# Learning From Each Other: STEM in two States





#### Iowa and Massachusetts

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## A little pre-history...MA.1 Starting in the mid 1990's:

 STEM professionals/ STEM corporations/ workforce development professionals realized there is a real shortage of skills/ workforce

 STEM professional organizations expressed concerns re: a shortage of STEMready-workforce & diversity in STEM workforce

## A little pre-history...MA.2

- Strong reflections in Massachusetts (engineering and science professional Societies; workforce development professionals; training and education professionals in STEM corporations)
- Beginning of STEM Pipeline movement in Massachusetts in late 1990-early 2000 - STEM professionals and K-20 education - together (a LOT of work from 1999-2003)
- NSF responded by SMET funding (late 1990 early 2000) (there was no STEM back then, it was SMET)

## A little pre-history...MA.3

 Beginning of a plan under aegis of UMass Pres Office

First MA STEM Summit in 2003

MA STEM Caucus in the Legislature

 MA STEM Pipeline Fund and MA STEM Network

## A little pre-history...IA

The IA. Math/Science Partnership

 Its evolution to State STEM coinciding with NGA highlighting MA model

 Meeting of two members simultaneous at NASSMC.

## A little history

 MA Council created by executive order, end of 2009

 IA Council created by executive order, 2011

 MA Council member appointed to IA, 2011, reappointed 2013

#### Agreements

 To share materials, plans, ideas with proper attribution

To avoid mistakes

To appoint a member in common

#### Shared resources

The state STEM plans

Ideas about website development

Ideas about process, structure & planning

### Consequences

- Learn from the other's experience
  - One plan led to another
  - Lieutenant governors providing leadership
  - Regional networks → Regional hubs
  - STEM Summits

#### Ideas shared

- Museum education in STEM; out of school STEM; Informal STEM learning
- Teacher preparation
- Advocacy strategies
- Organizational arrangements

#### Lesson learned

- It is about
  - people and relationships
  - two way generosity
  - not duplicating unnecessarily
  - building on success
  - Exploring/filling gaps

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