Accepting the T Challenge

IMPLICATIONS FOR HIGHER EDUCATION
Setting the Challenge

- How simple is it to be T?
- Not business as usual
- Who really gets the T
  - Students
  - Many paths to follow
  - To nurture T’s, the tenders have to be T, the organization has to create a T environment for growth
- Pushing toward a “grander” end

“Education is more than about making a living, but about making a life.”

Michel Resnick
The T- Shaped Professional

Adaptive Innovators

Boundary Crossing Competencies
- Teamwork
- Communication
- Perspective
- Networks
- Critical thinking
- Global understanding
- Project management
- etc.

Many Disciplines
Understanding & communications

ME

Many Systems
Understanding & communications

Deep in at least one discipline
Analytic thinking & problem solving

Deep in at least one system
System Thinking

J. Spohrer, P. Gardner, & L Gross
Sorting out the terms

- Contributed to a mess where T can mean almost anything
- Standardize some terms
  - T-model
  - T-components
  - T-principles
  - T-shape (refers to individuals)
Origins: individual threads to whole cloth

- Term coined in early 1990’s
- Threads
  - Skill & Competency Movement
  - Changing nature of the workplace & contract between employer and employee
  - Entrepreneurial Mindset
  - Complexity of Thinking
  - Work - huge changes to come
    - Microsoft video
    - https://www.youtube.com/watch?v=w-tFdreZB94
Continual Adjustment to Work: Disruption to Augmentation

- What positions are impacted?
  - Every job will be augmented
  - Some jobs will be eliminated
- What happens? (A little Friedman and Katz)
  - Jobs are pulled up
  - Jobs are pulled out
  - Jobs are pulled down
“Change the technology and you change the task, and you change the nature of the worker— in fact you change the entire population of people who can operate a system.”

- Our Robots, Our Selves
Components: Depth

- Deep Disciplinary Understanding
  - Content knowledge
  - Psychomotor abilities
  - Affective
- Definition
  - Deep disciplinary knowledge is defined as the domain of knowledge inclusive of core knowledge and unique to a given specialization (sub-disciplines) within that domain and encompasses the psychomotor and affective abilities critical to a practitioner’s success.
Components: Depth

- Deep System Understanding
  - Meadows
  - System Thinking (Senge)
    - A deep commitment to learning
    - Being prepared to be wrong – open to challenge your own mental models
    - Willingness to reshape these models
    - Empathy – ability to listen to others & come to understand these perspectives and knowledge
    - Patience and perseverance
- Challenge: Making it happen
Systems that focus on the flow of things
- Transportation & Supply Chain
- Water & Waste Recycling
- Food & Products (Nano)
- Energy & Electric Grid
- Information/ICT & Cloud (Info)

Systems that focus on human activities & development
- Buildings & Construction
- Retail & Hospitality/Media & Entertainment (tourism)
- Banking & Finance/Business & Consulting
- Healthcare & Family Life/Home (Bio)
- Education /Campus & Work Life/Jobs & Entrepreneurship (Cogno)

Systems that focus on governing
- City (Government)
- State/Region (Government)
- Nation (Government)

Higher Ed – T-shaped depth added, cross-disciplinary project teams
Professional Life – Adaptive T-shaped life-long-learning & projects
In the context of the T-model, deep systems knowledge requires an understanding of intra- and inter-system complexity that embraces the physical, biological, economic, financial, social, organizational, and political processes, services, units, and events that are interconnected and involve human interactions. These systems generate their own behavior patterns, thinking that is often open, innovative, and flexible, self-learning that embraces perspectives of others, and survival and persistence in the face of external and internal forces that require new and innovative solution as complex problems arise.

- Silos, mindsets, and collaboration
Components: Breadth

- Interdisciplinary Understanding
  - What it isn’t
  - Interdisciplinary conversations
  - Challenges - knocking down silos
    - Mindsets
    - Patience
  - Creatively develop and intentionally promote interdisciplinary environments that promote conversations, will allow students to suspend their models, personal judgments, and biases and work toward understanding alternative perspectives
Components: Breadth

- Boundary Spanning Abilities
  - Description
    - “are strongly linked externally and internally, so that they can both gather and transfer information from outside their sub-unit.”
  - Challenge – requires activities in multiple contexts where learning can be practiced, extended and learned (classroom no longer necessary and is not sufficient)
  - Competencies -- extensive because it includes attitudes, behaviors, and values
Components of the ME

**Purpose**
- Make plans
- Take action
- Move toward goals

**Confidence**
- Understand differences
- Mobilize resources
- Work as a team

**Awareness**
- Learn from others
- Adapt to differences
- Work with others

2014; Estry, Gardner, Gross
I know how my purpose fits in the world

Awareness

Awareness, as we use it here, refers to one’s awareness of themselves and their purpose in context with the world around them.

Because T shaped people are boundary spanners, they value and seek different perspectives, knowledge bases, and abilities from others to enhance achievement.

Diverse inputs enhance insight and impact

My strengths complement others in achieving my purpose
Confidence

Confidence is the knowledge, skills and abilities of oneself and others to contribute and bolsters one’s comfort level in taking risks.

Confidence is tempered by humility and mindset that accepts success or failure as leading to growth and future achievement.
Purpose is the process of discovering how you want to make a difference in your life and the world.

Born from your dreams and aspirations, purpose evolves over your lifetime, guided by your experiences, skills and values.
I am self-aware. I know what I value. I have dreams and aspirations. I understand what others value in me. I know what I want to achieve and who I need to achieve it with.

I can contribute. I feel part of something. I can ask questions and take action. I can take risks that may succeed or fail. I am responsible and act with integrity.

My purpose fits in the world. I understand what is expected to achieve success. I seek different perspectives, cultures, knowledge, and abilities from others to provide valuable insights. I can use my strengths to complement those of others in a team.

I am willing to enter uncertain situations by experimenting, engaging, or challenging my purpose with confidence that I can learn and adapt as I move forward.

I can advance my purpose by gaining insights from others; understanding how my purpose is valued by others and how I need to interact with others to contribute in meaningful ways.

I can work with others to accomplish common challenges. I am a global citizen, adapting to situations of change and embracing new ideas and experiences.
Principles that guide the T journey

- Being innovative
- Being intentional
- Practice, avidly, integration