Meeting Summary

Linking International Databases to Build Strategic Academic Partnerships in Science

Workshop, May 14-15, 2014

Co-organized by Indiana University and the U.S. Department of State; Co-hosted by NSF and AAAS.

This brainstorming workshop explored the socio-technical feasibility of creating a global knowledge platform to help universities build strategic international science, technology and innovation (STI) partnerships. U.S. and foreign universities lack easy access to necessary data and tools, thus hampering needed American strategic global engagement and yielding a sparsely filled worldwide matrix of strong potential matches, with lost opportunities for scholars, institutions, the nation, and the world. The envisioned platform (PEGASCIS, Platform to Enhance Global Academic Strategic Collaboration in Science) includes a stakeholder community, a clearinghouse of relevant information (e.g., country STI priorities, STI futures reports), datasets and programs, search/visual analytics functionality, and open source/open data resources to build community ownership of inclusive, widely available data and tools.

Social aspects of platform establishment appear to be at least as challenging as technical ones. These include recognition of the national need for strategic engagement within a global context; trust-building to allow cooperation in the competitive academic arena; a weak tradition of using data for strategic decision-making; articulation of compelling short-term benefits for platform adoption; and sustainability of focus and action in this “orphan space” where leadership and funding roles of government/business/universities/NGOs in international academic science are undefined.

Participants explored technical prospects of the platform’s matchmaking function by reviewing current capabilities of National Researcher Networking (NRN) systems that support online faculty profiles, provide value-added services (e.g., research portfolios, collaborative networks), or aggregate data on international collaborations. Two trends were noted: many compatible NRN systems now interface with an open source platform called VIVO to enable federated searches (e.g., for individual or institutional research complementarity) and to visualize science activity; and many universities are mapping their “international footprint” by developing tracking systems in-house or in consortia like UCosmic. Technical challenges include the need for an expanded set of relational definitions (i.e., ontologies) across all academic fields and for international activities, interoperability across proliferating platforms, and harmonization of efforts with other countries, including developing nations so that the platform does not widen any “digital divide”. An issue common to all these challenges is the need for agreed-upon standards across platforms and institutions, to enable cooperation without requiring coordination.

Outcomes of the workshop included delineation of a possible university profile system reliant on publicly available data, development of platform use scenarios, discovery of obvious synergies and areas of easy progress, and identification of entrepreneurial approaches to jumpstarting the platform.

The consensus reached by the workshop participants was that there is tremendous potential to provide the data and tools needed for strategic academic decision making in S&T within a global context. Such efforts are timely and can leverage much work done by individual institutions, consortia, businesses, the U.S. government, other countries, and international organizations.

The next step is a Scoping Meeting planned for July, 21 2014. The goal of that meeting is to conduct a scoping exercise to determine possible trajectories for PEGASCIS establishment. The participants will explore scenarios that clarify platform scope, organization, leadership, priorities, international linkages, timeframes, and activities that meet stakeholder needs.

1. More information about the workshop can be found at: http://cns.iu.edu/workshops/event/140514.html
2. Prepared by Elizabeth Lyons with input from participants. The Meeting Summary should not be assumed to represent the views of the U.S. Department of State or the National Science Foundation. It is solely intended as an informal record of individual views expressed by the participants at the workshop.
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