

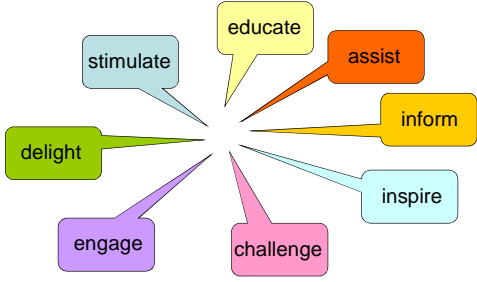
Barbara Streicher, Austria

**ScienceCenter
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Summit on Informal Science Networks
ASTC Conference
21.10.2013, Albuquerque


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Science Centers want to ...



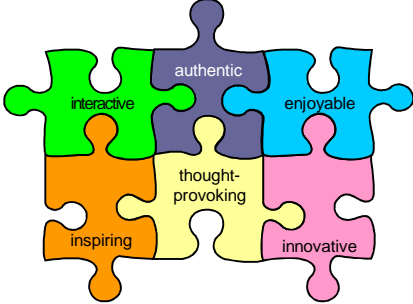
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by being ...



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... an open learning environment



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Can a science center
organisation mirror its
content?




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Idea of SCN

Aim: Make use of full potential of science center activities for societal benefit!

- empower (potential) SC stakeholders, developers and users
- create open learning environment for implementation of SCA
- Network more synergies, activities, quality, visibility



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SCN structure

association SCN network partners

supporters

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Roles

association SCN network partners

- organisational hub
- contact point
- create learning environment
- listen
- give impulses
- set up joint projects
- research, documentation, publishing, training

supporters

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Activities of coordinator

- **Initiating network**
- **Networking** → quality
open exchange, interactive workshops, international cooperations, impulses, strategic strength
- **Public relations** → quantity
critical mass, quality label, visibility
- **Innovative cooperative projects** → reach
complementary expertise, diversity, synergies, sustainability; experimental test lab → cost-efficiency → diversity
- **Research and training** → quality
activities / network; common learning training activities, courses

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Roles

association SCN network partners

- organisational hub
- contact point
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- give impulses
- listen
- set up joint projects
- research, documentation, publishing, training

supporters

- show up with expertise
- give input / share
- contribute to activities
- implement learnings in own institutions

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A lively network

>130 partners

- research institutions
- museums
- scientific initiatives
- childrens universities
- educational institutions
- teachers
- media
- design, arts
- companies

→ network of providers & users

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Roles

association SCN network partners

- organisational hub
- contact point
- create learning environment
- give impulses
- listen
- set up joint projects
- research, documentation, publishing, training

supporters

- show up with expertise
- give input / share
- contribute to activities
- implement learnings in own institutions
- finance
- link to policy / economy (content)

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Benefits

association SCN

- learning
- multiplier effect
- societal benefits

network partners

- supportive atmosphere
- diversity
- exchange / ideas
- cooperative projects
- visibility

supporters

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Rules

- Partnership requires commitment
 - genuine interest in SCA
 - openness
 - participation in activities if adequate
 - no financial input
 - no membership, no decision rules, association not obligated, flexible
 - partners benefit through engaging
- No recruiting
 - active partners
- Fairness and transparency
 - respect individual differences

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Network Theory

- loose couplings
- open and dynamic
- non-hierarchical
- redundancy

→ high potential for innovation, creativity
→ But: network is complex system, managing not possible, orientation important

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Complex systems

- non-trivial, non-linear interactions
- feedback loops influence system (+/-)
- self-organisational processes
- changes over time
- simple set of initial conditions → chaotic state
 - can produce new, collective behaviour as an emergent phenomenon

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Advice from network theory to network „management“

ensure...

- cooperation
- confidence
- commitment
- reliability
- negotiation
- sustainable partnerships
- systematic insights

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Network meetings & workshops

open communication

- attractive setting
- professional
- interactive formats
- engagement
- documentation

confidence

commitment

reliability

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Innovative, collaborative projects

negotiation

sustainable partnerships

diversity

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Network research

systematic insights

$$Pr(Y_i = m | X_i^{(m)}) = \frac{1}{1 + \exp(-\mu_i + \sum_{j=1}^m \beta_j X_{ij}^{(m)})} + \frac{1}{1 + \exp(-\mu_i + \sum_{j=1}^m \beta_j X_{ij}^{(m)})}$$

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Benefits: open learning environments

- Public → more offers, diversity, reach
- Network partners → contacts, empowerment, cooperation, access research
- Society → impulse → multiplier effect

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Thank you for your attention!

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Landstrasser Hauptstrasse 71/1/309
A - 1030 Vienna
streicher@science-center-net.at
www.science-center-net.at

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