“Institutions are projections of what goes on in the human heart.”

• Parker Palmer
STEM Experiences

• Personal Reflections
  – Most memorable STEM class
  – Most outstanding STEM teacher
  – Learning from experience
Technology Today

• Impact of Technology
  – Computers, cell phones, PDA, laptops, iPods, MP3 players, iPhone, iPads, skype

• Value of Technology
  – Listening
  – Feedback
  – Collaboration: sharing
  – Constructive Learners: content creators
  – Information

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Women in STEM Areas

- Why women aren’t interested?
- What can we do to encourage interest?
- What are you doing?
Research Results

- U of Colorado
- Ohio State U
- U of Hawaii
- U of Texas – Austin
- Norfolk State U
Impact of an Ursuline Education

- We are all educators, teachers – no matter what job or task we do.

- How does the Ursuline approach to education impact STEM
What does it mean to be an Ursuline Educator

• Basic Assumptions
• Aims
• Reglements
• Essential Elements
• Characteristics
• Implications

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Basic Assumptions of an Ursuline Education

• Everyone is created in the image and likeness of God
• Everyone is a unique creation
• Education includes formation of the whole person
Basic Assumptions of an Ursuline Education

- Education is adapted to the time & culture
- Educational spirit must be taught and caught
- Education is gift not just employment/work
Aims of an Ursuline Education

• Formation of integrated spiritual individuals

• Formation of individuals who can impact society
Aims of an Ursuline Education

- Recognizes individual capabilities
- Balances between gifts of individuals and outside pressures
- Harmonizes spiritual and intellectual
- Humanistic education includes all branches of human knowledge
Ursuline Reglements

• Role of Educator
  – Surround each student with care, respect, love
  – Discern and develop each student’s uniqueness
  – Be firm but inspired by love
  – Be open to constant learning
Ursuline Reglements

- Pedagogy
  - Learner centered
  - Interactive; student active participation
  - Create independent thinkers
  - Develop whole person
  - Teacher and student as learners

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Ursuline Reglements

• Groups: acquisition of knowledge
  – Facts and information
  – Social education

• Individuals: develop mind and thought
  – Develop total human person: mind, heart, hands and will
  – Develop judgment: value we attribute to people/things
Essential Elements of Ursuline Education

• Personal contact with each student
• Development of whole person
• Sense of belonging and community
• Spiritual relation to God
Essential Elements of Ursuline Education

• Atmosphere that lives the spirit of Ursuline

• Role of teachers and administrators as models

• Call to social action and service
Characteristics of an Ursuline Education

• Academic Excellence
• Change
• Community
• Concern for the Individual
• Leadership
• Spirituality
• Social Consciousness/Service
• Women
Implications

- Tools of education change but not philosophy and pedagogy
- STEM education earlier
- Adult communication
- Team building
- Tangible projects
- Societal benefit
- Role models
What can we do to encourage STEM?

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Encourage STEM

• Social beliefs – girls can achieve in STEM
• Potential of intellectual “growth”
• Confront stereotypes & bias
• High standards set by girls
• Spatial skills

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“Give good example—teaching more by what you do than what you say.” St. Angela
Inspiration

“Act, bestir yourselves, have faith, make efforts, have hope, cry aloud to God with all your heart; then, without any doubt you will see marvels.”

St. Angela Merici
Resources

• Take a test to learn about your unconscious bias at
  – https://implicit.harvard.edu
• Women in science, technology, engineering and math
  – www.womeninscience.org/
• Google: women in STEM
Why So Few? Women in Science, Technology, Engineering, and Mathematics

To download the report www.aauw.org

To contact the researchers aauw-research@aauw.org
Assistance

Sister Diana Stano, OSU, PhD
Ursuline College
2550 Lander Road
Pepper Pike, OH 44124
440.646.8101
dstano@ursuline.edu