International Society of the Learning Sciences

NAPLeS:
Network of Academic Programs in the Learning Sciences

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Todays' Agenda

Part 1

- NAPLeS: The Network of Academic Programs in the Learning Sciences

Part 2

- Teaching the Learning Sciences: an analysis of 75 programs

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The International Society of the Learning Sciences (ISLS)

The ISLS Education Committee

- Creating and developing outreach and educational activities for ISLS
- Learning Sciences doctoral consortia
- Early/mid career workshops
- NAPLeS as initiative to connect degree programs worldwide

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NAPLeS: The Network of Academic Programs in the Learning Sciences

NAPLeS

- Network of PhD and Master‘s programs in the Learning Sciences
- Part of the educational mission

Fostering the quality of higher education programs in LS

Mechanisms

- Webinar series
- Video resources
- Syllabi collection
- Visiting scholarship
- Joint supervision of doctoral research

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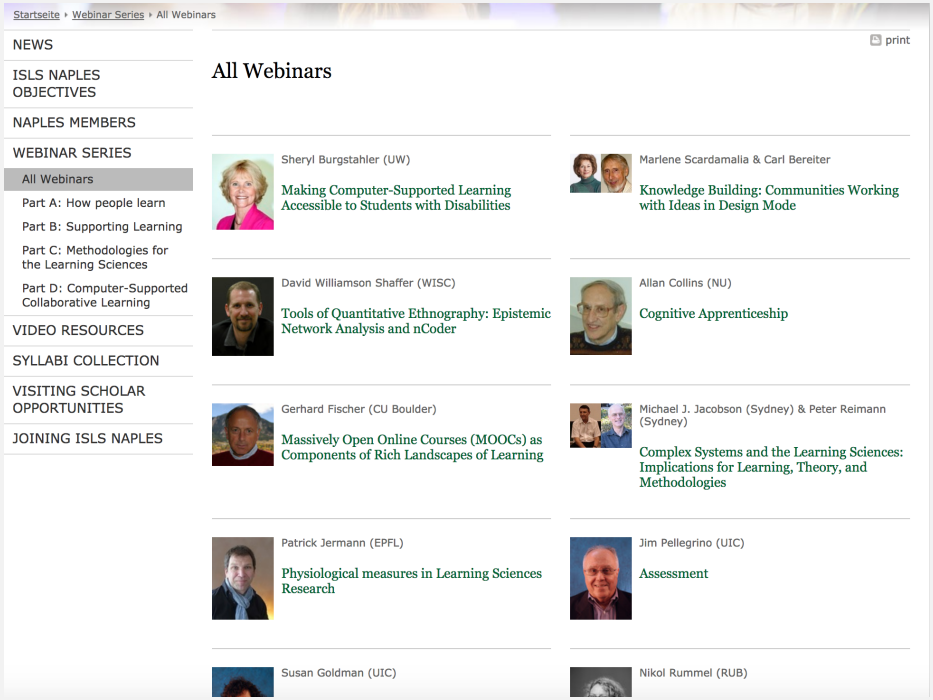
NAPLeS Resources

Webinar Series:
http://isls-naples.psy.lmu.de/intro/all-webinars/index.html



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NAPLeS Resources

Webinar Series:
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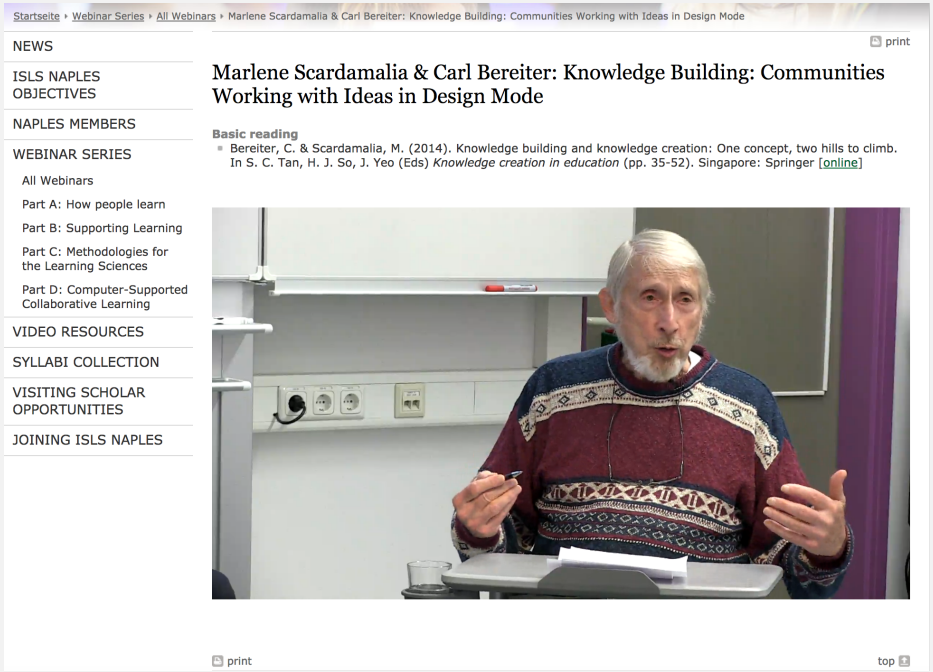

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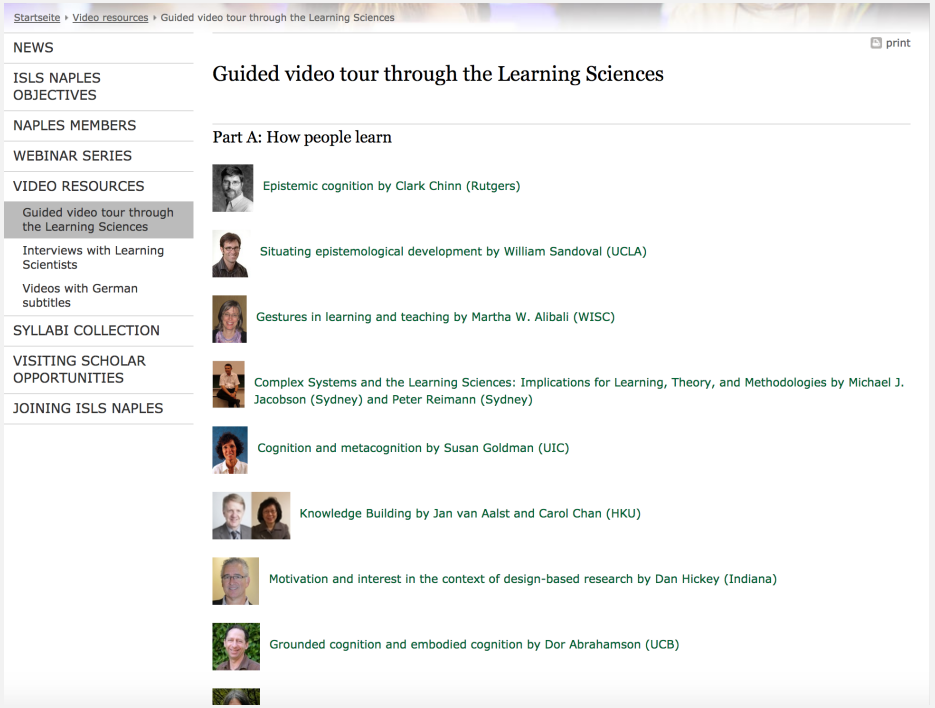
NAPLeS Resources

Guided Tour through the LS:
http://isls-naples.psy.lmu.de/video-resources/guided-tour/index.html



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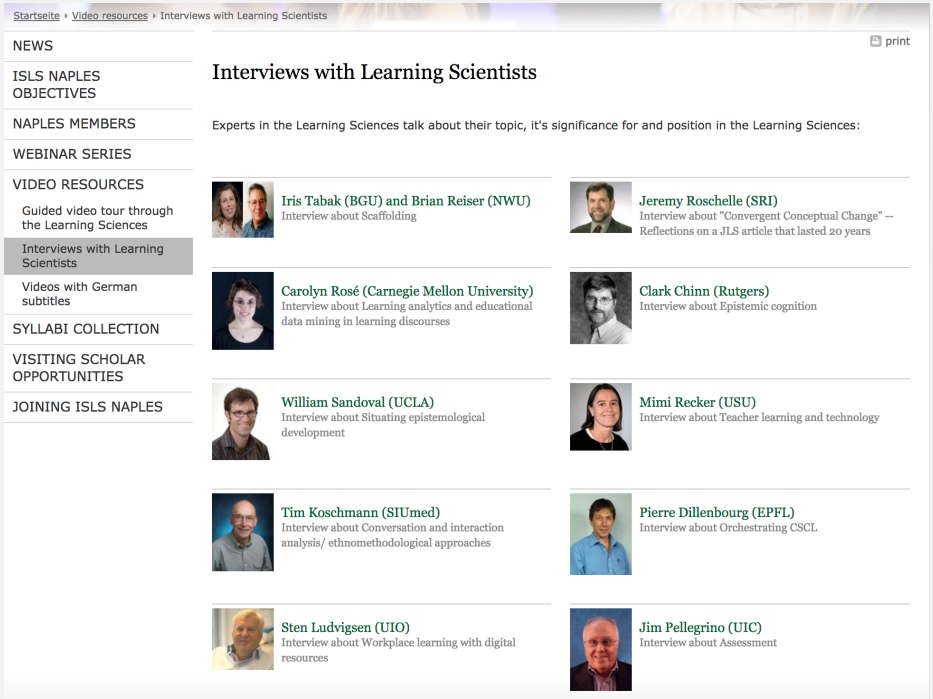
NAPLeS Resources

Interviews:
http://isls-naples.psy.lmu.de/video-resources/interviews-ls/index.html



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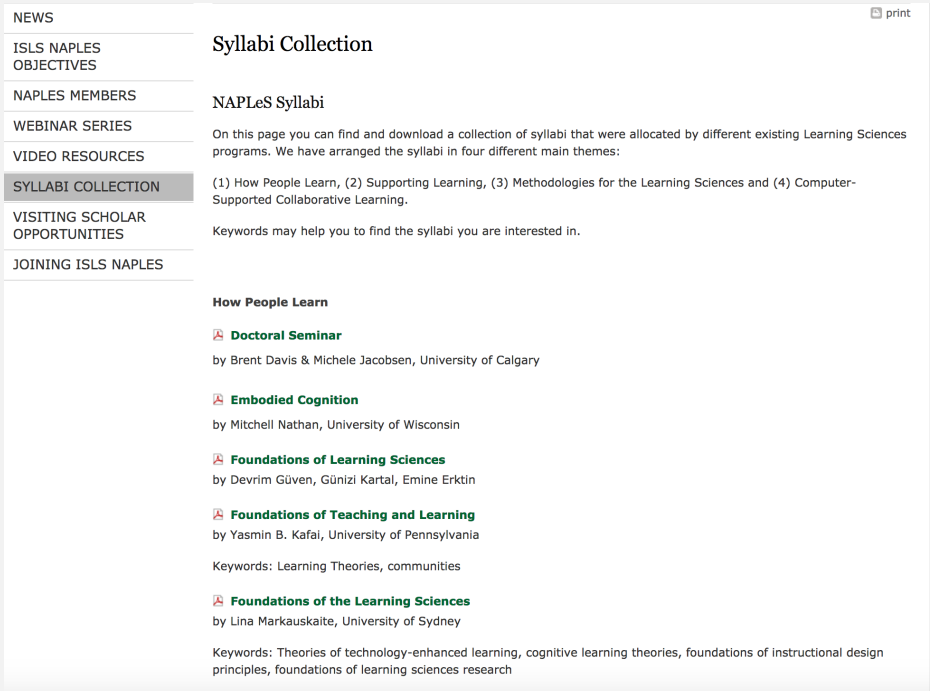
NAPLeS Resources

Syllabi:
http://isls-naples.psy.lmu.de/syllabi/index.html



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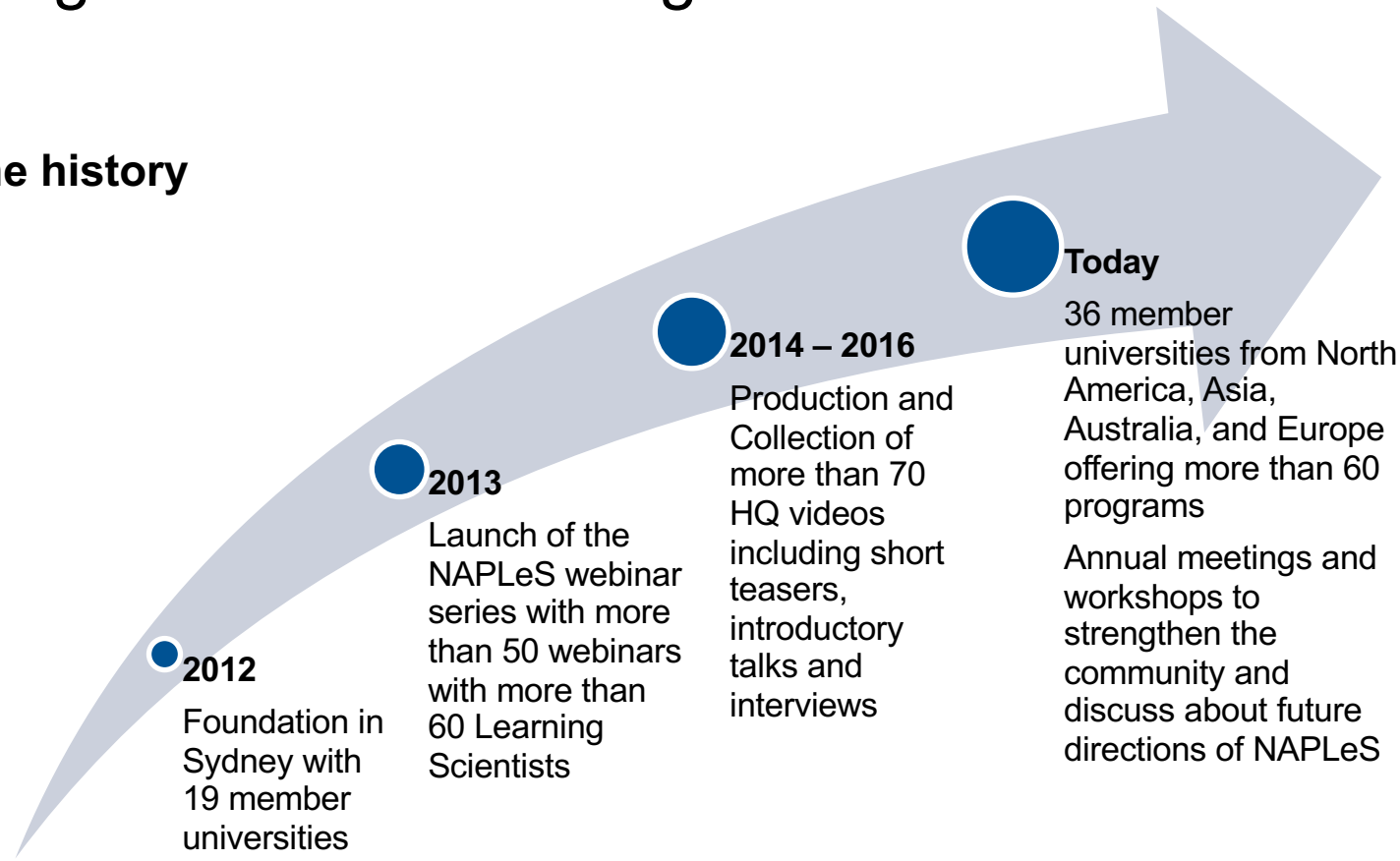
NAPLeS: The Network of Academic Programs in the Learning Sciences

The history



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NAPLeS: The Network of Academic Programs in the Learning Sciences

NAPLeS members

Status quo:
Concentration on programs in North America, (Europe, and Asia)

Future directions:
Reach out to programs in Asia and Europe

Collaboration with Learning Sciences initiatives in **Africa** and South America

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USA

- Carnegie Mellon University, Indiana University, New York University, Northwestern University, North Carolina State University, Penn State University, Rutgers University, Stanford University, University at Buffalo, University of California Berkeley, University of California Los Angeles, University of Illinois at Chicago, University of Illinois at Urbana-Champaign, University of New Mexico, University of North Carolina, University of Pennsylvania, University of Pittsburgh, University of Washington, University of Wisconsin-Madison, Utah State University

Canada

- McGill University, Simon Fraser University, University of Calgary, University of Toronto

Europe

- Boğaziçi University, Open University of the Netherlands, Ruhr University Bochum, Saarland University, University of Munich, University of Nottingham, University of Oulu

Asia, Middle East, Australia

- Nanyang Technological University, Singapore, University of Haifa, University of Hong Kong, University of Sydney

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Learning resources

Status quo:

- Collection of > 100 videos (recorded webinars, introductions, and interviews) for > 50 topics
- Collection of > 30 syllabi
- NEW: Selection of videos with German captions for local educational use

Future directions:

- Tagging, editing, and creating new videos around a topic for different learners
- Collecting and creating syllabi that build on the use of NAPLeS resources

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NAPLeS webpage

Status quo:

- Static website offering NAPLeS information and resources
- Hosted by the Ludwig-Maximilian University of Munich with limited features

Future directions:

- Shifting the NAPLeS content to the website hosted by ISLS
- More features using the Drupal system
- Including more interactive and social features (member login, exchange, etc.)

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How to become a NAPLeS member program?

Two main requirements

- PhD or Master‘s program in the area of Learning Sciences
- At least **3 ISLS members** associated with the program (at least 2 on the faculty level)

Members are expected to be active in

- Naming a NAPLeS liaison person
- Submitting program information for the NAPLeS webpages
- Provide visiting scholar opportunities
- Submitting exemplary syllabi
- Contribute to the webinar series / NAPLeS resources

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Teaching the Learning Sciences: an Analysis of 75 Programs

Learning Sciences

- Academic community investigating human learning
- Includes researchers from diverse backgrounds
  - Psychology
  - Sociology
  - Computer science
  - Science & science education
  - ...
- Community with a growing *membership*, *spreading*, and *maturity*
- Increasing number of LS degree programs worldwide

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Teaching the Learning Sciences: an Analysis of 75 Programs

But what do we know about these programs?

So far, it is unknown …

- … what the *disciplinary backgrounds* of LS programs are*?*
- … what these programs actually teach?
- … if there is some homogeneity between the various programs?

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Teaching the Learning Sciences: an Analysis of 75 Programs

Research Questions

1. Which *disciplines* are involved in teaching the Learning Sciences?
2. What are the *core concepts* taught in Learning Sciences programs?
3. What are the *core methods* taught in Learning Sciences programs?
4. Can we identify a core of *more homogeneous* Learning Sciences programs?

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Teaching the Learning Sciences: an Analysis of 75 Programs

Method

Document analysis (Bowen, 2009)

- Website contents of international graduate LS programs
- Qualitative content analysis (Mayring, 2001, 2014)

Inclusion criteria

- English online presentation
- Self-identification as Learning Sciences operationalized by: *Learning Sciences*, *Learning Science*, or *Sciences of Learning*

→ Differentiation of programs identifying/not identifying as LS is crucial to make inferences about *LS programs*

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Teaching the Learning Sciences: an Analysis of 75 Programs

Sample

75 Learning Sciences programs

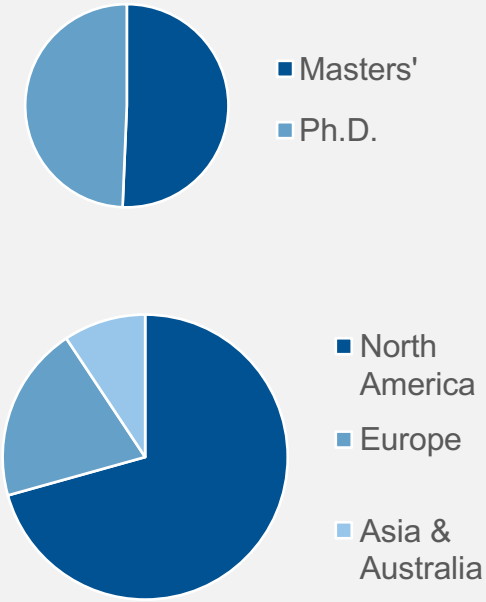
- 51% Master's programs (*N* = 38)
- 49% Ph.D. programs (*N* = 37)

NAPLeS membership

- 57% (*N* = 43)

Regional distribution

- North America 71% (*N* = 53)
- Europe 20% (*N* = 15)
- Asia and Australia 9% (*N* = 7)



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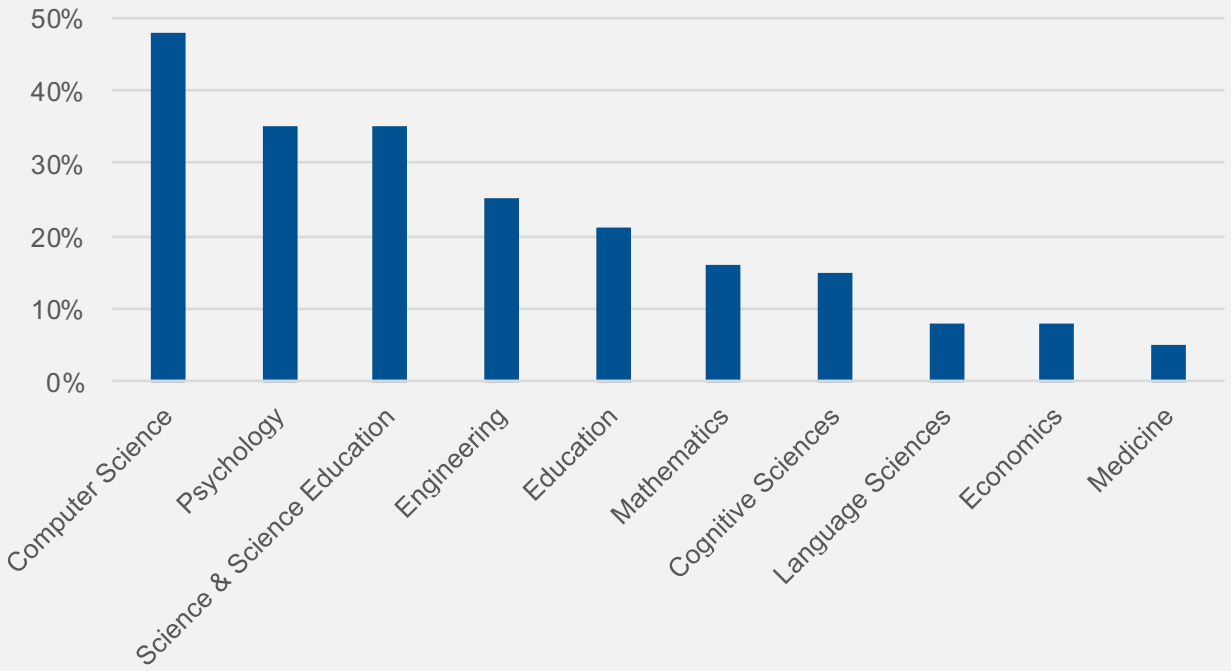
Teaching the Learning Sciences: an Analysis of 75 Programs

Results – Top 10 Involved Disciplines



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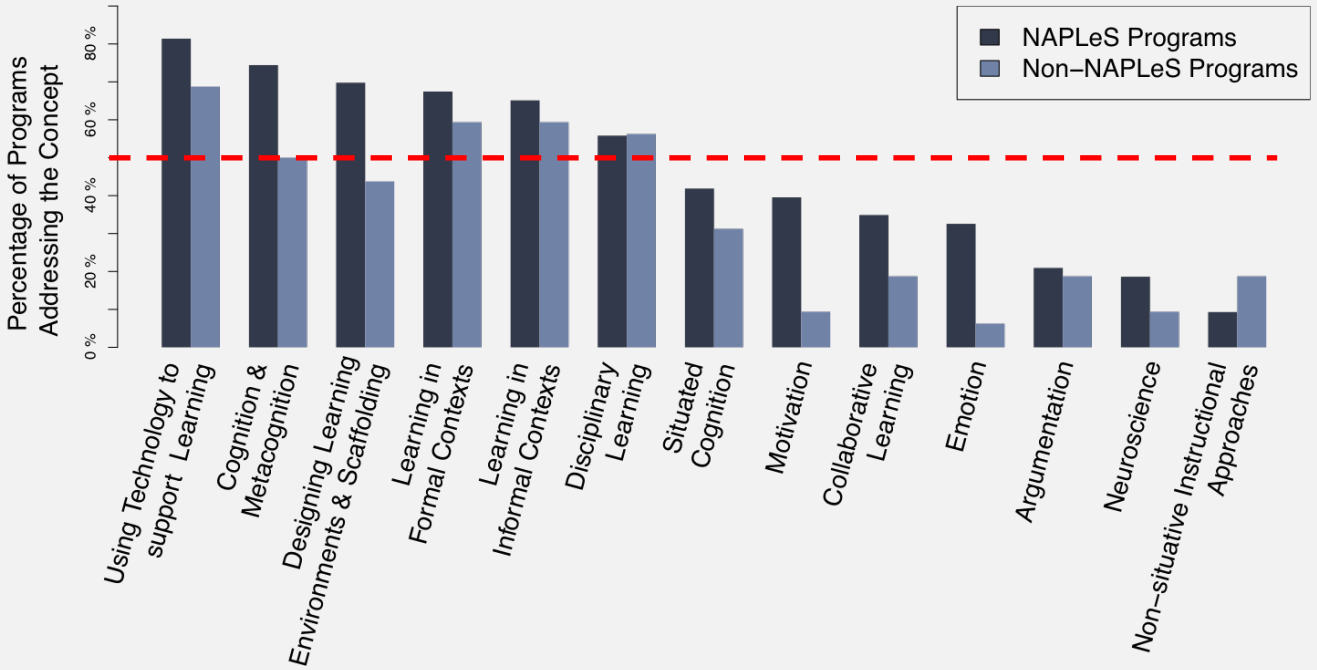
Results – Core Concepts



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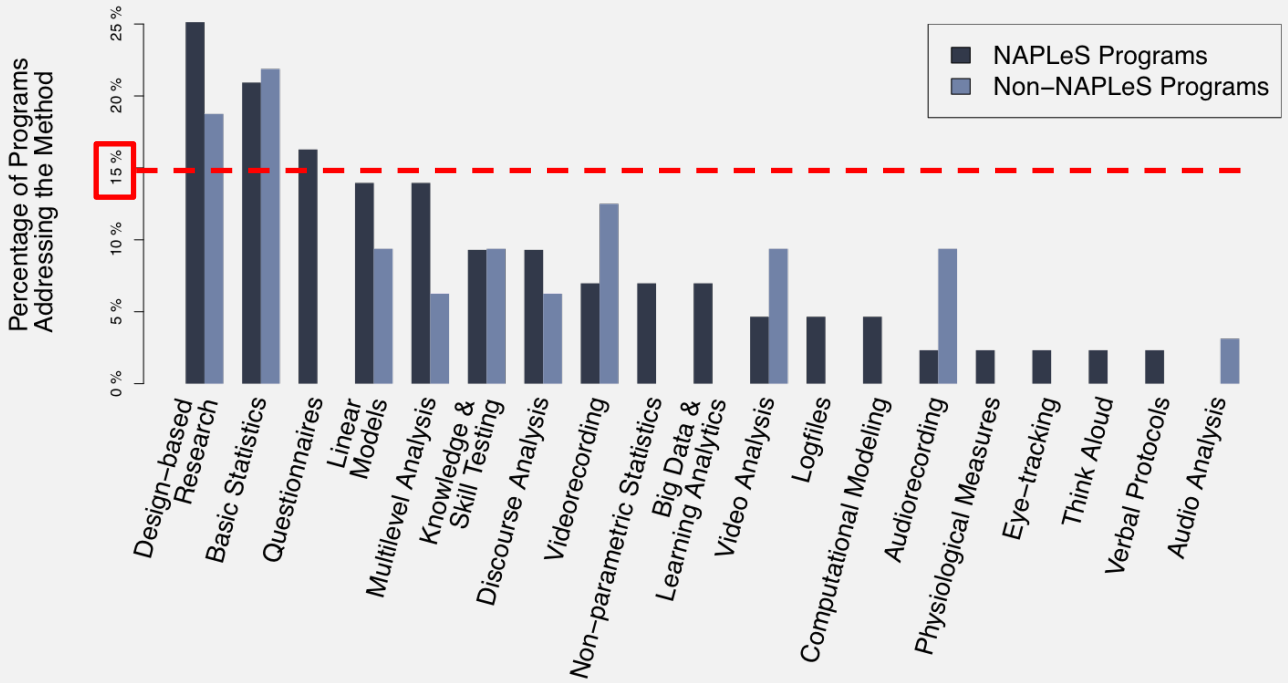
Results – Core Methods



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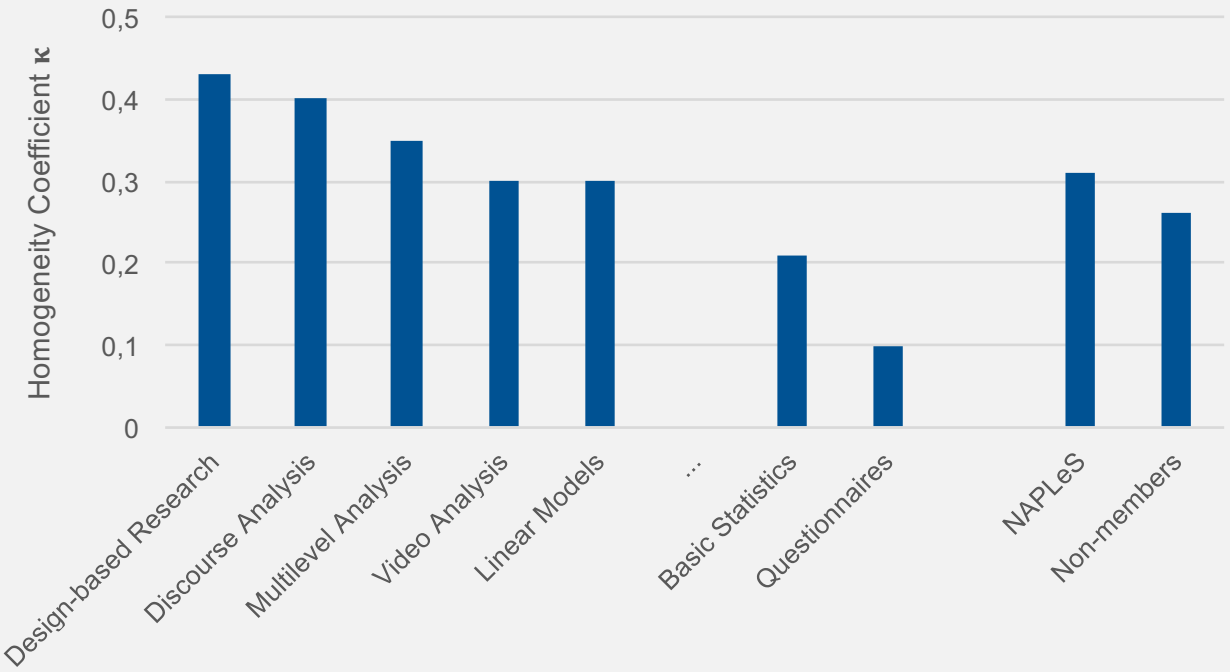
Results – Homogeneity



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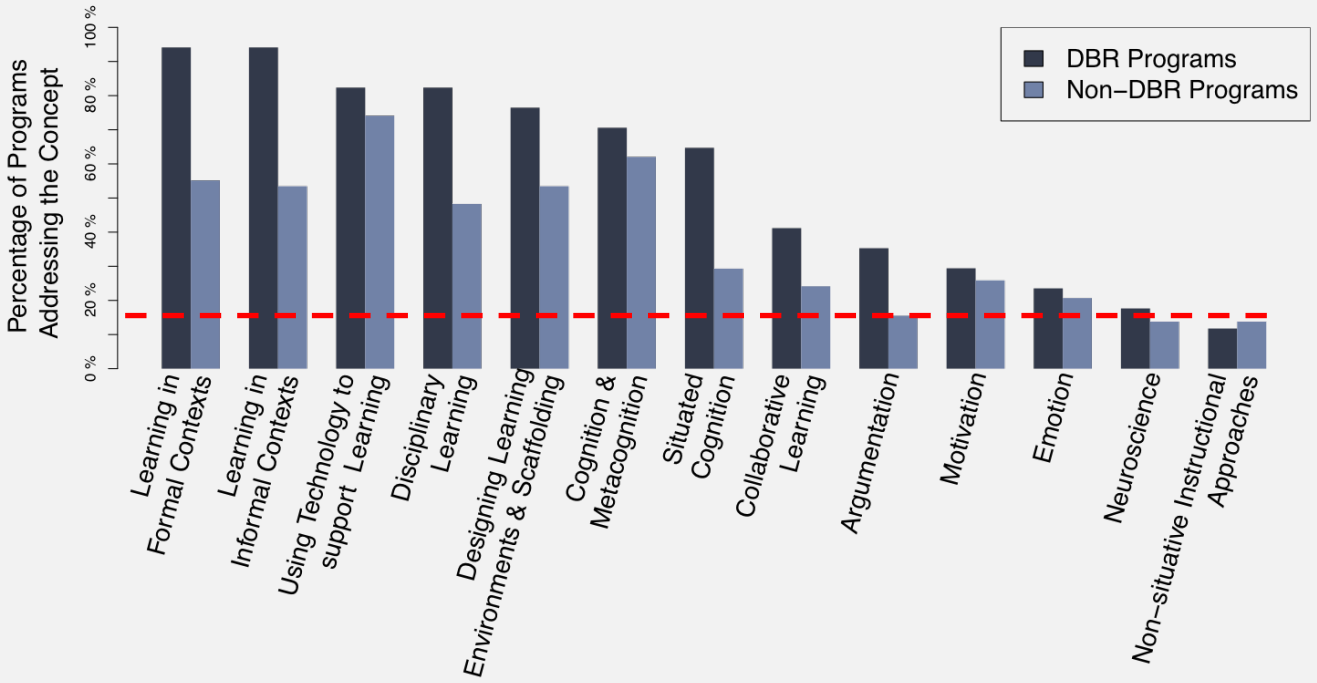
Results – Core Concepts in DBR Programs



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Discussion

Study provides empirical data

- LS programs include several disciplines
- Several conceptual and methodological cores can be identified

Important Features of Learning Sciences

- Design-based research constitutes a signature method
- NAPLeS programs are somewhat more homogeneous than other LS programs

The Learning Sciences as a growing and changing community

- Core themes, but also a variety of concepts and methods from other disciplines

→ *We argue, that this is an indication of a productive scientific community*

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Discussion

The results on concepts & methods

Only *partially* match other conceptions of LS (Packer &Maddox, 2016), especially regarding research foci (Yoon & Hmelo-Silver, 2017).

→ Possibly a gap between current *research* and *teaching*

First empirical data that LS degree programs

- show a high conceptual diversity and
- even higher methodological diversity.

Design-based research

- is the most frequently mentioned method (< 25% of programs)
- and programs teaching it show the highest homogeneity, possibly representing the core of the learning sciences Community of Practice

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You want to learn more? Watch out for our upcoming publication:

Sommerhoff, D., et al., (2018). What do we teach when we teach the Learning Sciences? A document analysis of 75 graduate programs. *Journal of the Learning Sciences, 27(2)*

or send me an E-Mail.

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