Researcher or Fellow Citizen? Looking for a Role Model in the Humanities

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Abstract: The idea of a team of researchers working at advancing knowledge represents a strong role model for STEM education. The article suggests that an alternative role model – a community of fellow citizens engaged in solving problems of how to better live together – can be an equally compelling model for the Humanities. Mode 1 knowledge building rooted in learning within the disciplines is compared with a mode 2 focusing on context-specific knowledge, transdisciplinarity and collaborative rationality as essential ingredients of a new role model for the humanities: The fellow citizen. Two cases – a collaborative investigation carried out by an ethics committee and a literature course in a conflict-ridden area – are presented as examples of the fellow citizen in action, which build on cultural humility as a key value and dialogic literacy as an overarching learning goal.

Introduction and overview of this paper

In the Knowledge Building approach, the work of students is primarily valued in terms of contribution to the community, which in turn is modelled on the ethos, goals and processes of knowledge-creating organizations as scientific research groups and industrial design teams (Scardamalia & Bereiter, 2014). The researcher working in teams thus represent a strong role model in an approach that is becoming a 'signature pedagogy' (Shulman, 2005) for the STEM disciplines. Nearly all educational interventions quoted by Scardamalia & Bereiter (2014) or presented at ISLS and CSCL conferences focus on STEM. This role model is instrumental in defining the criteria for assessing learning outcomes, as the extent to which learners adopt the mindset of a researcher, as reflected in their use of terminology (Zhang et al., 2011). This theory-developing article acknowledges the importance of role models in designing educational interventions and builds on the idea of contributing to the community as overarching goal for collaborative learning, but proposes that a group of fellow citizens engaged in processes of 'collaborative rationality' to solve problems of how to better live together (Innes & Booher, 2010) represent an additional role model that is productive for conceptualizing learning in the humanities.

Differences of in pedagogy between STEM and Humanities can to a certain extent be ascribed to differences in ontology, epistemology and methodology. Another important difference is the scope and goals of research in STEM versus Humanities between what has been called the nomothetic and the ideographic. The former seeking to constitute theories in the mathematical formulation of natural laws of general necessity, while the latter seeks to create specific forms out of the mass of historical material available to convey in vivid images the variety of human life in their unique forms (Windelband 1894). The differences in disciplinary perspectives leads to explicit or implicit pedagogies to educate the senses of the students to conform to the goals of research. Kuhn (1962) mentions how a specific 'gestalt' of the individual scientist is the outcome of education within a paradigm or disciplinary matrix consisting of methods and theories to which the student gets acquainted in the course of solving standard problems and doing research under the supervision of a researcher working within the paradigm. Both Windelband and Kuhn focuses on what can be called 'basic research' understood as "experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view." (OECD, 2002, p. 77). They are both aware that science–being a human endeavor–always stands in a specific relation to society which supports it. Science needs to be justified and this justification cannot be explicated from knowledge alone but only from the utility of that knowledge broadly conceived in relation to society. Bridging the prevalent but simplistic notion of a divide between the intrinsic motivation of knowledge production for purely scientific reasons and the extrinsic utilitarian production of knowledge for commercial gain or practical application Strokes (1997) proposed a mode of research resulting in 'use-inspired basic research' combining the two motives of knowledge production. He further suggested that this has become a significant mode of scientific research resulting from the interest of those funding research and in the overall justification of science to the general public. In describing the emergence of this new mode of research it can be helpful to distinguish between education for what Gibbons et al. (1994) termed knowledge production in 'mode 1' and 'mode 2'. Following the development in mass higher education and the diffusion and proliferation of different sites of scientific knowledge production it seems appropriate and justified that the students of humanities should gain

insights and competences within mode 2. In order to frame this within the humanities a new role model is needed. The fact that only a small fraction of candidates will become PhDs, an even smaller part will venture to become postdocs and fewer still will get tenure to become a full-time professional academic highlights the need to supplement the traditional role model of the researcher. In this article, we propose the notion of the fellow citizen as a new role model in the humanities. To this goal, we first discuss the elements of knowledge production associated with the role model, that aims at better defining the contribution of the humanities for advancing knowledge within a community. Two cases are presented that foster community growth, are rooted in the conceptual tools and practices of the humanities and that exemplify the role model. Finally, we propose cultural humility and dialogic literacy as respectively the key value and the key competence.

Building knowledge in mode 2

In distinguishing between the two modes Gibbons et. al. (1994) contrast mode 2 with the more traditional mode 1 that focuses on basic research and has the knowledge building paradigm as signature pedagogy and the researcher as role model. The differences can be highlighted by focusing on five distinctive but connected aspects: 1) contexts; 2) range of perspectives; 3) diversity in sites of production; 4) reflexivity and 5) challenges regarding quality control and peers. These aspects are further elaborated in the following.

1) Generated within contexts of application and evaluated in contexts of implication mode 2 differ markedly in relation to mode 1 where the practical implications of the results are of little importance. The context of application is the total environment in which the problem arises and where appropriate methodologies are developed and outcomes disseminated. This can be contrasted with the idea of the partial and controlled environment of the scientific experiment or the theoretical work of hypothesis generation in mode 1 within the natural sciences. External validity in mode 2 depends on the use-value of the knowledge.

2) Mode 1 often takes as its point of departure problems arising within the discipline and follow a process of puzzle-solving that Kuhn (1962) termed 'normal science'. Since the context of application in mode 2 is the total environment theories need not be derived from existing disciplines in order to be applied. Transdisciplinarity involves the creative mobilization of theoretical perspectives and practical methodologies to solve problems and to offer new perspectives. The characteristics of transdisciplinarity is "knowledge which emerges from a particular context of application with its own distinct theoretical structures, research methods and modes of practice but which may not be locatable on the prevailing disciplinary map" (Gibbons et al., 1994, p. 168). Solutions in mode 2 are transdisciplinary in the sense that they can't be derived from any single discipline. In the course of problem solving and a degree of formalization transdisciplinarity may even evolve into a research program that is different from the disciplinary nomenclature of the traditional universities, nanotechnology and environmental studies being prominent examples of this (Weingart, 2010).

3) Diversity in sites of knowledge production is another characteristic of mode 2. The breakdown of boundaries and hierarchies of knowledge is a result of the proximity and embeddedness of knowledge production to practice. New technologies and new ways of organizing knowledge allows for a high degree of openness to the public sphere. Examples are creative commons licenses and open-access journals, even cannibalistic appropriations (Bar et al., 2016) such as torrents and illegal sharing of restricted journals allow for others to join the research game. The diffusion and distribution of new sites also includes organizations ranging from private consulting firms, think tanks, NGOs and CROs (Contract Research Organizations).

4) Mode 2 is highly reflexive replacing the 'objective' interrogation of subject-object relation with a more inclusive dialogical relation. Research becomes a dialogic process between research actors and research subjects whereby the area of accountability is widened to include the anticipated–predicted and unintended–consequences of research. Knowledge needs to be 'socially robust' because its validity is no longer determined solely, or even predominantly by scientific communities, but by a wider community of producers, disseminators, traders, practitioners, politicians and users (Nowotny et al., 2003). Feedback loops, iterations and moderations are an integral part of mode 2 processes.

5) Mode 2 challenges traditional systems of quality control with peer-review, because it does not possess a stable taxonomy of disciplines from which to find scientific peers. Over time such a taxonomy can be established and even come to form a new discipline but this is the exception to the rule of mode 2. But what the knowledge might lose in scientific rigor it may gain in the applicability in practice, because quality control lies with the users which constitute the peers.

While the traditional researcher working within a discipline is an important role model, we argue that it needs to be supplemented with the role model of the fellow citizen working in collaboration with practitioners, stakeholders, policymakers and citizens outside university settings. It is important that the new role model is underpinned by pedagogical strategies and equipped with contexts of application. Furthermore, the role model

presupposes a mode of thinking termed Collaborative rationality. Collaborative rationality is not exclusive to mode 2: It is a *possibility* in mode 1, but a *necessity* in mode 2.

Collaborative rationality

Collaborative rationality (henceforth CR) (Innes & Booher, 2010) stands out as an epistemology and methodology for knowledge production in mode 2 which is especially designed to tackle 'wicked problems' about how to better live together. CR aims at producing robust, legitimized knowledge and identify three conditions for a successful process: 1) all relevant actors must be included in the process, thereby securing the necessary diversity without which collaboration would yield solutions that are poorly informed, infeasible or unjust; 2) the actors must need each other to achieve their goals, because without interdependence, they would have no reasons for collaboration; and 3) actors must engage in authentic dialogue. CR represents an emerging paradigm for developing innovative solutions to societal challenges and in doing so making communities more resilient and adaptive to future change. CR is important for a community of researchers working in mode 1, as suggested by the centrality of open-ended yet goal-directed dialogue in the KB process (Scardamalia & Bereiter, 2014), but CR nearly constitute a prerequisite for mode 2. CR is essential to the role model of the fellow citizen. Moreover, the idea of a community of diverse and interdependent fellow citizens in dialogue may better capture the learning context and the competences required for solving problems and developing new knowledge.

Community and knowledge building: two cases

In the two following cases participants – including teachers and facilitators – worked together at the edge of their understanding, while at the same time working towards strengthening their community's cohesion and resilience. To us they represent strong cases of the fellow citizen in action and may serve as ideal type exemplars of a practice to support both community and knowledge building in mode 2.

The Danish Council of Ethics and coercion in psychiatric care

In 2011 the Danish Council of Ethics was asked by the parliament to develop guidelines on the use of coercion in psychiatric care (Waldorff, Sørensen & Petersen, 2014). Instead of building on its traditional approach – that is, collecting expert advice and discussing it behind closed doors – the committee decided to establish a community of inquiry involving representatives of psychiatric patients and their families in addition to health professionals, and to gradually open up the discussion to public scrutiny and debate. With the help of a consulting firm hired to facilitate the process, experiences of patients and their family were staged by actors and transformed into short fictional films, portraying for example the meetings of former patients with their former caregivers. The prolonged process eventually led all the involved actors to agree in reframing coercion in psychiatric care from being primarily a matter of managing resources (which was the initial point of view of health professionals) to being primarily a matter of culture in the caregiving institutions. The committee's final report was widely appreciated and managed to initiate institutional change due to an enhanced legitimacy grounded in the committee's reputation for competence and in the openness and inclusivity of the inquiry process (ibid., pp. 82–86).

A literature classroom for Israeli and Arab teachers

Since 2005, at a college of education in northern Israel, Yahel Poyas has taught a course of literature as part of a teacher education master's program in multidisciplinary teaching of the humanities attracting students from various disciplines with both Israeli and Arab background. During the course, the students read and discuss literary works. In the process, they meet and interact the with one another in a context were members of the Arab and Israeli communities, while inhabiting the same territory, watch different television channels and read different books and newspapers (Poyas, 2016). Literature in Poyas' classes is the point of departure for creating an 'in-between space' and metaphoric domain between the external reality and the inner world of the reader. This space stands in a complex, dialogic relation with the external world and the literature allows for discussion on issues of power, identity, gender and human conduct in times of conflict and anxiety, while at the same time enables reflecting on the role of language and narrative in building imagined worlds (Poyas, 2016). Poyas' role in designing the course primarily consisted in choosing the texts, which in itself involved negotiating issues of language, aesthetics and politics. This contestation was witnessed most clearly through a conflict with one of her students, where both students and teacher had to explore the foundations of their own understanding both in their role as fellow citizens of a conflict-ridden country and as learners in the humanities. In the process, they enhanced their understanding of other fellow citizens, as well as of literature as a powerful tool for patterning our expectations, fears, desires and behaviors (Raskin, 1983).

Discussion and conclusions

Participants in the two examples never take the role of truth-owning experts, but act primarily as fellow citizens with a personal involvement with the issue and topic. Teachers or facilitators have a responsibility for organizing and managing the process, but should be in no position of power in discussing the problem at hand. This is painfully evident in the case of Yahel Poyas, who takes full responsibility for managing the classroom and the ensuing conflicts by reserving for herself a role of a fellow citizen with special obligations to self-restrain in order not to let her own views prevaricate others. The same type of cultural humility as a "commitment to self-evaluation and replacing inherent hierarchical power imbalances [...] with a collaborative learning model" (Nomikoudis & Starr, 2016) seems to be one key value in the successful work of the Danish Council of Ethics. Thus, dialogic literacy as a dual principle for advancing knowledge and for nurturing relationships (Caviglia et al., 2017) seems to be an essential part in establishing the new role model. It is therefore suggested as an overarching learning goal of educational intervention based on collaborative rationality. The pedagogy fostering the role model therefore needs to incorporate the conditions of CR: diversity, inclusion and interdependence of actors with the goal of dialogic literacy. Achieving this in the learning context of humanities means first and foremost to promote the epistemology of mode 2. The fellow citizens can be a role model for the Humanities as strong as the role model of the researcher is for STEM education. Indeed, integration of the additional role model of the fellow citizen may prove conducive to the development of a curricula focusing on knowledge building in mode 2.

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