apply their math, geometry and critical thinking abilities in real-world examples of construction techniques. Lessons include activities that teach 3-4-5 triangles, squaring a foundation/wall, slopes of roofs (rise/run), reading architect scales, and estimating.

Allied Health: Conversions and Prescription Measurements. This workshop targeted skills in middle school mathematics that are crucial to passing the math portion of a nursing exam, being a successful certified nursing assistant and eventually a medical laboratory technician or licensed nurse. Activities include calculations of doses, measuring medications, checking blood pressure and using a fat caliper properly.

Audience: Educators and experts from the allied health, manufacturing and construction technology industries in Northwest Minnesota.

Format: Workshops include group activities, discussion, and group design.

Length: Multiple days

Manufacturing Production Workshop

In this workshop, the Idea Circle worked with industry experts to design and develop course curriculum using work place examples of manufacturing positions. Workshop teaches implementation techniques for using Articulate software to create curriculum that can accommodate many learning styles.

Audience: Individuals interested in entry level manufacturing positions including high school and adult learners. Also applies to instructors developing curriculum for independent study.

Format: Workshops include computer-based independent study, hands-on activities, and quizzes for post-assessment.

Length: 1-2 hours

Selected Publications:

Customer Expectations of Northwest Technical College.
Mary Z. Eaton. (2003) Published Ed.D. University of Minnesota.

Employer Perceptions Regarding the Relationship Between Training and Organization Performance in Customized Training. **Robin L. Larson.** (2003) Published Ed.D. University of Minnesota.

Governor's Education Council Core Indicator Report. Minnesota Department of Education. **Mary Z. Eaton and Robin L. Larson,** Co-writers.

Mathworks! Curriculum development materials and lessons. **Mary Z. Eaton and Robin L. Larson,** Co-writers.

Contracts:

Minnesota Department of Education (Governor's P-16 Council)
Governor's Workforce Development Council (Representing 40 K-12 schools)
Northwest Private Industry Council (K-12 and corporate educational partnership for incumbent workers)
Bagley Public Schools (Comprehensive School Reform)
Marvin Windows and Doors and Minnesota State Community and Technical Colleges (Succession planning)

Previous Projects:

Mathworks! Designed curriculum to use real-industry examples in the areas of allied health, construction technology, and manufacturing, and use them as applications and new ways to teach science and math lessons, in accordance with STEM national requirements as well as the Minnesota Department of Education requirements.

Bagley Public Schools, MN Comprehensive School Reform Program. Designed and developed a comprehensive school reform program for elementary and high school programs.

Governor's Education Council and Partnership. Facilitated implementation of their 2006-2007 Core Indicators Report, a part of the National Governor's Association Honor State Award.

Northern Tech Prep Network. Led the development of the formation of the Northern Tech Prep Network which provides a collaborative place for

K-12 faculty and higher education faculty to discuss articulation opportunities, share curriculum and track specific agreements. It also provides standard policy and processes, links to resources, events and meeting rooms for chats.

Nursing Abilities Tracking System (NATS). Developed and implemented an online tracking system designed to track Minnesota Board of Nursing Abilities for LPN and RN licensure. This quality, standards-based system tracks clients, key documentation and course outlines in an electronic format. This is an example of a complex database that is currently being used by multiple college campuses throughout Minnesota.

Qualifications:

Mary Z. Eaton, Ed. D. in Work Family and Community Education (2003), BS in Vocational Education (2000), RN (1976).

Robin L. Larson, Ed. D. in Education Policy and Administration – Leadership Academy (2003), M.A. in Applied Behavioral Science (1999), BS in Psychology (1990).

Member:

The National Alliance for Partnerships in Equity (NAPE)
College of Education and Human Development (CEHD)
Minnesota American Council on Education Network (ACE)
American Society of Quality (ASQ)
Women Work!