

ACTIVE LEARNING COMMUNITY PARTNERS WORKING GROUP

2016 Report to the Governor's STEM Advisory Council

A Tool for Quality Informal STEM Programming

Dimensions of Success a pear observation tool







STEM Active Learning Community Partners

12 Dimensions of Success for STEM Program Quality

September, 2015 DoS Professional Development Pilot Workshops

60 Participants

Workshop Goals: Evaluating 12 Dimensions and Defining a Learning Goal





STEM Learning Goal

Pre-Workshop Score: 2.24

Post-Workshop Score: 3.84

Average % of Improvement:



Features of Learning Environment

(Pre -> Post):

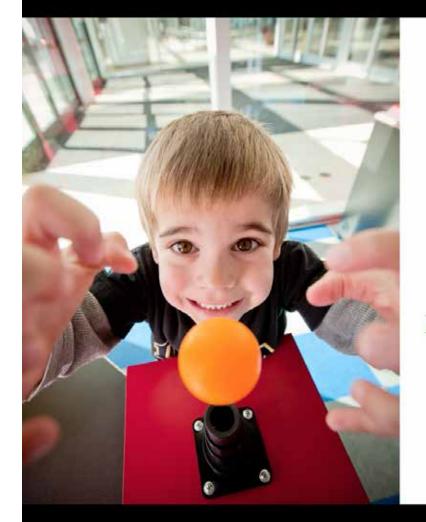
Organization (1.31 -> 4.47)

Materials (3.34 -> 4.68)

Space Utilization (1.21 -> 3.39)

Average % of Improvement: 153%







Activity Engagement

(Pre -> Post):

Participation (2.53 -> 4.05)

Purposeful Activities (2.68 -> 4.11)

Engagement with STEM (2.87 -> 3.95)

Average % of Improvement:



STEM Knowledge & Practices

(Pre -> Post):

STEM Content Learning (2.79 -> 3.55)

Inquiry (3.17 -> 3.96)

Reflection (2.1 -> 4.29)

Average % of Improvement :







Youth Development in STEM

(Pre -> Post):

Relationships (1.43 -> 3.37)

Relevance (2.18 -> 4.05)

Youth Voice (2.34 -> 3.79)

Average % of Improvement :



TOTAL STEM LESSON PLAN CHANGE

(PRE -> POST WORKSHOP): (2.32 -> 3.96)

% of Improvement 71%





ACTIVE LEARNING

COMMUNITY PARTNERS

WORKING GROUP

IMPROVING STEM EDUCATION IN IOWA,
ONE CHILD AT A TIME