The Case for Problem-Making Research in the Developmental University

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Abstract: Everyone knows that research should solve problems. It's common sense, especially in the context of lower-income countries striving to improve the living conditions for all citizens. Ethiopian universities are now being encouraged to conduct more problem-solving research and thus function as "developmental universities" in support of national growth priorities. However, advocates of problem-solving research have overlooked a major problem. In this essay, I suggest that the discourse of problem-solving research may constrain our research questions and neglect problems that call for critical attention. To widen our research discourse and our research vision, I propose that *problem-solving* research should be complimented by *problem-making* research, i.e., research that highlights otherwise hidden issues – including who has the power to frame "problems" – and challenges us to look more critically at the consequences of our "solutions".

Keywords: problem-making research, problem-solving research, Ethiopia.

Introduction

Everyone knows that research should solve problems. It's common sense, especially in the context of lower-income countries striving to improve the living conditions for all citizens. Everywhere we turn our heads, we can see problems – limited access to health care, gender inequities, low learning achievement, child labor, climate change, food insecurity, etc. – problems that our research can help solve, piece by piece.

Problem-solving research makes good sense. Universities in Ethiopia are now being encouraged to do more problem-solving research that makes a direct contribution to the common good. I agree with the value of this approach….but I have a problem with problem-solving research. Actually, my problem is not with problem-solving research, per se, but with the discourse that suggests problem-solving research is all we should do.

In this essay, I suggest that the discourse of problem-solving research may constrain our research questions and neglect problems that call for critical attention. To widen our research discourse and our research vision, I propose that *problem-solving* research should be

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complimented by *problem-making* research, i.e., research that highlights otherwise hidden issues and challenges us to look more critically at the consequences of our "solutions".

Research in the developmental university

As Ayenachew (2016) discusses, the developmental state, as found in countries such as Rwanda and Ethiopia, concentrates government efforts on delivering accelerated economic growth and effective service delivery. The developmental state steers public institutions toward achieving national development goals. Indeed, higher education is one of the key venues through which the developmental state implements its agenda. In the higher education sector, a university that contributes significantly to solving the problems of development has been called a "developmental university" (Fredua-Kwarteng, 2015).

In Ethiopia, universities are expected to conduct teaching, research, and outreach in the service of national goals of economic growth and transformation. The push to produce more science/engineering graduates represents one aspect of the state's effort to orient higher education toward economic growth. Particularly in the sciences, the developmental university is expected to emphasize problem-solving research that improves living conditions for the public.

Because universities are funded by the public, it is appropriate for government to expect that universities produce research that can inform social improvement and policy development. An emphasis on applied, problem-oriented knowledge is particularly appropriate for research in professional fields of practice, such as education.[2] In the Ethiopian context, for example, university staff can conduct research on key policy issues: What is the effectiveness of mother-tongue language policy? How to improve teacher professional development and retention? Can the integration of environmental science in school curricula help prepare students to adapt to climate change? What are the barriers facing children with special needs in accessing secondary schools?

My problems with problem-solving research

These are all important educational questions that further research may help clarify or even solve. But the path to solving some problems may create new ones. And that's part of my problem with problem-solving research.

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[2]In the United States, some scholars have argued for even greater attention to problem-solving in doctoral dissertations in professional fields like education. Archbald (2008), for example, suggests that educational leaders who are earning their doctoral degrees would benefit from analyzing a concrete organizational problem in order to improve practice. As Archbald notes, the traditional form of the social science dissertation does not necessarily serve the goal of problem-solving in the world. Such a goal might be best served, for Archibald, by scholarly analysis of the history and causes of the problem, as well as recommendations for action. Archbald also argues that doctoral candidates could accompany their problem analyses with "action communications" like strategic plans, memos, videos, and presentations, rather than only writing scholarly documents which policy-makers and other stakeholders are unlikely to read. In short, the problem-oriented dissertation would help bridge the gap between research and policy, a gap that traditional research rarely crosses due to the conventions and expectations of academic culture.

I would like to suggest that research can't stop with finding "solutions"; it must continuously ask questions about who benefits from certain solutions, whether there could be alternative solutions, and what the unintended problems with our expected solutions might be. In other words, research must continually turn solutions into problems. That's one reason why I suggest that we need problem-making research as an integral partner to problem-solving research.

At a deeper level, my concern regarding problem-solving research is that it can become a narrow discourse about the purpose of professional inquiry. It may blind us to a fundamental question: *Whose problem is this*?

In this respect, the discourse of problem-solving research may disguise issues of power in relation to setting research agendas. Where does the power to name "the problem" come from? Conventional wisdom about problem solving research may assume that highly visible problems of development, as articulated in national development plans or strategies, should be the focus of our research efforts. There is no doubt that these are issues of vital importance. But what about the problems that may be hidden within our current solutions? What about research that evaluates the unintended consequences of policy implementation? What about "other people's problems" that problem-solving research fails to address?

I would like to suggest that research can serve the public interest – not just by solving problems, but also by making problems. In this brief commentary, I will sketch different possible forms of problem-making research, as indicated in Figure 1 (below) and also provide several examples of such problem-making research. By adding multiple forms of problem-making research to our broader dialogue about the work of the developmental university, we can expand opportunities for researchers to contribute to the public good.
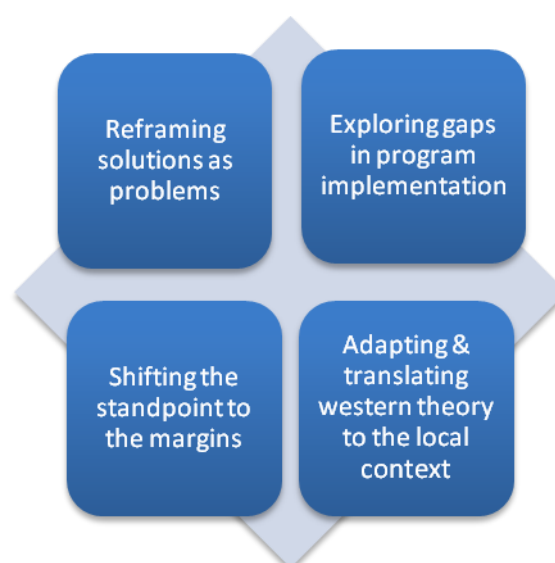
Reframing solutions as problems

Exploring gaps in program implementation

Shifting the standpoint to the margins

Adapting & translating western theory to the local context

Figure 1: Types of problem making research

Examples of problem making research

Research and policy often travel in what Orland (2009) has called "separate orbits". There are many reasons why research and policy rarely meet. Researchers may communicate in forms that are not useful to policy-makers or may focus on understanding and interpreting problems in new ways, rather than proposing concrete solutions (Orland, 2009). In her work on different models of knowledge utilization, Weiss (1979) explained that research rarely has a direct influence on policy, since the insights provided through research may not match the needs of the decision-making context. Weiss also notes that a problem-solving model of research (in relation to policy) assumes that there is consensus on the nature of the problem; in other words, it assumes that there is agreement on ends, with only the means in question. When different moral, cultural, or philosophical understandings of educational goals or ultimate purposes are in play, it may be impossible to find a singular, consistently shared definition of a problem that research can solve.

For a dynamic and learning-oriented policy environment, I suggest that we need multiple models of research and research utilization. Along with research that is intended to inform policy, we also benefit from research that questions policy assumptions and effects. Such research may raise questions about how issues are framed and can surface the unintended outcomes of policy. For me, problem-making research opens questions that might otherwise go un-asked. By doing so, such research makes more questions possible, and more problems visible. Thus, it becomes the seedbed for more problem-solving research in a complimentary cycle. Ultimately, problem-making research and problem-solving research become partners.

Exploring gaps and unintended consequences in policy implementation

In my own prior experience working in East Africa, I learned the power of questioning one's own assumptions. I worked on a regional child labor project, as the project's research and policy specialist. Our project's objective was removing children from exploitative labor and enrolling them in school in target areas of Kenya, Uganda, Rwanda, and Ethiopia. We targeted individual children as beneficiaries, with limited attention to their specific family circumstances. Eventually, we began to hear that our well-intentioned efforts had unintended consequences. Was it possible that removing a boy from working in a stone quarry, or stopping a girl from weaving for long hours, would create other problems?

Sometimes, it did. We commissioned a study to investigate the unintended consequences of removing children from child labor. We learned, for example, that in some cases our project's efforts resulted in harder work for the siblings or the mother of the beneficiary child. We also learned that, when a child stopped working during the week to go to school, she sometimes worked harder at night or worked more during school holidays. These findings surprised us, and made us look more critically at our efforts to stop child labor. The research converted our "solution" into a problem. By doing that, we could see what otherwise was hidden from us and adjust our implementation strategies to address children's lives more holistically.

Below, I provide two additional examples of research in the Ethiopian context that problematize particular approaches to educational improvement. One case comes from secondary education; another case, from higher education. In both cases, researchers ask hard questions about the realities that students and staff experience on the ground and how those realities might differ from the expectations of policy-makers. By posing these questions, researchers illuminate the complexity of educational policy and practice, while widening the possibilities for policy improvement in the future. In this manner, question-asking and problem-making research can be appreciated as the bases for improving future policy – even if such research challenges current policy.

Reframing solutions as problems

Ethiopia has made several efforts to introduce technology in the teaching and learning process in schools. Across the country, secondary schools have been equipped with plasma TVs in an effort to provide high quality lessons from expert teachers. In a recent article, Birbirso (2014) questions the effects of the plasma instruction initiative. He argues that importing expert knowledge into the classroom actually undermines the legitimacy of local teachers. Birbirso also suggests that the plasma-TV reform has been top-down, and should instead engage professionally with teachers as active agents and "knowledge inventors" (p. 199).

I am not in a position to evaluate the strength of Birbirso's critique. Other researchers and officials may strongly disagree with his assessment or challenge his conclusions. For my purpose here, his article is an example of research that does the important work of examining policy implementation and providing evidence of complex, unintended effects that might otherwise go unnoticed or unspoken. By problematizing the plasma-TV initiative, Birbirso makes it possible for policy-makers, teachers, students, and researchers to engage in a healthy debate about the intentions, effects, and side-effects of the initiative. Further research arising from this debate may clarify both positive/negative aspects of the initiative, and lead to more inclusive engagement in the next generation of technology-enhanced learning strategies.

Shifting the standpoint to the margins

In higher education, another example of problem-making research comes from the work of Molla and Cuthbert (2014) who investigate the barriers faced by women in Ethiopian universities. This qualitative research study gives voice to women who have experienced various forms of discrimination, sexual harassment, and gender bias as students and staff members. In a related article, Molla (2013) argues that current policy initiatives to improve gender equity in higher education do not go far enough. The problem of gender equity is often believed to stem from women's lack of confidence, which leads to their reluctance to pursue higher education. As a result of this way of framing the problem, equity measures often include assertiveness training for women. Molla suggests moving beyond such

superficial responses, to address deeper matters of unequal power relations embedded within the curriculum and teaching/learning process.

Like Birbirso's critique of plasma-based instruction, Molla's critique of current approaches to gender equity reveal otherwise hidden experiences and amplify otherwise marginalized voices, to challenge the ways in which policy problems were framed. By hearing such voices more clearly, administrators and policy-makers have more information to help them improve gender equity and technology-based instruction. In general, for critical research to have a constructive impact requires an open environment for debate and reflection among the research/policy community. University researchers must also be willing to experiment with alternative research methodologies—such as feminist research or participatory research—that can illuminate otherwise neglected perspectives.

Translating theory to the local context

There is another aspect of problem-making research. Problem-making research can also work at a theoretical level to adapt or customize theoretical frameworks so that they are more applicable to the specific nature of the local context. In educational leadership, for example, how might the theory of transformational leadership be modified to better fit the social, economic, political, and cultural conditions of Ethiopian schools?

This kind of question turns theory itself into a problem, especially theory that comes from western countries that may face quite different conditions than those found in Ethiopia. By making a problem out of theory, we can gradually polish the lenses through which research is conducted.

Conclusion

Writing about developmental universities, Fredua-Kwarteng suggests that "a classical university is converted into a developmental university when it becomes a primary tool for generating knowledge for national purposes" (2015, n.d.). Knowledge that can be applied to address national problems, often articulated as problem-solving research, is indeed highly important. As suggested earlier, I fully support the agenda of problem-solving research.

But what about the other problems that may not reach the national agenda? I would suggest that the discourse of problem-solving research may become too narrow, in that it may limit researchers to focus only on certain kinds of problems at the expense of others. As a sister to problem-solving research, I propose problem-making research, i.e., research that makes otherwise hidden problems more visible and otherwise silent voices more audible.

Of course, many readers may recognize that my understanding of problem-making research is largely an expression of the critical paradigm in research. My thinking certainly takes inspiration from Paulo Freire's articulation of critical pedagogy and a "problem-posing"

stance toward the world. In this case, what I'm doing is taking a problem-posing stance toward the discourse of problem-solving research. In the critical spirit, researchers consider issues of power to be central to the way issues and questions are framed. Critical research often attempts to problematize conventional assumptions and standpoints, in order to produce knowledge for constructive social change (Crotty, 1998). In this sense, the notion of problem-making research is nothing new, only a reminder of what critical researchers have long advocated.

From another angle, some scholars may feel that there is little actual difference between the two terms of problem-solving and problem-making research, in that both are attuned to problems in the world. Very true. For me, the difference comes in the purposes of the work. To summarize: problem-making research has multiple purposes, including raising the visibility of issues that might otherwise go unnoticed, identifying problems latent within our policy solutions, challenging the cultural assumptions in theory, and looking at both theory and practice through the eyes of people on the social margins. Problem-making research raises a question at the heart of the critical research tradition: *where do our research problems come from, and who has the power to define them?*

By suggesting a constructive role for problem-making research, I emphasize the authority of critically-minded scholars, practitioners, and community members to identify (and amplify) issues or perspectives that, on the surface, might not seem like important problems to solve. By making such problems more visible and more complex, we also make an important contribution to broader dialogue on how those problems can be solved, or at least softened. I suggest that, in the developmental university, we can productively pursue both problem-solving and problem-making research to create a creative, participatory space of knowledge production and policy discourse.

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