

BDP 100: Call for Clusters – Best Practices

Cluster hiring became a mechanism for investment in “grand challenge” areas of research during the 1990s. Over the last few decades, there have been several studies conducted on cluster hires to assess their efficacy in fostering interdisciplinary and impactful research. Of note, sociologist Steven Brint surveyed 199 cluster hires at 20 research universities in the United States. He also reviewed the literature on cluster hiring and interdisciplinary research centers, providing insights in his 2019 book, *Two Cheers for Higher Education*. This drew largely on studies by sociologist Daniel McFarland. Below are some of the top lessons learned and best practices by fellow research universities:

- Most productive clusters were built around one or two existing highly productive scholars who were capable of mobilizing the energy and talents of the group around leading-edge research questions.
- Strong interdisciplinary research is reliant on strong disciplines. Strong departments want to collaborate with strong departments, and strong faculty want to collaborate with strong faculty. It helps to build on existing disciplinary strengths and established interdisciplinary work, rather than starting something from scratch.
- Existing collaborations can improve success. Interdisciplinary clusters that included researchers who had published together or cited each other’s work extensively prior to cluster formation had a higher probability of success.
- Interdisciplinary initiatives in natural science and engineering fields had a better record of success than those in social science related fields where the team science approach is less familiar and not yet a dominant feature of academic production.
- The research focus of the cluster needs to be clearly stated and understood. Centers that lacked a well-defined problem definition became a nexus of loosely connected individuals searching for intersections, as opposed to cohesive groups tackling well-defined problems.
- Engage broader faculty groups throughout the planning and hiring process. Without faculty buy-in, as well as time to review effectiveness, cluster hiring will not work, or at least won’t work as well as it could.
- Hires were more effective when co-funded by research institutes and departments, and governed by written agreements on shared time commitments.
- Seed grant money for projects within the cluster and goals focused on boosting competitiveness for federal research dollars led to stronger research and collaboration outcomes.

Further Reading:

Biancani, S., Dahlander, L., McFarland, D. A., & Smith, S. (2018). Superstars in the making? The broad effects of interdisciplinary centers. *Research Policy*, 47(3), 543-557.
doi:10.1016/j.respol.2018.01.014

Bloom, Q., Curran, M., & Brint, S. (2019). Interdisciplinary Cluster Hiring Initiatives in U.S. Research Universities: More Straw than Bricks? *The Journal of Higher Education*, 91(5), 755-780.
doi:10.1080/00221546.2019.1688615

Brint, S. (2019). *Two Cheers for Higher Education: Why American Universities Are Stronger Than Ever—and How to Meet the Challenges They Face*. Princeton, NJ: Princeton University Press.

Dahlander, L., & McFarland, D. A. (2013). Ties That Last. *Administrative Science Quarterly*, 58(1), 69-110.
doi:10.1177/0001839212474272

Mäkinen, E. I., Evans, E. D., & McFarland, D. A. (2019). The Patterning of Collaborative Behavior and Knowledge Culminations in Interdisciplinary Research Centers. *Minerva*, 58(1), 71-95.
doi:10.1007/s11024-019-09381-6

McMurtrie, B. (2016, March 13). The Promise and Peril of Cluster Hiring. *The Chronicle of Higher Education*.

Rawlings, C. M., McFarland, D. A., Dahlander, L., & Wang, D. (2015). Streams of Thought: Knowledge Flows and Intellectual Cohesion in a Multidisciplinary Era. *Social Forces*, 93(4), 1687-1722.
doi:10.1093/sf/sov004