I thank Bryan Warnick for his paper on educational research and state interests. His central argument is: the state’s legitimate interest in society’s welfare means that it may demand generalizability for state-funded research. I commend him for opening up this timely discussion and for the courage to take a clear and perhaps controversial position.

If a democracy “repudiates the principle of external authority” (John Dewey; quoted in Warnick), then a state might well have legitimate interests in developing competent, active and thoughtful citizens. Such citizens might well be fostered in schools where students are taught to become proficient in basic skills, knowledgeable in theoretical disciplines, engaged in mutually agreed cooperative action, and self-reflective in critical analysis of society and culture. To that end, a democratic state might rightly demand educational research to be a rich resource for developing these interests in young citizens.

Warnick suggests that a democratic state’s legitimate interest in educational research is generalizability. This he interprets broadly: generalizability is “large enough that even many critics of generalizability may find room within it.” His broad notion includes both qualitative and quantitative paradigms of research.1 Only a few “radical particularists” would not be included, deservedly so.

I would like to sketch a model of broad generalizability. To depict its broadness I will use Jürgen Habermas’s idea of “knowledge-constitutive interests.”2 As a postpositivist, Habermas suggests that all knowledge is shaped by prescientific human interests. Although they are human interests, what makes them constitutive of knowledge is that they determine the mode of discovery and of validation. Habermas suggests three such interests: technical, practical, and emancipatory (KHI, 308). I think that each of these might possibly generate not only its own type of knowledge but also its own mode of generalization.

Habermas argues that in the empirical-analytic sciences a technical interest shapes possible knowledge statements into expressions of the success or failure of experimental operations. He suggests, “the facts relevant to the empirical sciences are first constituted through an a priori organization of our experiences in the behavioral system of instrumental action” (KHI, 309). In this mode, knowledge takes the form of that which can be manipulated and controlled. It is arguable that some educational research is shaped by this technical interest. Generalization in this kind of research might involve the transferability of statements about control and manipulation in an experimental sample to a larger population or situation.3

For Habermas, in the historical-hermeneutical sciences a practical interest shapes knowledge into expressions of success or failure to achieve mutual co-
understanding with an eye to cooperative action. In these sciences “access to the facts is provided by the understanding of meaning” and validated through interpretive modes of inquiry (KHI, 309). Such knowledge would be composed of mutual understandings and common actions according to agreed upon norms. It could be argued that some educational research is hermeneutical, where knowledge takes the form of clarifications and transformations of the investigator’s and subjects’ pre-understandings. Generalization here might well involve “the preservation and expansion of the intersubjectivity of possible action-orienting mutual understanding” (KHI, 310). Scientific generalization, for this type of educational research, might mean maintaining and clarifying an intersubjective consensus about cooperative interactions in the world. This might well require the active co-participation of subject as a kind of reader to make clearer the “lived-through quality” as well as the “meaning of the expressions” of the lived experiences such understandings make explicit.4

Habermas argues that in the critical sciences, an emancipatory knowledge-interest shapes knowledge into expressions of understanding the hypostatized character of the forces that seem to control one’s action. This mode of inquiry uses critical self-reflection and leads to “emancipation from seemingly ‘natural’ constraints” (KHI, 311). Here research knowledge would take the form of making visible ideologies and rationalizations through self-reflection. Arguably, some educational research might well also be informed by this interest. Scientific generalizability here might then involve the effectiveness of generating self-reflection that frees people from undue dependence on hypostatized forces, ideological or personal. This might well require a form of analytic generalization by the subjects themselves.5

I am proposing the possibility that, on Habermas’s account, scientific generalization might involve three possible modes: instrumental, interpretive, and self-analytic. On this model, we could argue that critics of generalization may well not be aiming at generalization as such but at reduced or narrowed notion. One critic, Elizabeth St. Pierre, argues that the National Research Council’s (NRC) state-sanctioned definition of good research has a restricted view of science, a criticism I think is largely justified.6 Although in places the NRC does show a broader approach, it generally seems to restrict what counts as science through a narrowed lens.7 For example, the NRC highlights genetics research as paradigmatic, decries humanists for not seeking replication or for not having a formal logic for generalization, and suggests that today’s public wants information “driven by performance goals.”8 Putting this in Habermasian terms, St. Pierre might be arguing that the NRC restricts generalization to that associated with the technical knowledge-interest of manipulation and control. But her own research might well align more closely with the hermeneutic or critical sciences. Thus St. Pierre might well be critical of the report’s narrow notion of generalization without throwing out generalization altogether. On Habermas’s model, perhaps critics such as St. Pierre might actually be arguing — albeit indirectly and implicitly — for recognizing knowledge that is generalizable along hermeneutical or emancipatory modes, rather than just technical ones.
This is not merely a theoretical debate or a quarrel about funding. It is also about maintaining a robust democracy. Warnick implies that if the state’s legitimate interest in educational research is generalization, then it requires a broad notion. I quite agree. In fact, I would argue that it is the broad notion that is vital for a democracy. To serve educational practice responsibly in a democracy, educational research ought to involve, collectively, all three knowledge-interests. Good research using the empirical-analytic mode of generalization certainly can be helpful in shaping teachers’ practices for effective student performance, whether that be on standardized tests or critical self-reflection. And a democracy needs this. But educational outcomes in a democracy are a rich complexity. We would be missing valuable insights into effectively developing democratic citizens if educational research did not also involve the hermeneutic mode of generalization, one involving mutual co-understanding and action among subjects as well as between subjects and researchers. And, I would think, educational research for democracy should also involve a critical mode of generalization, one generating self-reflective awareness and critical self-analysis of possible ideological hypostatizations. All three are vital in a democracy. Broad generalization, perhaps understood along these three modes, would best support the rich variety of research required to sustain educational practice fostering students to become competent, knowledgeable, cooperative, thoughtful, critical participants in that democracy, citizens that might “repudiate” the “external authority.”

If that is so, then a state interested in sustaining a democracy might well require all three sorts of generalizations for educational research. Arguably, I would think a democratic state would want to protect and foster all three modes of inquiry in order to maintain and enhance its democratic character. Yet, St. Pierre and other critics argue, this broader notion of generalization is not present in the state-mandated NRC report. I tend to agree: it does seem to have a narrower notion of generalization. If so, this restriction on the notion of generalization cannot be argued on purely scientific grounds, either taking Habermas’s three-part model or on current practices in educational research. And to deny state funding to the hermeneutic or emancipatory modes might well be to deny research generalizations important for a robust democracy.

Thus we could ask why a state might want to operate with a narrowed notion of generalization. Why might a state exclude those sectors of current scientific research in education more aligned with the hermeneutical and critical sciences? Why might a democratic state, in effect, go against maintaining a robust democracy? The answer to this might well have to do with certain political aims; perhaps a particular state’s goals are at cross-purposes with developing citizens for a democracy. For example, in the United States, the federally mandated accountability movement, which Jeffrey Aper argues is informed primarily by instrumental reason for technical control, might well best be interpreted as “the state exercis[ing] power by making each individual ultimately self-regulating.”9 Perhaps its effect, if not intent, may be to create economically ready consumers and compliant producers rather than thoughtful if not critical democratic participants. Perhaps the notion of narrow generalization silently functions as an ideology in this regard. Perhaps narrow
generalization is a false consciousness that privileges the kind of educational research helping schools more effectively create domesticated consumers and docile workers. Perhaps narrow generalization best supports developing citizens who might more easily accept the unjust status quo of the widening gap between rich and poor in America.


5. Firestone, “Alternative Arguments.”


8. Ibid., 74, 22.