Sustainable Scholarship 2014

Social Network Analysis in Education
What is Social Network Analysis?

a brief introduction

Organizations consist of people

These people have formal and informal relationships

Social Network Analysis helps to analyze & interpret these relations
What is Social Network Analysis?

a brief introduction
What is Social Network Analysis?

a brief introduction

Sensor

Broker

Connector
What is Social Network Analysis?

a brief introduction
How can SNA help administrators manage change on their campuses, help us understand how new ideas spread across higher education & help us understand and advance innovation and organizational change in higher education?

- Analyze the networks of 16 institutions
- Benchmark schools against each other
- Conduct on-site implementation workshop
Initial Results

Sentiments

- Readiness 1: Like try new tech
- Criteria for Success 1: Inc Qual Edu*
- Criteria for Success 2: New tech sig impact on work
- Coop Teach 1: Tech Enables Collab Teach*
- KS/Comm 2: New tech improve comm btw inst
- KS/Comm 1: New Tech improve KS*
- Criteria for Success 3: New tech contribute more efficient
- Readiness 3: I like helping others*
- Culture 1: Visibly Support Innovation*
- Culture 2: FacultyStaff encour think creative*
- Culture 3: Innovation recognized*
- Coop Teach 2: Inst encour collab teaching approach*
- Readiness 2: First to use new tech
- KS/Comm 3: Have good systems*

* = significant difference between Community College & Comprehensive

Legend:
- Community College
- Comprehensive
- All
Initial Results
Technology Use

*Significant difference between Faculty, Staff & Admin
Initial Results

Obstacles

Perceived Obstacles | Institution Type

- Lack Finance*
- Lack Time*
- Log/Tech Issues*
- Difficult Adoption*
- Lack Knowledge*
- Lack Incentives*
- Obstacles Other*
- Lack Value*
- Lack Admin Support*
- Lack IT Support*
- Lack Colleagues*
- Lack Institutional Culture*

* = significant difference between Community College & Comprehensive

Legend:
- Community College
- Comprehensive
- All
Initial Results
Side-by-side

..negative attitudes

**Culture:**

Our institution's leadership visibly supports and encourages innovation.
In our institution, faculty and staff are encouraged to think creatively and unconventionally.
Innovation is recognized, celebrated and rewarded at our institution.
Initial Results
Side-by-side

..correlate with perceived obstacle..
Initial Results
Side-by-side

...and technology use

<table>
<thead>
<tr>
<th>Responses To</th>
<th>Technology Use</th>
<th>Technology Use</th>
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<tbody>
<tr>
<td>To what extent do you personally use the following technologies in your work?</td>
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<td>Learning Management System (B...</td>
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<td>Discussion boards</td>
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<td>Lecture capture</td>
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<td>Online chat rooms</td>
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<td>Adaptive learning tools</td>
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<td>Dashboard to track student progr...</td>
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<td>Online homework supplements</td>
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<td>“Flipped” classroom model</td>
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<td>Peer review tools</td>
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<td>Existing online content (MOOCs, ...</td>
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<td>Social Media (e.g. Facebook, Twi...</td>
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<td>Back-office related technologies (...</td>
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<td>Open source technologies</td>
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Initial Results
Side-by-side

..appear to correlate with network structure
Initial Results
Influence & Departments

Influence

<table>
<thead>
<tr>
<th>Department</th>
<th>Influence (EV)</th>
<th>Sensor</th>
<th>Broker</th>
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<tbody>
<tr>
<td>Chancellor</td>
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<td>Graduate Schools</td>
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<td>STEM Education (Office)</td>
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<td>Online Classes</td>
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<td>IT</td>
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<td>Library</td>
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<td>Total</td>
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Incoming links (connector)
Questions

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