Tightening research-practice connections: Applying insights and strategies during design charrettes

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Abstract: Design charrettes feature hands-on activities for capturing, analyzing and developing the knowledge, values, and vision of its participants. In this workshop, using a design charrette approach, participants will (a) consider how their research informs formal and informal practice, (b) learn about a variety of outlets for bringing research to practice audiences, and (c) consider who might benefit from learning about the research. Participants will discuss different modes of research-practice interaction, and their implications for the production and use of new knowledge. Individuals will analyze their current approaches to knowledge dissemination for use and participants will share existing strategies to stimulate fruitful and mutually informing research-practice connections. Participants will design their own research-practice connections, both through individual projects and through the ISLS community.

Background
Educational research has long been criticized for its weak link with practice. Explicit attempts to close the research-practice gap have been underway for over four decades. These efforts have included design team approaches and researcher-teacher models aimed at making practice the object of investigation. Shrader, Williams, Whitcomb, Finn and Gomez (1998), for example, described a research for practice approach, in the Learning Sciences, that involved working collaboratively with teachers to design, enact, and refine science materials. Lampert (1992) and Ball (Lampert & Loewenberg-Ball, 1998) taught in classrooms and made their practice an object of study. Yet, while a robust, growing body of knowledge now exists to describe how policymakers and educators access, value and use research, much of the work that would be useful happens in silos, is known to a few, and is rarely leveraged by policy makers, school administrators and teachers to improve educational practice. We have learned much about what aspects of evidence-based practice and research utilization in other fields can be applied to education, yet, how to share current knowledge, generate and share new knowledge, and walk the knowledge-sharing communicative path between research and practice remains a significant challenge in the Learning Sciences. Internationally, enormous efforts have been launched to improve the practical relevance and actual use of research knowledge, especially in the fields of education and health care. However, both the scholarly insights and effective practices have yet to become widely spread.

In addition, even though researchers are becoming increasingly required to disseminate research findings among practitioners, few graduate programs devote serious attention to preparing researchers for the task and many researchers find it daunting. The proposed workshop addresses this problem by (a) sharing insights and practices from existing projects that stimulate fruitful research-practice connections during knowledge production and/or use; and (b) facilitating the design of strategies through which ISLS can tighten research-practice connections, both individually and as a community.

Theoretical underpinnings
Informed by the work of Rogers (1969), and review of over 2600 research studies, Havelock (1971) published a landmark report on the dissemination and use of scientific outputs. Havelock identified seven general factors that could account for how scientific outputs are taken up and used: linkage, structure, openness, capacity, reward, proximity and synergy. He identified several modes in which those factors can be seen: social interaction; research, development and diffusion (RDD); and problem solving. More recently, attention has also been given not only to the use of scientific knowledge for educational practice (e.g. Hargreaves, 1999; Levin, 2004), but also to how it is produced (Vanderlinde & van Braak, 2010). Specifically, there is growing attention for how researchers and practitioners can collaboratively bear the responsibility for both producing and using relevant knowledge in education.

Burkhardt and Schoenfeld (2003) identify seven models to describe the relationship between research and practice, five of which feature strong divisions of labor, relate more to evidence-based practice and align well with the RDD model described by Havelock (the reading model; the summary model; the professional...
development model; the policy model; the ‘long route’) and two of which show more characteristics of Havelock’s problem solving model (design experiments; and the engineering model). De Vries and Pieters (2007) add an eighth model which shares elements of Havelock’s social interaction model and highlights equal collaboration: knowledge communities. Each of these models denotes different assumptions and expectations regarding the roles of practitioners and researchers in the generation and application of theoretical understanding. Taken together, three broad types of research-practice interactions during knowledge production can be distinguished today: RDD, design research and communities.

**Workshop structure**

To meet these aims, the workshop is divided into two main stages. The first stage is intended to sensitize and inform participants by sharing insights and strategies from existing projects that stimulate fruitful research-practice connections during knowledge production and/or use. Strategies for sharing (emerging) insights will be discussed in terms of: content (focus), form (products and activities), medium (face-to-face, online, etc.) and time (sustained, bursts, frequency, etc.). During the second stage of the workshop, participants will be encouraged to consider, and design, specific strategies for tightening research-practice connections that can be put into action in the short to medium term. Participants may choose to develop action plans related to individual projects, or to a broader (sub-) set of ISLS work. Participants will be involved in design charrettes that will undertake the tasks of: establishing a focus, considering time, determining the form and choosing the media to enhance research-practice interactions in a project that is currently underway or recently completed.

**References**


