

Making the Future

Technology Education Conference
UW-Stout, Oct 13, 2000
Steven Bomba, VP, Technology
Johnson Controls, Inc.

**Futures don't
just happen.
They are
made.**

Making the Future

Can we copy and paste?

Powerful People

- Information
- Insight
- Influence

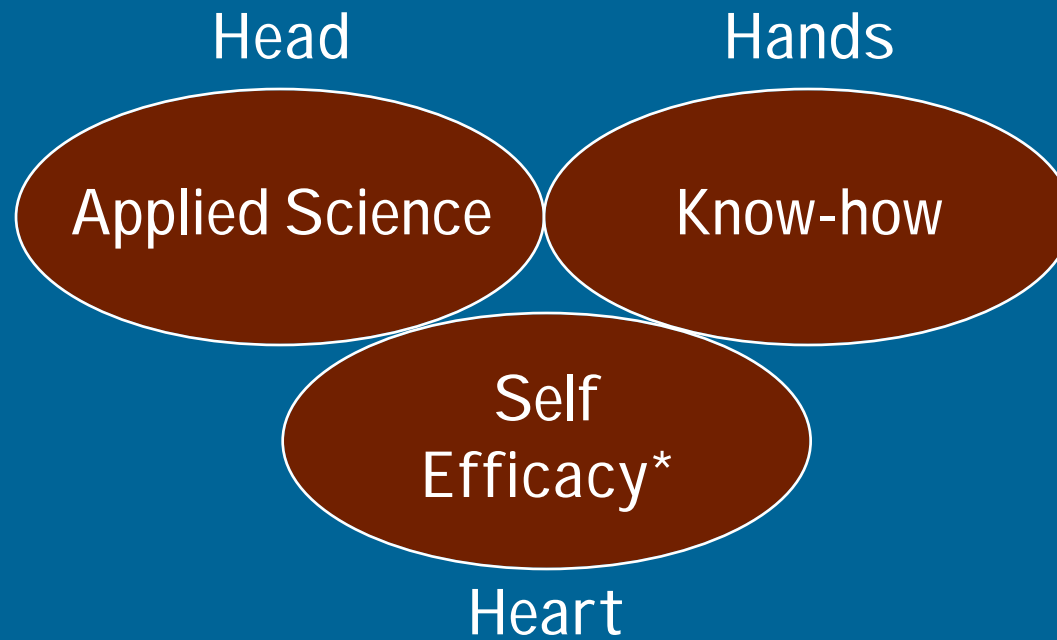
Innovating...

- Doing it better
- Doing it differently
- Doing something else

...with Technology

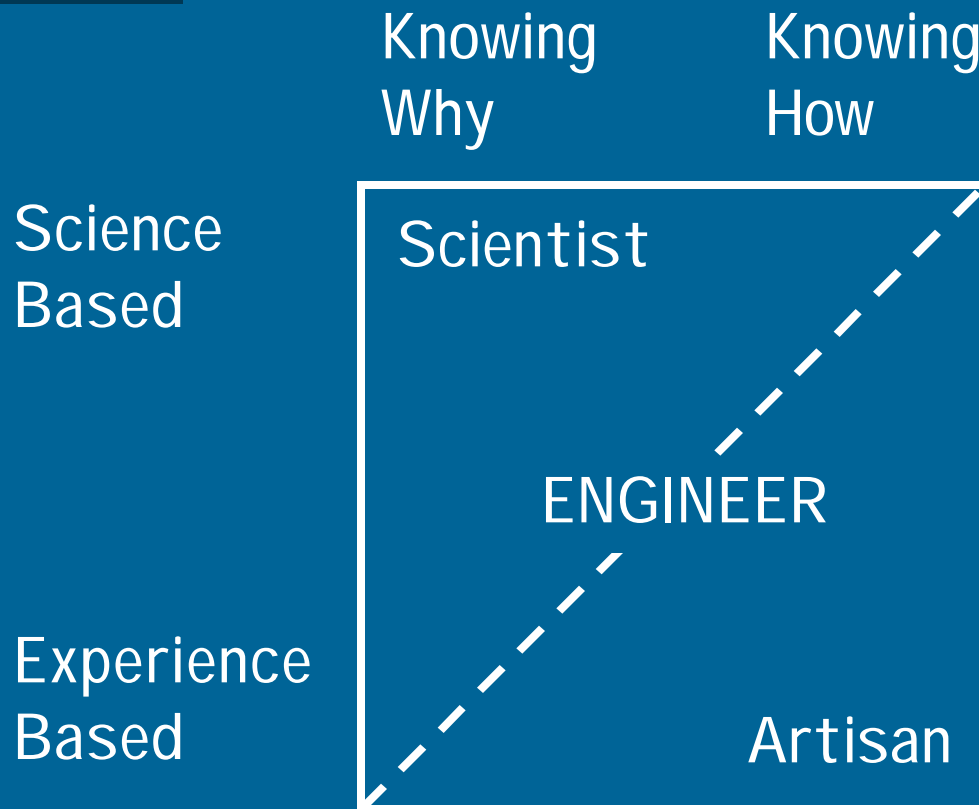
We know
technology
by
what
it
makes.

Technology is...



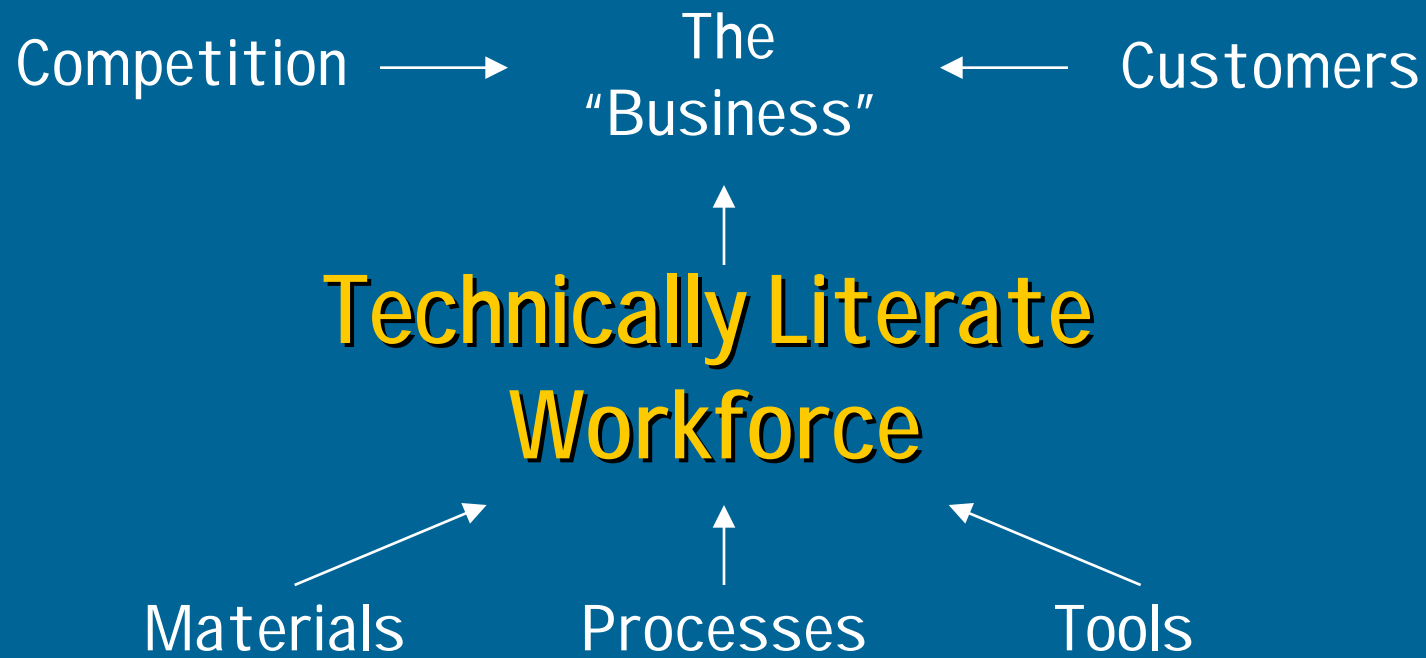
*Mark Mone
UW-Milwaukee

Technology Practitioners



M. Dayne Aldridge
Auburn University

Requirements are changing...



Teaching
systems
will
change.

Conventional Thinking

Student + Teacher = Employer + Career

Typical Activity Zones

Student + Teacher

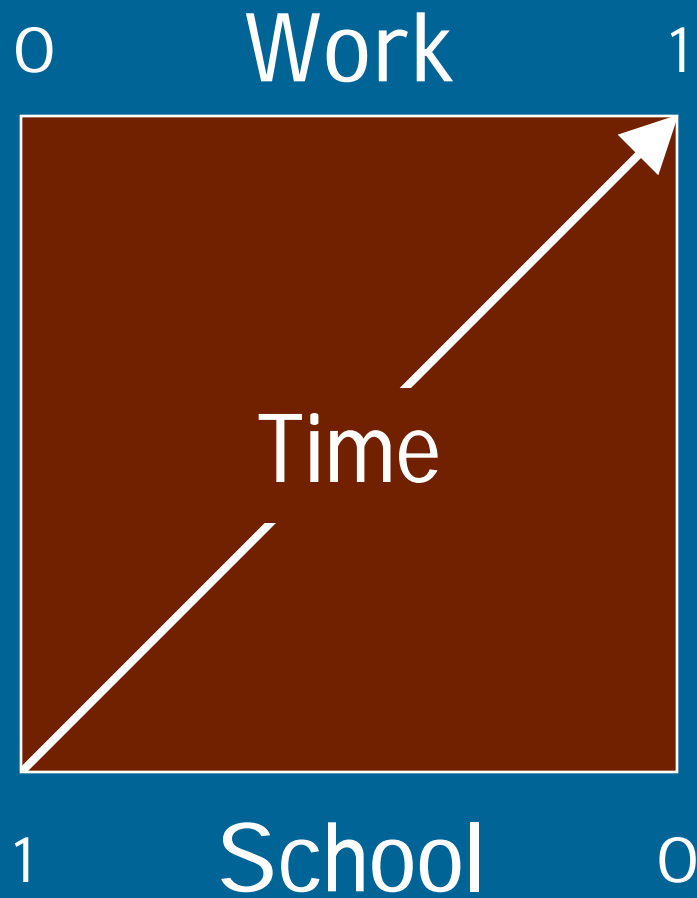
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Employer + Career

School:
Lab, Classroom

Work:
Job, Office

Conventional Schooling



Then
the
Internet
happened.

Results

Complexity



Interdependency



Control



Risk



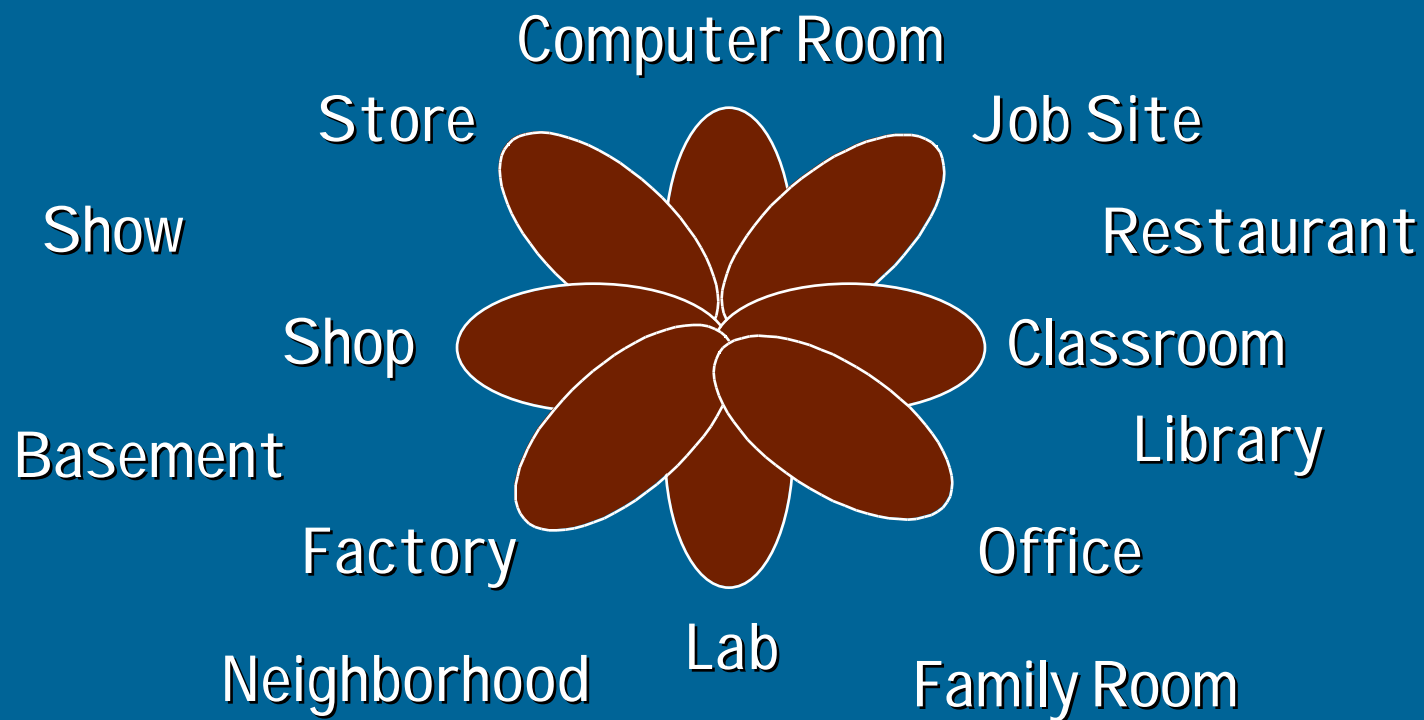
The
Internet
disintermediates
teachers
in
schools.

The
Internet
disintermediates
books
in
libraries.

Computers
facilitate
Storing
Information
and
Storing
Knowledge

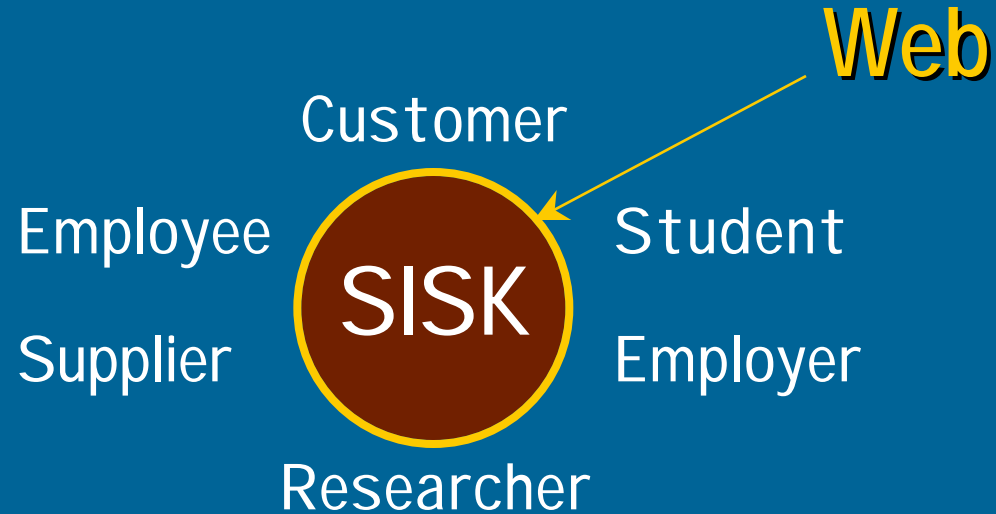
The "Web"
facilitates
Sharing
Information
and
Sharing
Knowledge

Learning Everywhere...



...with the omnipresent Web!

Learning Continually



Shared Information and Shared Knowledge

Educational System Needs

- Facilitate lifelong learning
 - ➔ Head
 - ➔ Hands
 - ➔ Heart
- Provide and nurture the SISK

Teachers
stimulate
students
thinking
and
feelings...

In a world where you can:

- Remember everything about everything
- Find anything about anything
- Share Information and Knowledge

What's more important?

- Basic Insight
- Established Methods

Where we all experience...

- Ubiquitous Browsing
- Immediate Sharing
- Mediated Relationships

Organizational Challenges

- Shared Vision
- Mental Model
- Personal Mastery
- Team Learning
- Systems Thinking

P.Senge
Fifth Discipline
1990

Information Insight Influence

**Head
Hands
Heart** + **SISK = OUR Future**

Teachers are Powerful People

The End

P.S.

The "make do" Gap

Delivery



Expectation



Possibility



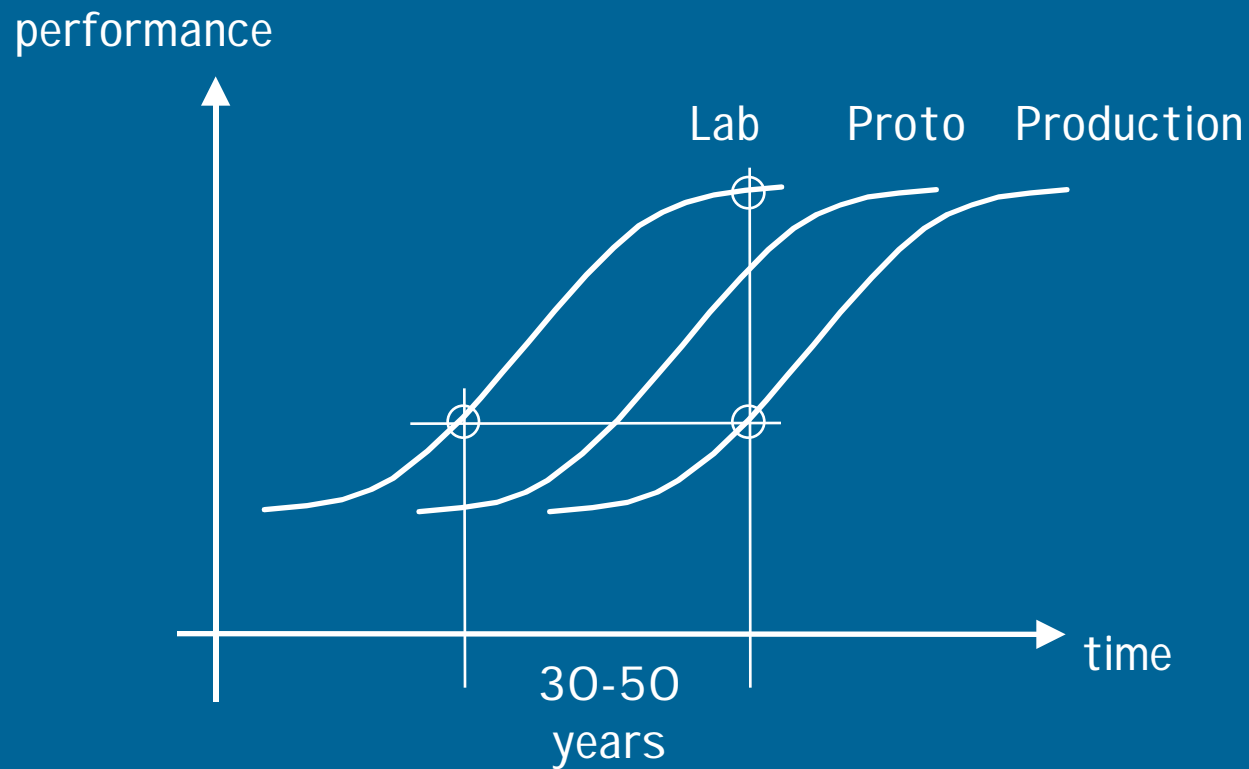
Someone
"making do"



Axiom

Innovation is the
root of
sustainable
competitive
advantage.

Changes Move Slowly



Taniguchi
CIRP Annals, 1983