

Using Personal Networks to Understand Teacher and School Capacity to Use Research: Findings from a National Study of U.S. Schools

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Background

Evidence use as a global issue

- Increased debates about evidence-based practice in education, health, and other public sectors globally
- Increased attention to use of evidence (research and data) in teacher and leaders standards
- Growing emphasis on engagement with practitioners during production and dissemination of research

Research use as relational

- Supported by trusting relationships that feature trust, common goals and values
- Educators' social capital—that is, the resources generated from relationships—can support individual growth and organizational change
- Policy and implementation literatures highlight the importance of co-construction of meaning, negotiation,
- Evidence use as a situated practice

Network theory and analysis supports our understanding of:

- Diffusion of innovation into and within schools
- Social and human capital afforded by ties to different sets of resources

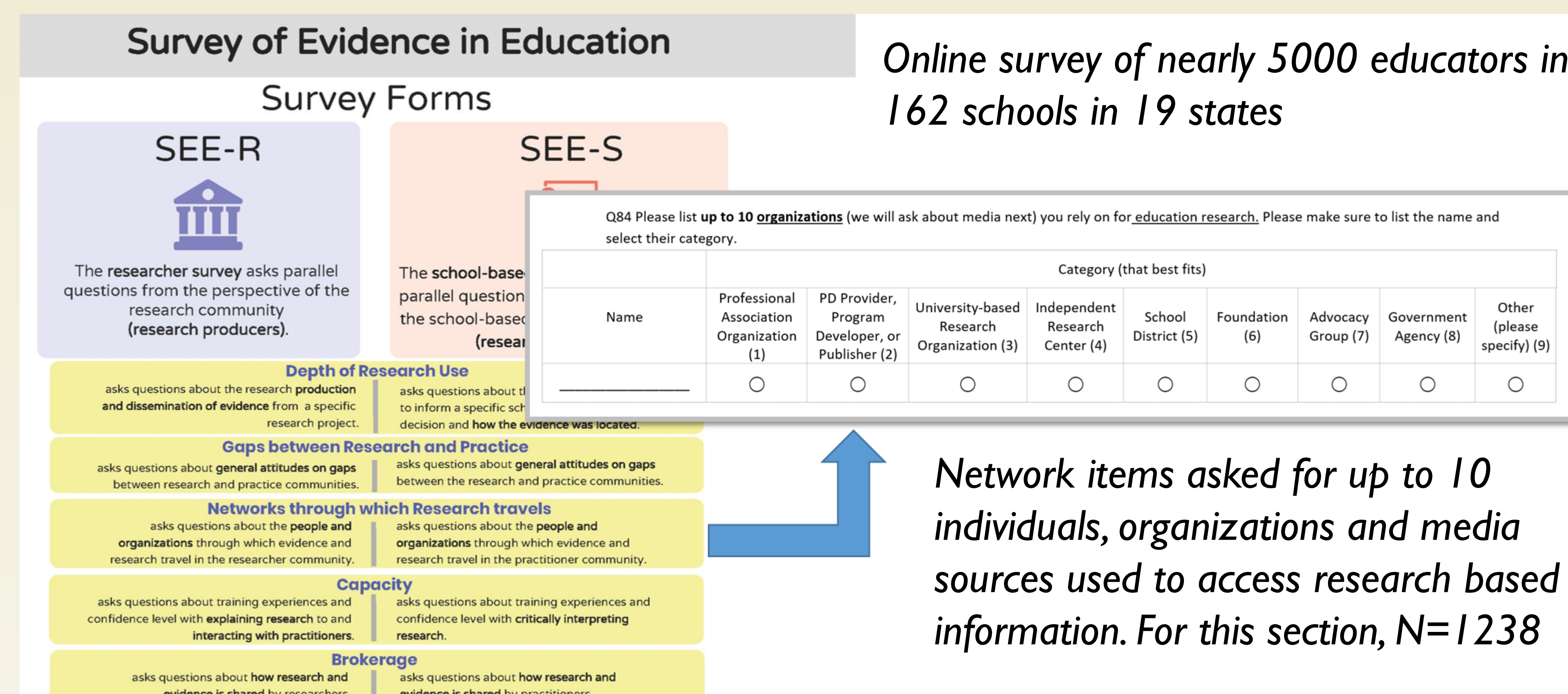
Ego networks are a particular form of network analysis that generates information about individuals' ties to various types of resources – here, potential sources of research-based information

Research Questions

How can we use networks to understand capacity for research use?

What can we learn about system, individual, and school capacity from personal network data?

Approach



Sample and Measurement

- Stratified sample of districts based on size, geography, populations served
- Survey of Evidence in Education (at left)

Analysis

- Examine *system capacity* by descriptively establishing range and diversity of resources
- Latent profile analysis (LPA) and multiple LPA of ego networks to differentiate individual and organizational capacity

Results

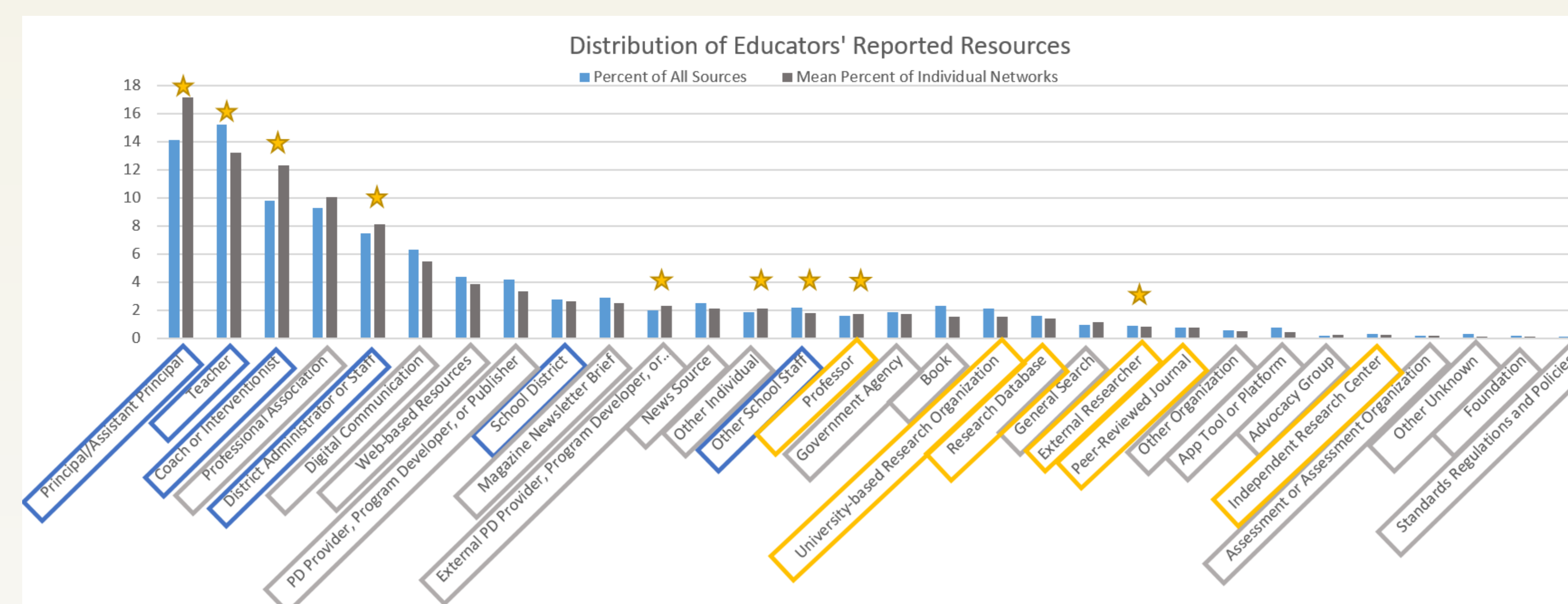


Figure 1. Proportion of all resources used, overall and individual means

Network Size	Mean	SD
Research Relationship	7.42	5.88
Proportion locally mediated	0.55	0.32
Proportion externally mediated	0.59	.43
Proportion direct	0.07	0.15

Table 1. Ego network statistics

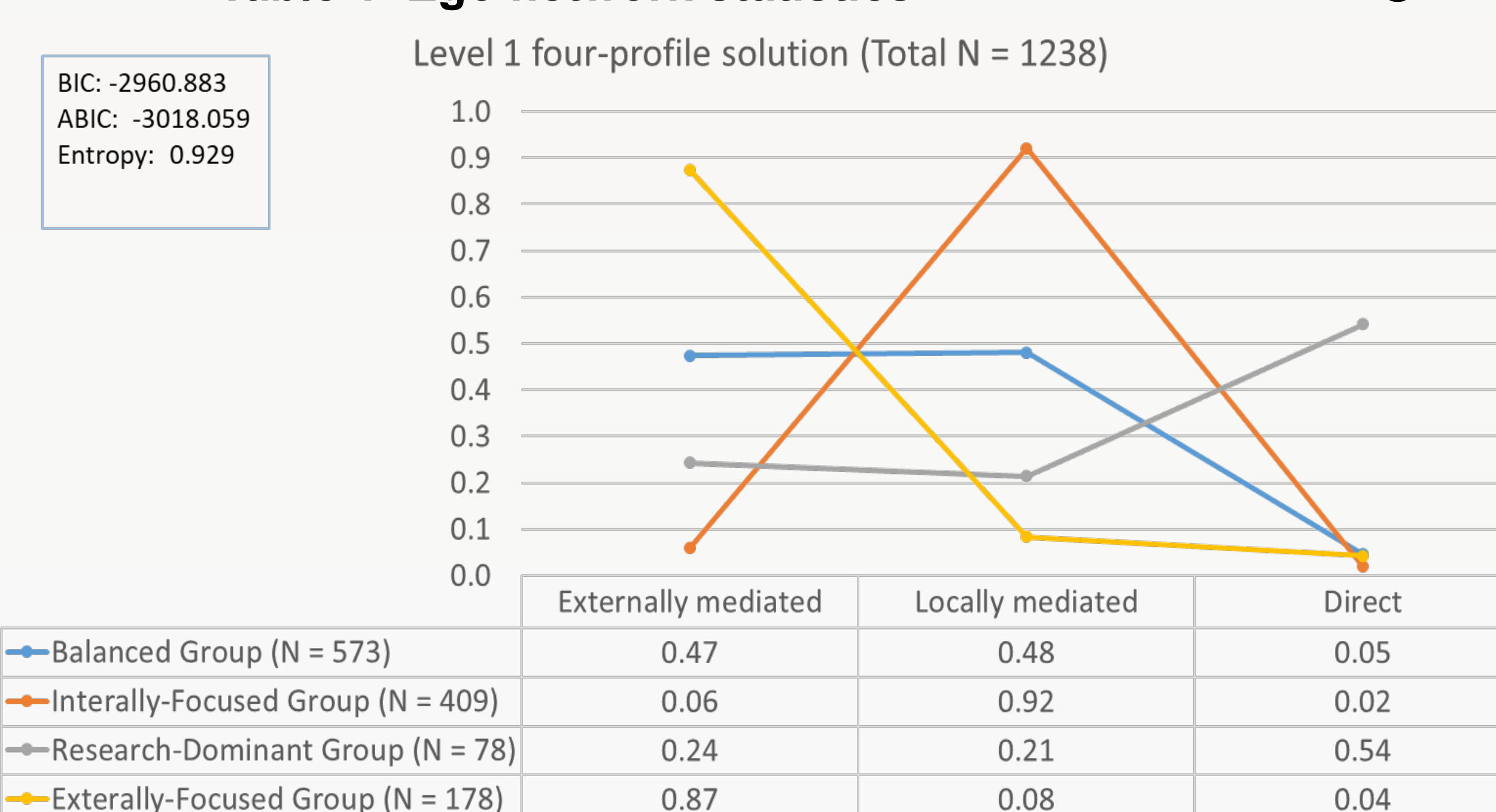


Figure 3. LPA of individuals

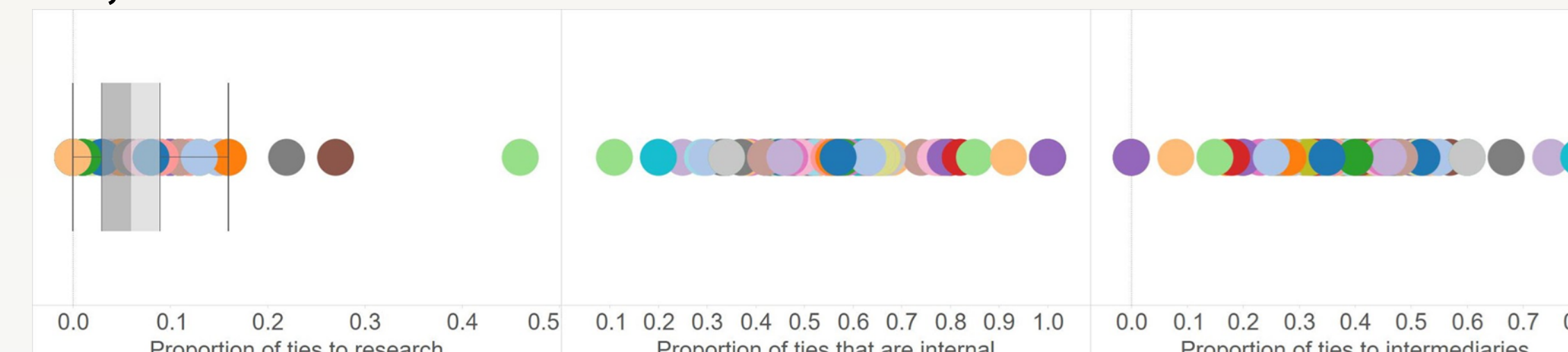


Figure 2. Distribution of network statistics across schools

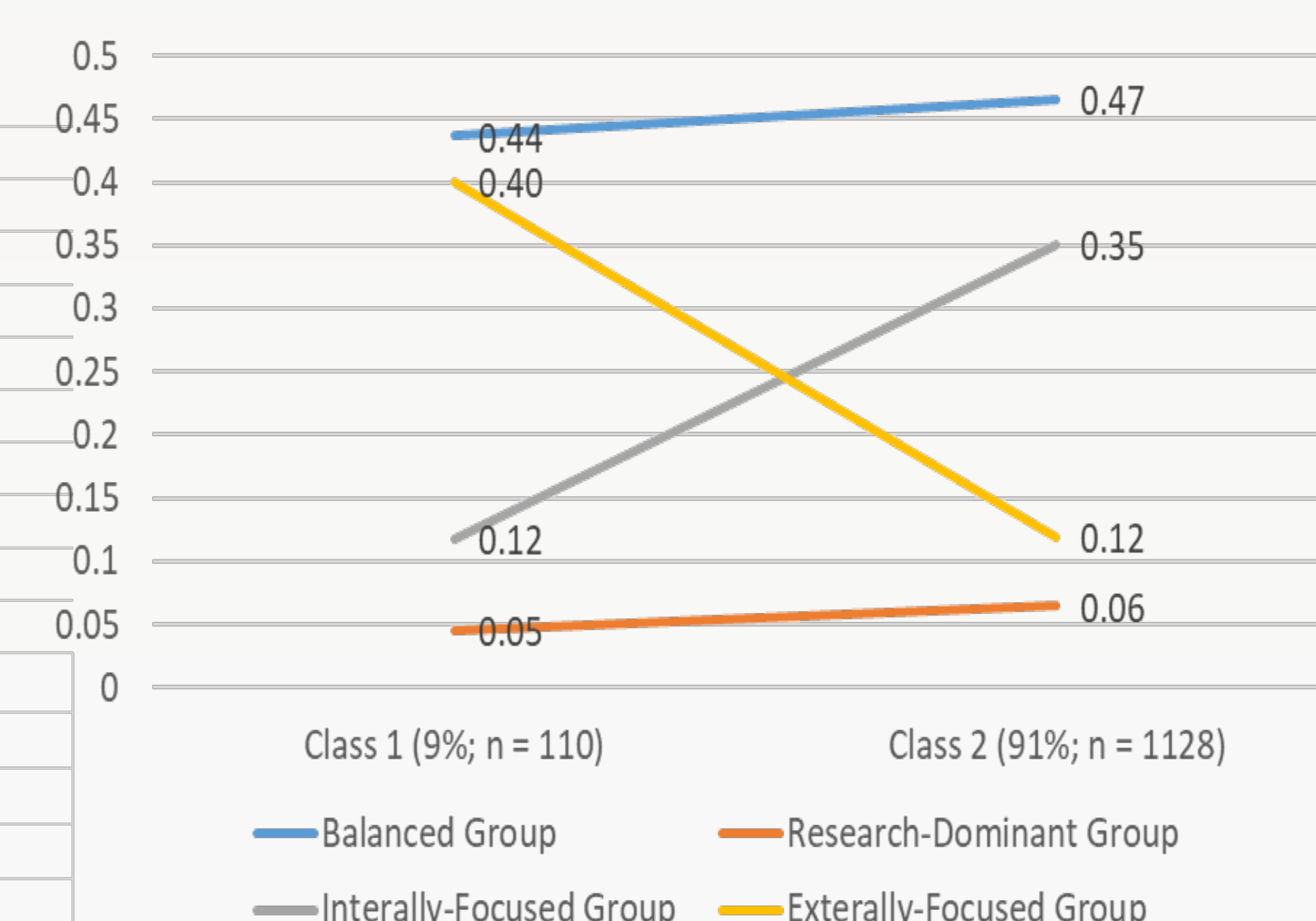


Figure 4. Multi-level LPA of Schools

Conclusions

- Research use is almost always **mediated**
- Diffuse, decentralized set of resources creates **challenges for systemic change**
- Predominance of individual and local resources may mean that there are some **high leverage individuals who broker research**
- Distinct profiles can **support PD, preparation decisions**
- Important considerations in terms of **equity and sustainability** within and across schools
- Networks as **useful indicators** for system and individual capacity; Direct ties to research **weak enough as to not define school capacity**

Team

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This work was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R305C150017