

Systems Thinking: Making the Best Case for Higher Education's Customers

Presenters: C.J. Bibus and Elizabeth McLane

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As we find new sources over the next year, we will update the links in this presentation for sources on national challenges, data and news reports (state, national, and international), literacy and other variables in our changing educational system, and systems thinking.

Parts of the Presentation

1. Context for Making the Best Case for Higher Education's Customers
2. Cognition and the Challenge of Systems Thinking – Examples from the Public School and about Literacy
3. The Visual for the Participant Sessions
4. Participant Session in Two Parts
 - First, exploring areas of higher education
 - Then, sharing those explorations

Context – The National Challenges

The key issues showing up repeatedly:

- “uneven distribution” of essential skills
- “perfect storm that’s
 - threatening American prosperity
 - and tearing at our political cohesion.”

[Source of These Quotations and Additional Sources](#)

(Includes sources on global competitiveness)

Context – The Demand for Evidence

1990s – “As far back as the 1990s, more than six out of 10 government and business leaders believed that higher education was too bureaucratic and resistant to change.... “

2006 – Institutions must “prove ... programs performance” and “take ... programs to the next level.” Why? To choose the students and faculty they want and to “secure access to financial support from a competitive funding pool.”

2012 – The question becomes “Will we govern us? Assessment and accountability as the path to professionalism... and reform.”

[Source of These Quotations and Additional Sources](#)

Cognition – The Challenge of Systems Thinking

This section relies on principles covered in Dietrich Dörner's *The Logic of Failure: Recognizing and Avoiding Error in Complex Situations*. To provide details beyond the short phrase on a slide, each slide includes a link—Dörner in Detail—to his complete statement or, in this case, to his background.

Its examples are about public schools and literacy from:

- Public information
- Information collected by the presenters

The examples are:

- To illustrate the challenge of systems thinking and to show visuals that can help reveal data and also let us think together
- **Not** intended to explain all of the issues in public education

[Dörner in Detail - Who Is He? What's a System? Why Is Systems Thinking Necessary?](#)

The Public School Example – “covariations” with a “time lag”

One of the basic questions is what is the status of public education. Dörner notes that one of the ways to learn about a system is by noticing related variables especially as they have changed over time.

A look at comparative data nationally and internationally

Dörner in Detail – What Are “Covariations,” “Time Lags,” and What Can We Do?

The Public School Example – “analogy” to reveal “structure”

Analogy, especially when plotted, provides a powerful way to learn the structure of a system and how the system works.

The [customer service model and the public high school](#), including headlines about items covered in the model

- Who is the user? (# 1) Are there long term issues? (#10)
- Is there something larger than the individual to protect the process? (# 5, 6)
- What’s at stake? (# 7,8, 9) What happens if those things do not happen?
- What do you measure—and not measure? (#11)
- Who takes the loss if it fails and who wins if it succeeds—and are they the same people? (#12, 13)

[Sources on the View that the Student Is the Only Customer](#) [Sources on the Headlines](#)

[Dörner in Detail – How Can Analogy Reveal Systems and What Can We Do?](#)

[Background on the Chart from our NISOD 2011 Presentation](#)

The Public School Example – Change Over Time

Change over time:

- Lack of “telling” and “frequent” feedback
- Assumption that “absence of immediately obvious negative effects meant that correct measures had been taken”
- “Where the whole system is heading over time”

A look at what may happen to cohort after cohort of students:

- In the first years of a law
- After years of a law

Dörner in Detail – What is “telling” and “frequent” feedback? “ Why Is Change Over Time
Difficult to Understand and What Can We Do?

“Telling” Feedback, Literacy, and Evidence – “covariations”

A look at changes to literacy over time and freshman college use of evidence and other covariations

Dörner in Detail – What Are “Covariations,” “Time Lags,” and What Can We Do? (Also available from Slide 6)

- How Can Analogy Reveal Systems and What Can We Do?
(Also available from Slide 7)

- What is “telling” and “frequent” feedback?” Why Is Change Over Time Difficult to Understand and What Can We Do? (Also available from Slide 8)

The Visual for the Participant Sessions

The visual for higher education and the visual for the sessions

- What's different and similar about the customer service model for higher education and the three models that are closest to it?
- What do you want to “retain”?
- What strategies for thinking does Dörner offer, such as “reverse planning”?

Dörner in Detail - Who Thinks Well? What Strategies Work? What Can We Do?

Q & A; Breakout Session

1. Q & A
2. Breakout Session - The instructions for the Breakout Session will be visible during the session itself. The number of people attending determines which method we will use for that session.

Additions from Breakout Session - With thanks to participants:

Examples including updated chart with new rows for

- 4. Customer as mandates for required action (funded or not)?
- 7. Customer as support staff?
- 8. Customer as leaders/managers?
- 9. Customer as a board?
- 10. Customer as mission statement?

For Questions or For the URL to the Presentation

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URL (accessible after June 4) for a PDF of this PowerPoint:

http://facultyweb.wcjc.edu/cbibus/SystemsThinking_BestCaseH_EdCustomers_BibusMcLane.pdf

If you have problems with this link, please email using the email address below.

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