

Self-Study of Teaching and Teacher Education Practices

Volume 20

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Important insights into varying aspects of teacher education emerge when attention is focused on the work of teacher educators. Teacher educators' observations, explorations and inquiries are important as they offer access to the intricacies of teaching and learning about teaching so important in shaping the nature of teacher education itself. For (at least) this reason, research of the kind found in self-study of teacher education practices (S-STEP) is increasingly pursued and valued by teacher educators. In so doing, self-study also encourages others to look more closely into their own practices.

For many, self-study has become an empowering way of examining and learning about practice while simultaneously developing opportunities for exploring scholarship in, and through, teaching. Self-Study allows educators to maintain a focus on their teaching and on their students' learning; both high priorities that constantly interact with one another. This interplay between practice and scholarship can then be quite appealing to educators as their work becomes more holistic as opposed to being sectioned off into separate and distinct compartments (e.g., teaching, research, program evaluation, development, etc.). However, just because self-study may be appealing, it is not to suggest that the nature of self-study work should simply be accepted without question and critique. There is a constant need to examine what is being done, how and why, in order to further our understanding of the field and to foster development in critical and useful ways so that the learning through self-study might be informative and accessible to others.

This series has been organized in order so that the insights from self-study research and practice might offer a more comprehensive articulation of the distinguishing aspects of such work to the education community at large and builds on the *International Handbook of Self Study in Teaching and Teacher Education* (Loughran, Hamilton, LaBoskey & Russell, 2004).

Self-study may be viewed as a natural consequence of the re-emergence of reflection and reflective practice that gripped the education community in the last two decades of the 20th century (see for example Calderhead & Gates, 1993; Clift et al., 1990; Grimmitt & Erickson, 1988; LaBoskey, 1994; Schön, 1983, 1987). However, self-study aims to, and must, go further than reflection alone. Self-study generates questions about the very nature of teaching about teaching in teacher education (Korthagen & Kessels, 1999) and is important in conceptualizing scholarship in teaching as it generates and makes public the knowledge of teaching and learning about teaching so that it might be informative to the education community in general.

This series offers a range of committed teacher educators who, through their books, offer a diverse range of approaches to, and outcomes from, self-study of teacher teacher education practices. Book proposals for this series may be submitted to the Publishing Editor: Nick Melchior E-mail: Nick.Melchior@springer.com

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Robyn Brandenburg • Sharon McDonough
Editors

Ethics, Self-Study Research Methodology and Teacher Education

 Springer

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Foreword

Brandenburg and McDonough have a long and strong history in breaking new ground in self-study of teaching and teacher education practices. They think deeply about their research and strive to continually develop and refine their scholarship. This book illustrates yet again how well they work together as an editorial team and how their desire for growth and understanding in self-study pushes others to consider issues, ideas and situations in new ways. Their thoughtfulness and rigour encourage the same in others and, as the chapters in this book illustrate, through a serious consideration of ethics in self-study, they have sparked a new awakening in teaching and teacher education that challenges some taken-for-granted assumptions about practice.

It would be naïve to think that ethics does not ‘touch’ self-study in any significant way. Yet, sadly, many who observe the work from a distance may appear to carry that view – as too might some more closely involved in the work itself. Perhaps, that is because the very language of ‘self’-study too easily conjures up an image of individuals contemplating their own work – individuals who are imagined to do their research in ways that are somewhat removed from the social interactions that shape practice – because their work is too close to themselves. But that is a perception that needs to be challenged, which is exactly what Brandenburg and McDonough have done in assembling the list of authors they have invited to share their thoughts, actions and learnings about ethics in self-study.

Reading these chapters has helped me to think again about some aspects of self-study that I have not paid enough attention to in the past. For example, a self-study is often attractive to early career researchers who have a strong desire to develop and refine their ideas about, and practices in, teacher education. Their deep concern for quality teaching and learning in teacher education – often characterised by a desire to ‘practice what they preach’ – can lead to situations whereby that which they learn, the manner in which they learn it and how their data is collected and portrayed lead to a display of vulnerability that is not so obvious in other research methodologies (Kelchtermans, 2007). As a consequence, in order to illustrate that which they have learnt, their data might highlight what, to some, can appear to be harsh evaluations of their practice, or conversely soporific accounts of faultless

teaching, or unquestioning praise by students entwined in a power relationship that can only result in ‘telling teachers what they want to hear’. Again, such interpretations are askew. But regardless of perceptions of the work, there is a deeper matter for consideration, an ethical concern for the individual researcher that should not be overlooked or ignored.

One obvious issue that emerges along this line of thought is that early career researchers’ work in self-study may well be judged by more senior others (who have influence over the nature of career progression), and as such, their perceptions of the nature of an ECR’s research matter (Guilfoyle, Hamilton, Pinnegar, & Placier, 1995). A difficulty that may arise is that in seeking to be rigorous in their research and to present honest and trustworthy portrayals of their practice, early career researchers may unwittingly ‘invite’ undue attention, criticism or critique, and/or not be in a position to adequately ‘speak back’ to more senior colleagues about their work. Such a situation is curious as it invites different types of questions about research and practice: ‘Is it ethically appropriate for early career researchers to place themselves in a position of judgement of this kind?’ ‘What responsibility lies with the self-study community to purposefully support and mentor others and help them learn how to respond to questions, issues and concerns in an appropriate manner?’ Again, doing so matters, especially in relation to developing scholarship, articulating the significance of research and establishing a career.

It seems fair to suggest then that in self-study, there is an ethical imperative to ensure that each new generation of early career researchers is not forced to ‘reinvent the wheel’ or unwittingly ‘relive the mistakes’ of those that went before. It may well be that those who choose to embrace a self-study methodology may advance their scholarship through a focus on ethics, and in so doing make more apparent through their portrayals, the significance of their learning and teaching about teaching and, thus, the development of their pedagogy of teacher education (Korthagen, 2016; Loughran, 2006; Northfield & Gunstone, 1997).

Looking beyond individual self-studies, it is equally prescient to consider the ethical implications in collaborative self-study research. As even a cursory glimpse of the literature illustrates, self-study has a strong tradition associated with the involvement of a critical friend (Loughran & Northfield, 1998; Northfield, 1996; Schuck & Russell, 2005; Schuck & Segal, 2002). In many such studies, data, interpretations, portrayals and accounts are ‘checked’ by a highly trusted ‘other’. That trusted other carries serious expectations around questioning and critiquing in meaningful ways, to seek disconfirming data and to illustrate the importance of how to frame and reframe (Schön, 1983) episodes in order to see situations and experiences ‘through fresh eyes’.

One of the major points of collaboration is to foster ‘honest conversations’ about one’s own practice in order to develop new meaning. The value of a critical friend is inexorably tied to the nature of the relationship underpinning that ‘friendship’. That which is critiqued, the manner in which it is done, the situations and experiences considered and the ways in which such interactions are conducted can all be influenced by understandings of the ethical considerations inherent in the situation – not only at that time but also for other times and in other places.

The responsibility inherent in critical friendship should not be taken lightly. It is crucial that the personal and professional are able to be distinguished and acted upon appropriately. It matters that examination of data and events result in learning that is able to be documented and presented authentically. Thoughtful consideration of an ethical approach to interrogation in self-study inevitably influences how the resultant portrayal resonates with the reader. Each of these factors is underpinned by processes that have an ‘ethical edge’, and, as the authors in this book make clear time and time again, that ethical edge intersects with many of the foundation principles of self-study (LaBoskey, 2006; LaBoskey, 2004) despite not always being so explicitly acknowledged in the past. In conceptualising this book, Brandenburg and McDonough have chosen to make that explicit now.

There are many other factors in self-study where a serious consideration of ethics is important. This foreword is but an invitation to the much more fulsome arguments made throughout the book and presented for your consideration. I have learnt much from this book and am grateful to the editors and authors for all that they have done in pushing the boundaries and helping to open our eyes to something that deserves much more attention – ethics in self-study.

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References

- Guilfoyle, K., Hamilton, M. L., Pinnegar, S., & Placier, M. (1995). Becoming teachers of teachers: The paths of four beginners. In T. Russell & F. A. J. Korthagen (Eds.), *Teachers who teach teachers: Reflections on teacher education* (pp. 35–55). London: Falmer Press.
- Kelchtermans, G. (2007). Professional commitment beyond contract: Teacher’s selfunderstanding, vulnerability and reflection. In J. Butcher & L. McDonald (Eds.), *Making a difference: Challenges for teachers, teaching, and teacher education* (pp. 35–54). Dordrecht, The Netherlands: Sense Publishers.
- Korthagen, F. A. J. (2016). Pedagogy of teacher education. In J. Loughran & M. Hamilton (Eds.), *The international handbook of teacher education* (pp. 310–346). Dordrecht, the Netherlands: Springer Press.
- LaBoskey, V. (2006). The fragile strengths of self-study: Making bold claims and clear connections. In P. Aubusson & S. Schuck (Eds.), *Teacher learning and development: The mirror maze* (pp. 251–262). Dordrecht, The Netherlands: Springer.
- LaBoskey, V. K. (2004). The methodology of self-study and its theoretical underpinnings. In J. J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practices* (Vol. 2, pp. 817–869). Dordrecht, the Netherlands: Kluwer.
- Loughran, J., & Northfield, J. R. (1998). A framework for the development of self-study practice. In M. L. Hamilton (Ed.), *Reconceptualizing teaching practice* (pp. 7–18). London: Falmer Press.

- Loughran, J. J. (2006). *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. London: Routledge.
- Northfield, J. R. (1996, April). *Quality and the self-study perspective on research*. Paper presented at the American Educational Research Association, New York (ED 397034).
- Northfield, J. R., & Gunstone, R. F. (1997). Teacher education as a process of developing teacher knowledge. In J. Loughran & T. Russell (Eds.), *Teaching about teaching: Purpose, passion and pedagogy in teacher education* (pp. 48–56). London: Falmer Press.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schuck, S., & Russell, T. (2005). Self-study, critical friendship, and the complexities of teacher education. *Studying Teacher Education*, 1(2), 107–121.
- Schuck, S., & Segal, G. (2002). Learning about our teaching from our graduates, learning about our learning with critical friends. In J. Loughran & T. Russell (Eds.), *Improving teacher education practices through self-study* (pp. 88–101). London: RoutledgeFalmer.

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