



Bricolage, Self-reflection, and Transformative Pedagogy among Student Teachers: A Case of Micro-teaching Practices for a Transformative Pedagogy

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ABSTRACT

When student teachers graduate to become fully trained teachers, it is required of them to have both theoretical and practical competency. Student teachers struggle to use micro-lessons as a tool to improve practice, instead, they perform micro-lessons for marks which defeats the entire purpose of conducting micro-teaching practices. This qualitative research paper adopted the Participatory Action Research (PAR) approach, underpinned by bricolage theory, which is a metaphor for research that "uses what is available to accomplish new aims and creates something out of nothing," conveniently sampled sixteen student teachers from the University of Technology in South Africa. The results demonstrated that, on a very small scale, PGCE students may use critical self-reflection as a skill to improve and address teaching concerns. Additionally, the study found that students struggle to critically evaluate themselves using a variety of media, including reflective journals and video recordings. In light of the findings, the study recommended that in a natural setting, student teachers can act as change agents. In South Africa, where most local schools are under-resourced, this paper contributes to the ongoing efforts to improve teaching as a practice using what is already available in schools.

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INTRODUCTION

The pre-lesson teaching phase which student teachers attend, is primarily focused on theory to help student teachers with various aspects of teaching. The curriculum's real teaching section focuses on developing abilities in areas like lesson planning, questioning strategies, managing classroom activities, and the use of instructional technology. In this paper an exposition of bricolage as a theoretical lens is cast over the student teachers in their B Ed third-year level and in the PGCE programme. The first and second micro-teaching sessions are supposed to be conducted by the students' teachers, among others. In return, student teachers can choose to get a video clip, written

criticism, or in-person evaluation. These three techniques are employed by lecturers to assist student teachers in critically analysing their own growth and approaches. Student teachers should be aware of the innate historical limitations in their classrooms, according to critical self-reflection, and are thus freed from the limits of their settings by critically reflecting, allowing them to negotiate and create spaces instead of replicating those places that impede.

According to Dewey as cited in Beauchamp, reflection is an intentional, logical action that a person takes, yet most teachers do not engage in it. He argued that teaching as a profession will take time to develop because of 'ignorant' personnel as he puts it.¹ The rationality of reflection implies a conscious and voluntary endeavour on the part of a student-teacher to form a set of ideas about their teaching practice.² In order to comprehend and advance professional practice, Stella, Kinsella, Friesen, and Hodges concentrate on reflective journals kept by student teachers while they practice teaching, and further conclude that even schools lack the resources that encourage teachers to reflect.³ Gostelow and Gishen emphasise that Schön's rational reflection was based on the idea that professional practice should be improved, with the understanding that this process would result in a level of knowledge in that sector.⁴

According to O'Flaherty and Liddy, Dewey and Schön's theories show that their thinking is grounded in scientific objectivity, giving the student teacher authority over their immediate surroundings.⁵ Saric and Steh, on the other hand, accept that human emotions are subjective and that this is essential to their reflective learning.⁶ With the argument made by both Saric and Steh, Attard concluded that student teachers must be given the freedom to communicate their feelings in order to face the complexity of their teaching methods.⁷ Habermas advances the cause of reflective learning by assuming a critical stance, which serves as the cornerstone of transformative learning.⁸

While the above studies have made a contribution to the study of self-reflection as a tool for improvement, none of the studies has focused on micro-teaching practice, thus this study is unique in the sense that it employs the theory of bricolage which will include the schools that do not have the desired resource for self-reflection. In light of this, this study investigates how students at the University of Technology in South Africa apply critical self-reflection after being exposed to microlessons. The findings are presented in subsequent sections.

LITERATURE REVIEW

Bricolage as the Theoretical Foundation of Transformational Teaching

The authors discovered that the most helpful theoretical framework and method to couch this study was bricolage, which allowed them to generate the learning settings that were previously discussed. According to Jogie and Freathy et.al bricolage is a metaphor for research that "uses what is available to accomplish new aims and creates something out of nothing."⁹ According to Gautam and Perselli,

¹ Catherine Beauchamp, "Reflection in Teacher Education: Issues Emerging from a Review of Current Literature," *Reflective Practice* 16, no. 1 (2015): 123–41.

² Robbin Miraglia and Marilyn E. Asselin, "Reflection as an Educational Strategy in Nursing Professional Development," *Journal for Nurses in Professional Development* 31, no. 2 (2015): 62–72, <https://doi.org/10.1097/NND.000000000000151>.

³ Stella L Ng et al., "Reclaiming a Theoretical Orientation to Reflection in Medical Education Research: A Critical Narrative Review," *Medical Education* 49, no. 5 (May 2015): 461–75, <https://doi.org/10.1111/medu.12680>.

⁴ Naomi Gostelow and Faye Gishen, "Enabling Honest Reflection: A Review," *The Clinical Teacher* 14, no. 6 (2017): 390–96.

⁵ J. O'Flaherty and M. Liddy, "The Impact of Development Education and Education for Sustainable Development Interventions: A Synthesis of the Research," *Environmental Education Research* 24, no. 7 (July 3, 2018): 1031–49, <https://doi.org/10.1080/13504622.2017.1392484>.

⁶ Marjeta Saric and Barbara Steh, "Critical Reflection in the Professional Development of Teachers: Challenges and Possibilities," *CEPS Journal* 7, no. 3 (2017): 67–85.

⁷ Karl Attard, "Personally Driven Professional Development: Reflective Self-Study as a Way for Teachers to Take Control of Their Own Professional Development," *Teacher Development* 21, no. 1 (January 18, 2017): 40–56, <https://doi.org/10.1080/13664530.2016.1218363>.

⁸ Raziye Sancar, Deniz Atal, and Deniz Deryakulu, "A New Framework for Teachers' Professional Development," *Teaching and Teacher Education* 101 (May 2021): 103305, <https://doi.org/10.1016/j.tate.2021.103305>.

⁹ Melissa Reshma Jogie, "Critical Race Theory and Higher Education Research: In the Shadow of Bricolage," *Theory and Method in Higher Education Research* 7 (November 12, 2021): 1–19, <https://doi.org/10.1108/S2056-37522021000007002>; Rob Freathy et al.,

bricolage is a research framework that makes use of the materials present in the contexts to generate and reconstruct new meanings.¹⁰ For instance, local participants develop the study challenges, subjects, purposes, and objectives that bricolage researchers use because it is believed that those who face difficulties are also those who have answers.

Bricolage is relevant to this study because serves as a means for student teachers to recognise their own power and local solutions to existing problems. This puts the onus of coming up with answers on them because no outsider will possess greater knowledge and expertise than people who are a part of the affected community. Bricolage research does not look for new instruments, nor does it follow a straightforward, step-by-step approach to conducting studies.¹¹ Depending on what is available in the situation, it is emergent and contingent. Additionally, the term "bricolage" in French, which refers to knowledge and production, originated as a metaphor employed by Levi-Strauss (1966) as cited by Hatton, which Hatton referenced in his structuralist attempt to explain how early humans became aware of and comprehended their surroundings.¹²

Hatton maintained that these early humans lacked access to scientific instruments that would have allowed them to learn, but instead, they pieced together their own anecdotal knowledge with anecdotes from their own lives to create a mode of knowing that allowed them to comprehend the world in which they lived.¹³ Although some may have viewed what they learned through bricolage and sustainable teaching and learning environments as myths, stories, or superstitions, in the end, this way of knowing allowed them to establish order in their universe.¹⁴ Therefore, bricolage is the process of coming up with novel and inventive solutions to challenges in real life by utilising what is available.¹⁵ To provide an intricate text of problem-solving strategies, this research recognises and deals with inconsistencies, complexity, and incongruences rather than following a linear path.¹⁶ It makes use of various literary forms, voices, and resources.¹⁷ By shattering the dogmatism of a single approach, it blurs clean disciplinary lines.¹⁸

"Pedagogical Bricoleurs and Bricolage Researchers: The Case of Religious Education," *British Journal of Educational Studies* 65, no. 4 (October 2, 2017): 425–43, <https://doi.org/10.1080/00071005.2017.1343454>.

¹⁰ Chetanath Gautam, "Scholar–Practitioner Dynamics: A Transformative and Dynamic Model of Educational Leadership," *Scholar-Practitioner Quarterly* 10, no. 3–4 (2016): 150–73; V. Perselli, "Symposium: The Potentially Transformative Power of Theory When Put to Work in Professional Practice Contexts: Observations towards a 'Pedagogy of Change': Overview," BERA Annual Conference. London, UK: Unpublished., 2014, <http://beraconference.co.uk>.

¹¹ Freathy et al., "Pedagogical Bricoleurs and Bricolage Researchers: The Case of Religious Education"; Anna Schneider-Kamp, "Health Capital: Toward a Conceptual Framework for Understanding the Construction of Individual Health," *Social Theory & Health* 19, no. 3 (September 23, 2021): 205–19, <https://doi.org/10.1057/s41285-020-00145-x>.

¹² Elizabeth J Hatton, "Teachers' Work as Bricolage: Implications for Teacher Education," *British Journal of Sociology of Education* 9, no. 3 (1988): 337–57.

¹³ Hatton, "Teachers' Work as Bricolage: Implications for Teacher Education."

¹⁴ Sechaba Mahlomaholo, "On Bricolage and the Creation of Sustainable Postgraduate Learning Environments," *TD: The Journal for Transdisciplinary Research in Southern Africa* 9, no. 3 (2013): 379–92.

¹⁵ A Poornima and G Rajini, "Bricolage as an Intervention to Resource Constraints in Social Entrepreneurship-A Systematic Literature Review," *Turkish Journal of Computer and Mathematics Education* 12, no. 7 (2021): 698–709; Dean A. Shepherd and Roy Suddaby, "Theory Building," *Journal of Management* 43, no. 1 (January 10, 2017): 59–86, <https://doi.org/10.1177/0149206316647102>; Gautam, "Scholar–Practitioner Dynamics: A Transformative and Dynamic Model of Educational Leadership"; Perselli, "Symposium: The Potentially Transformative Power of Theory When Put to Work in Professional Practice Contexts: Observations towards a 'Pedagogy of Change': Overview"; Bethany Blankenship, "Bricolage and Student Learning. A Practice Report," *Student Success* 11, no. 2 (2020): 122–26.

¹⁶ Julie Byrd Clark, "Heterogeneity and a *Sociolinguistics of Multilingualism* : Reconfiguring French Language Pedagogy," *Language and Linguistics Compass* 6, no. 3 (March 2, 2012): 143–61, <https://doi.org/10.1002/inc3.328>; Jeff Stickney and Adrain Skilbeck, "Problematising 'Transformative' Environmental Education in a Climate Crisis," *Journal of Philosophy of Education* 54, no. 4 (August 4, 2020): 791–806, <https://doi.org/10.1111/1467-9752.12486>; Ashraf Alam, "Mapping a Sustainable Future Through Conceptualization of Transformative Learning Framework, Education for Sustainable Development, Critical Reflection, and Responsible Citizenship: An Exploration of Pedagogies for Twenty-First Century Learning," *ECS Transactions* 107, no. 1 (April 24, 2022): 9827–40, <https://doi.org/10.1149/10701.9827ecst>.

¹⁷ Gautam, "Scholar–Practitioner Dynamics: A Transformative and Dynamic Model of Educational Leadership"; Perselli, "Symposium: The Potentially Transformative Power of Theory When Put to Work in Professional Practice Contexts: Observations towards a 'Pedagogy of Change': Overview."

¹⁸ Sancar, Atal, and Deryakulu, "A New Framework for Teachers' Professional Development."

METHODOLOGY

Participatory Action Research

The study's utilisation of participatory action research (PAR) as a research methodology was informed by the transformative paradigm. For this study to create conditions that support empowerment, a real-world intervention in the form of PAR was required. By fostering conditions that promote empowerment and engagement, the PAR research strategy seeks to improve social justice.¹⁹ PAR bridges the gap between power hierarchies and allows researchers to critically reflect on themselves, ensuring that all parties involved in the partnership have a voice in decision-making.²⁰

The authors engaged in unstructured conversations with students to assist them in understanding the importance of self-reflection through microlessons and how it might improve their performance as future teachers. This made it easier for them to implement the PAR's idea. Various scholars have all reached the same conclusion in their individual studies: When stakeholders are involved, they frequently feel more equipped to assist with learning and are ready to take advantage of any opportunity to motivate the students.²¹ To further understand how students could improve, the authors also looked at the students' engagement patterns and microlesson scores.

Furthermore, PAR is pertinent to this study because it integrates elements of community-oriented research, popular education, and social change action to assist marginalised communities in their efforts to pinpoint the underlying reasons for the social disparity and, eventually, a remedy to deal with the problems that have been found. Using a convenient sampling technique, the authors conducted PAR and chose sixteen participants for the study. Eight student teachers in the B. Ed. programme and eight student teachers in the PGCE programme made up the study group at the University of Technology in the South African province of the Free State. By ensuring the participants' anonymity and giving them the option to leave the study willingly if they felt uncomfortable, the research adhered to ethical guidelines. Participants received assurances that the data they provided would be utilised for research aimed at reducing problems associated with non-developing teachers in South African classrooms. Respondents addressed the following two research-related inquiries: How can student teachers who reflect on themselves help themselves become better teachers? Is it possible for the theory of bricolage to maintain growth in educational settings? To evaluate the data, the following format—which was suggested by Laws, Harper and Rachael²² and utilised by Dube and Segalo²³—was utilised:

Step 1: Go over the collected data twice.

Step 2: Make an initial list of the subjects that were found.

Step 3: Go back over the information and determine whether the themes identified align with the investigation queries and participant responses.

Step 4: Connect the topics to citations, expert commentary, and annotations.

Step 5: Browse the categories to understand the themes. When analysing the data, keep the investigation queries in mind.

Step 6: Develop an instrument to aid in identifying trends in the information.

Step 7: Analyse the information and draw conclusions. In this step, the data are categorised based on the research questions or the ideas behind them, and the research outcomes are highlighted.

The authors ensured the validity of the study by using the member checking approach. The participants were provided with the back data so they could evaluate how well the themes and conclusions matched the research questions and their answers from the unstructured chats.

¹⁹ D. H. Tracey and L. M. Marrow, *Lenses on Reading: An Introduction to Theories and Models* (London: The Guilford Press, 2012).

²⁰ Tracey and Marrow, *Lenses on Reading: An Introduction to Theories and Models*.

²¹ Eduardo Salas, Denise L Reyes, and Susan H McDaniel, "The Science of Teamwork: Progress, Reflections, and the Road Ahead.," *American Psychologist* 73, no. 4 (2018): 593; James E. Driskell, Eduardo Salas, and Tripp Driskell, "Foundations of Teamwork and Collaboration.," *American Psychologist* 73, no. 4 (May 2018): 334–48, <https://doi.org/10.1037/amp0000241>.

²² S. Laws, C. Harper, and M. Rachael, *Research for Development* (London: SAGE, n.d.).

²³ Bekithemba Dube and Jacob Segalo, "Post-COVID Teaching and Learning of Religious Education in the Context of School Violence in South Africa," *E-Journal of Humanities, Arts and Social Sciences*, October 26, 2022, 6–18, <https://doi.org/10.38159/ehass.2022SP3112>.

PRESENTATION OF FINDINGS AND DISCUSSIONS

It is important for student teachers to acquire new methods for solving challenging problems in the classroom because they are supposed to be lifelong learners. This part addresses and examines the research on the advantages of using critical self-reflection for practice development and the suitability of bricolage as a transformative theoretical framework for identifying the need for teacher improvement.

a. Self-reflection as the need to develop practice

Journal of Reflection, a workbook, diary, portfolio, or blog are a few examples of reflective journals.²⁴ Therefore, a reflective diary is an assortment, curation, and arrangement of the experiences that a student teacher has had over a period of time, such as during school-based learning. Student instructors can evaluate their work and establish new objectives for how to advance their practice by putting their own ideas and experiences in writing. These are some of the responses from the participants regarding the importance and the need to self-reflect:

Participant 1: *Now that we are talking about it, I think it is important to self-reflect, because it is.. it is helping us students who are shy and panic easily in front of people... .. However, it is very difficult to do so because sometimes we prepare our audience on how to engage us, which is impossible to do in the real classroom...*

Participant 3: *Yeah, I do think it is important to self-reflect as an upcoming teacher, because like we always say, we teach different learners from different backgrounds, so it is very important to ensure that you always self-reflect in order to reach all of them... But because we do it to improve our marks, we don't normally self-reflect as much...*

Maintaining a reflective notebook gives students the chance to think back on their experiences, what happened, and—most importantly—how to advance their professional practice.²⁵ According to Bennet-Levy, reflective journaling is a method that students use for their professional growth. It involves rational problem-solving procedures that incorporate intuition and emotions.²⁶ By using reflective journals, instructors can evaluate their students' capacity for reflection and gain insight into how student teachers approach their work and work to get beyond obstacles they encounter in the classroom.

Through reflective journals, students can find their voices regarding the ontology of their work in an in-depth learning environment. They can go beyond what they learned from books and their lecturers by placing themselves inside the context of comprehending their practice and confronting the realities of teaching in the actual world.²⁷ Being heard is seen as a liberating force because it makes room for equality and empowerment with regard to the essence of teaching and learning as experienced by student teachers.²⁸ Additionally, the reflecting voice of a student teacher enables the creation of

²⁴ Anton-Rupert Laireiter and Ulrike Willutzki, "Self-reflection and Self-practice in Training of Cognitive Behaviour Therapy: An Overview," *Clinical Psychology & Psychotherapy* 10, no. 1 (January 13, 2003): 19–30, <https://doi.org/10.1002/cpp.348>; Corinne Gale and Thomas Schröder, "Experiences of Self-practice/Self-reflection in Cognitive Behavioural Therapy: A Meta-synthesis of Qualitative Studies," *Psychology and Psychotherapy: Theory, Research and Practice* 87, no. 4 (December 28, 2014): 373–92, <https://doi.org/10.1111/papt.12026>; Jane McGillivray et al., "Self-Practice and Self-Reflection in Training of Psychological Interventions and Therapist Skills Development: A Qualitative Meta-Synthesis Review," *Australian Psychologist* 50, no. 6 (December 1, 2015): 434–44, <https://doi.org/10.1111/ap.12158>.

²⁵ Jun Iwata, John Clayton, and Sarah Jane Saravani, "Learner Autonomy, Microcredentials and Self-Reflection: A Review of a Moodle-Based Medical English Review Course," *International Journal of Information and Communication Technology* 10, no. 1 (2017): 42, <https://doi.org/10.1504/IJICT.2017.081008>.

²⁶ James Bennett-Levy, "Why Therapists Should Walk the Talk: The Theoretical and Empirical Case for Personal Practice in Therapist Training and Professional Development," *Journal of Behavior Therapy and Experimental Psychiatry* 62 (2019): 133–45.

²⁷ James Bennett-Levy and Nicole K. Lee, "Self-Practice and Self-Reflection in Cognitive Behaviour Therapy Training: What Factors Influence Trainees' Engagement and Experience of Benefit?," *Behavioural and Cognitive Psychotherapy* 42, no. 1 (January 2, 2014): 48–64, <https://doi.org/10.1017/S1352465812000781>.

²⁸ K-s. Yip, "Self-Reflection in Reflective Practice: A Note of Caution," *British Journal of Social Work* 36, no. 5 (February 20, 2006): 777–88, <https://doi.org/10.1093/bjsw/bch323>.

contextual knowledge that is relevant to a particular location and time. Student teachers are thus given the opportunity to match what is happening in schools right now with their world of teaching.²⁹

Because the student teachers showed a lack of understanding to self-reflect in order to “harness the craft” as most of them were putting it, the researcher casually asked them how they self-reflect for the purpose of improving the practice. These were some of their responses:

Participant 6: *As my brother here is saying, we do micro-lessons for marks... We consider micro-lesson week as a very busy and hectic week, therefore immediately after we are done with them, we are just happy for the relief and wait for the next session.*

Participant 8: *We normally go out for photos after the micro-teaching and that is normally the moment, we discuss our presentations compared to the last ones.*

Participant 11: *My reflection is normally based on my marks for those micro-lessons.... If I have higher marks compared to the last session, I know I have done well and I'm in the right direction.*

From these extracts, the lack of knowledge and understanding of self-reflection could be noted, which shows what contributes to the non-improving practice or non-developing teachers at schools. The conversations between the two groups of prospective teachers further showed that because of time, PGCE teachers lack time to self-reflect even if they were afforded the resources to do so.

b. Bricolage towards sustainable teaching and learning environments

In order to improve learning in local schools, for example, parents, teachers, and students must work together realistically as researchers to create sustainable teaching and learning environments. Even though Elizabeth Hatton's analysis of teachers' work as bricolage is well-reasoned,³⁰ there are a few loose ends that we would want to pull apart and then reassemble. One of these relates to Hatton's focus on the scientist and the bricoleur as the only two categories in which to place the activities of modern educators. The third category that Levi-Strauss addresses in "The Science of the Concrete," is the artist, who is "both something of a scientist and of a 'bricoleur,'" and in some ways, instructors' work resembles this group as well. In other ways, it is all too similar to the post-industrialized society's deskilled manufacturing work.³¹ In comparison to art or science, bricolage could have a more conservative purpose. However, it appears incredibly inventive when contrasted with deskilled labour processes—as in Harper's in-depth analysis of a contemporary metal worker (1987, for instance).

Hatton's connection between the science of the abstract and the creative potential of pedagogic knowledge is another unresolved issue. The following are some of the themes that emerged on the question of whether it is possible or not for the theory of bricolage to maintain growth in educational settings:

Participant 14: *I had to skip several sessions of micro-teaching because the resources were not properly placed (projectors were not there in the rooms), so there was literally little we could do because projectors were our main resource for evaluation...*

Participant 7: *Despite lacking some resources, we sometimes continue with the sessions... We use posters and chalkboards to move on with sessions.*

Participant 5: *We have never skipped conducting the session because of lack of resources because, before the actual session, we run the preparatory sessions as students because we now know and understand each other... We actually prepare each other for better marks.*

²⁹ Anna Chaddock et al., “Understanding Individual Differences in Response to Self-Practice and Self-Reflection (SP/SR) during CBT Training,” *The Cognitive Behaviour Therapist* 7 (December 20, 2014): e14, <https://doi.org/10.1017/S1754470X14000142>.

³⁰ Mahlomaholo, “On Bricolage and the Creation of Sustainable Postgraduate Learning Environments.”

³¹ Hatton, “Teachers’ Work as Bricolage: Implications for Teacher Education.”

This is a compelling link, particularly for educational researchers, many of whom see their own work as a first step towards developing a corpus of pedagogic propositions that will allow them to infer more or better teaching practices. However, there are two distinctive aspects to this idea. First of all, it ignores types of knowledge other than the abstract that could be just as valuable or perhaps more valuable to educators in developing fresh approaches to teaching. Levi-Strauss compares the scientist and the engineer; similarly, the relatively conservative task of conducting lessons appropriate for a school or classroom can become the more transformative pedagogic task of supporting the intellectual and academic development of individuals and communities if one knows the community, perhaps through participation in community discourse. Understanding work resources like computers, books, or particular kids can help the teacher-turned-bricoleur conduct in-depth research that results in designs and products that resemble those of the engineer or artist.

Discussion Summary

The results demonstrated that PGCE students have a very poor capacity for critical self-reflection as a skill to improve and address teaching issues.³² Additionally, the study found that students struggle to critically evaluate themselves using a variety of media, including reflective journals and video recordings. The pioneers of student teachers' reflective journals, according to certain scholars are Boud, Dewey, Habermas, Schön, and Walker.³³ According to Beauchamp and Clark, critical reflection, which embodies emancipatory reflection, empowers student teachers to approach difficult situations in novel ways.³⁴

RECOMMENDATIONS

The research noted issues such as lack of self-reflection by students, lack of resources in the micro-teaching facilities, and the lack of knowledge to utilize the existing resources. To address these trajectories, the study noted the need for updated micro-teaching assessment tools and the need for student self-reflection as a tool to improve the practice. Thus, the study makes the following recommendations:

- Student teachers should be allowed the space to express their emotions which allows them to confront the perplexity of their teaching practice,
- Student teachers must determine the methods of assessing their micro-lessons for their development, and
- The micro-lessons groups must be randomly chosen every time to ensure the accurate reflection.

CONCLUSION

Despite the need to improve the teaching practice, most student teachers have not really felt the need for self-reflection. This can be caused by the workload during the micro-teaching week and the lack of materials in place for self-reflection. However, in a bricolage sense, teaching as a profession can be improved as it has been done in other countries and the current micro-teaching labs and universities provide opportunities to engage in self-reflection and provide positive growth and development in teaching as a profession.

³² K. Maree and J. Pietersen, "Sampling," in *First Steps in Research*, ed. K. Maree (Pretoria: Van Schaik Publishers, 2016), 198.

³³ Shirley R. Steinberg and Joe L. Kincheloe, "Employing the Bricolage as Critical Research in Science Education," in *Second International Handbook of Science Education* (Dordrecht: Springer Netherlands, 2012), 1485–1500, https://doi.org/10.1007/978-1-4020-9041-7_95; Hatton, "Teachers' Work as Bricolage: Implications for Teacher Education"; Jogie, "Critical Race Theory and Higher Education Research: In the Shadow of Bricolage"; Bennett-Levy, "Why Therapists Should Walk the Talk: The Theoretical and Empirical Case for Personal Practice in Therapist Training and Professional Development"; Chaddock et al., "Understanding Individual Differences in Response to Self-Practice and Self-Reflection (SP/SR) during CBT Training."

³⁴ Beauchamp, "Reflection in Teacher Education: Issues Emerging from a Review of Current Literature"; Clark, "Heterogeneity and a *Sociolinguistics of Multilingualism* : Reconfiguring French Language Pedagogy."

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