(Re)engaging Our Ethical Commitments and Becoming Activists in Our Own Backyards

Using Research to Expose, Disrupt and Transform Opp(Regre)ssive Science/STEM Teacher Education Practices

ALBERTO J. RODRIGUEZ

*Department of Curriculum & Instruction, Purdue University; e-mail: rodri193@purdue.edu

Responses

JASTE is a non-refereed, open-access journal. We encourage reader feedback on contributions to it. Please send your comments, suggestions, etc. about this paper to its author, Alberto Rodriguez. Thanks!

ABSTRACT

In this manuscript, I provide an example of what activism in your own backyard may look like in institutional contexts using Foucault’s notions of ethics. To this end, I report findings from a two-year study conducted in my own science methods courses with two cohorts of pre-service teachers. Through a critical autoethnographic lens, I recount a synthesis of struggles and successes that illustrate what happens when one’s ethical and professional commitments to work for social justice intersect (collide) with the urgent need to address opp(egre)ssive practices in our own programs. Suggestions for how to be an activist in our own backyards and how to (re)engage our ethical commitments through a praxis of self-care are also provided.

Road Map

The guiding questions the editors of this special issue included in their call for submissions were quite compelling, and for me, the following question was particularly captivating: “What might activism and political engagement in science/education entail?” Since I was already engaged in an activist project, I wanted to explore more closely a modified and more personal version of this question. That is, “What might activism and political engagement in science/education entail in your own backyard (at your own institution)?”

Thus, in this manuscript, I draw attention to the need to (re)engage our ethical commitments and turn our activist lens inward. We, especially teacher educators and researchers, should reflect on the following questions: In what ways does our research and activist work effect transformative change in our own teacher education programs? More specifically, in what ways are we using findings from our own studies to instigate transformative change in our colleagues’ practices through our programs and our institutional policies for the benefit of pre-service teachers (and their future students)?
In order to consider these questions, herein, I use findings from a two-year study I conducted in my own science methods courses with two cohorts of pre-service teachers to expose, disrupt and transform contradictory and normative practices within my institution’s elementary teacher education program. To this end, I first explain how I invoke Foucault’s (1997) notions of ethics to guide and nourish my reflections and the direction of this manuscript. This is followed by a description of critical autoethnography as the most appropriate tool for inquiry in this context (Marx, Pennington, and Chang, 2017). As a Latino, immigrant, teacher, and researcher, engaged in equity, diversity, and social justice work in various educational contexts for over two decades, I have observed that critical autoethnography provides a powerful tool for deconstructing the struggles and successes we encounter when addressing oppressive practices (that is, practices that are simultaneously oppressive and regressive, Rodriguez, 2010). I close, as I start, with Foucault’s conceptions of ethics and provide some suggestions for how to be an activist in our own backyards and how to (re)engage our ethical commitments through a praxis of self-care.

**Theoretical Framings**

Michel Foucault’s (1997) notions of ethics and their application to the field of education are intriguing. Other more capable scholars have connected Foucault’s ideas in more detail to education (Infinito, 2003; Olssen, 2006) and specifically to science education (Bazzul, 2014; 2018). Bazzul (2018), for example, argues that education is a field of inquiry particularly suitable for the study of ethics and ethical subjectivity (“how one comes to understand themselves as an ethical being,” p. 474) because of the wide range of spaces where subjects (in various positionalities) operate. Herein, however, I take a pragmatist turn and use Foucault’s constructs of ethics and freedom to explicate the need for this study.

For Foucault, freedom essentially gives the construct of ethics its purpose, and ethics provides clarity for the enactment of freedom. As Infinito (2003) elaborates, “Foucault treated freedom and ethics as overlapping realms of action rather than distinct spheres of human being” (p. 156). Furthermore, Foucault interpreted ethics as an act of self-care—neither as a selfish nor selfless traditional and binary notion, but as a much more complex system mediated by the games of truth and power relations that imbue human interactions. These two notions provide useful entry points for us to better understand the dominant discursive practices that sustain (or could aid in disrupting) entrenched power structures:

The word "game" can lead you astray: when I say "game," I mean a set of rules by which truth is produced. It is not a game in the sense of an amusement; it is a set of procedures that lead to a certain result, which, on the basis of its principles and rules of procedure, may be considered valid or invalid, winning or losing. (Foucault, 1997, p. 297)

Thus, in activist work, we must not only access and understand the existing rules and procedures of dominant discursive practices. We also need to know how to use them to engage in the power relations that could ultimately facilitate the change we seek. For Foucault (1997), these dynamics are neither negative nor positive—they are just features of our humanity:

This is precisely a failure to see that power relations are not something that is bad in itself, that we have to break free of. I do not think that a society can exist without power relations, if by that one means the strategies by which individuals try to direct and control the conduct of others. The problem, then, is not to try to dissolve them in the utopia of completely transparent communication but to acquire the rules of law, the management techniques, and also the morality, the ethos, the practice of the self, that will allow us to play these games of power with as little domination as possible. (p. 298)

Returning then to the construct of ethics, we can appreciate that for Foucault, an individual’s freedom involves navigating through games of truth and power relations that influence—but do not determine—the ethical self. Our freedom is indeed best manifested in the practice of self-care, and in practicing self-care, we labor to care for others as well. Infinito (2003) expands on this insight, adding that Foucault implied that “by
forming ourselves as ethical beings, we activate our capacities for creation and potentially bring about an ever-evolving person (ourselves), thereby a new and different world” (p. 162).

Now, in the exploration of my own ethical commitments as an often “othered,” scholar of color in science education, I am constantly navigating through challenging and shifting terrains. I am expected to contribute to the advancement of equity and social justice by virtue of who I am and my expertise, but only as long as those contributions are deemed palatable and consumable in “well-articulated” portions by those with (or perceived to be in) power. Enacting our ethical commitments involves taking risks, and I am aware that each one of us must determine when, where, and how we choose to take risks in our own contexts. However, we should constantly reflect on the extent to which our ethical selves are compromised when we choose “to look the other way” in the presence of unjust and oppressive practices, and by default relinquish our freedom.

Tools for Inquiry and Reflection

In this pragmatist exploration of my ethical commitments as an activist for social change, I chose critical autoethnography as a tool of inquiry (Marx, Pennington, and Chang, 2017). This methodological approach is particularly well suited for the reflexive (re)telling of narratives of engagement. In previous writings (Rodriguez & Morrison, 2019; Rodriguez, 2015b), I described narratives of engagement as a more representative, balanced, and critical analysis of the challenges and successes we encounter in our efforts to advance social justice. These efforts include the responsive (and responsible) role researchers can (and should) play in bringing about transformative change. The “critical” in critical autoethnography enables multiple entry points for the subject/researcher to (re)tell lived encounters with dominant discursive practices, and consider how existing webs of oppression are sustained, resisted, and can be potentially dismantled.

I also prefer to adopt critical ethnography as a tool for inquiry because it unapologetically expects (requires) that the teller reveals their intentionality; whereas, ethnographic and auto/biographical work does not. In a previous critique of auto/biographical research, I described intentionality “as the consciously driven ideological, political, pedagogical, and theoretical motives behind the desire to tell a chosen story of self” (Rodriguez, 2001, p. 14). At that time, the use of auto/biographies as a research method in the social sciences was gaining as much interest as autoethnographies are gaining today. Thus, it is important to be cognizant of the differences. Marx, Pennington, and Chang (2017) also add that “although autoethnography can naturally embrace the critiques of societal injustice and positionality of identities, not all autoethnographers have explicitly and intentionally identified their autoethnographies as ‘critical ethnography’.” Although all of these methodological tools are alluring, meaningful, and impactful in their own right, Ursula Kelly’s (1997) warning resonates with me as much today as it did then when she stated:

Unproblematic or romantic notions of the power of story and/or the educationally redemptive powers of autobiography—even when applauded by those whose agenda may appear more radical—must be approached cautiously, for notions are never innocent; they always participate in larger ideological constructs. (p. 49)

For the purpose of this study, which focuses on deconstructing how my ethical commitments as an activist, teacher, and subject/researcher play out within dominant discursive practices, the use of critical autoethnography is essential. As Holman Jones (2016) explains, critical ethnography involves “linking analysis and action as they unfold together in material and ethical praxis—by creating bridges between analytic, practical, and aesthetic modes of inquiry and representation” (p. 5).

How to (Re)Engage our Ethical Commitments and Become Activists in Our Own Backyards
In an effort to instigate others to become activists in their own backyards, I organized this narrative of engagement into four temporal phases as they unfolded: research opp(regre)ssive practices, expose, disrupt, and transform. I do not wish, however, to essentialize the complexity of this work, nor give the impression that some perceived formula or steps can easily manage the emotional, physical, and laborious work required to (re)engage one’s ethical commitments. These phases are fluid, and as is explained below, we might be required to move back and forth using perseverance as our only compass.

Research Opp(regre)ssive Practices

We all know that universities embody the most intransigent kind of institutions. While the pursuit of positive change may be slow, arduous, and even precarious, it is our ethical, moral, and professional responsibility as privileged intellectuals to do so if we are to significantly advance the diversity and equity goals our universities often claim to uphold. One first step toward combating universities/teacher education programs’ reluctance to change is to research the very opp(regre)ssive practices1 in which they are engaged. To this end, I conducted a hybrid study in my own science methods courses for elementary school teachers. While this project is ongoing, I gathered a significant body of evidence through pre- and post-surveys (N=30), focus group interviews (N=15), and field-based observations. This research produced a 56-page monograph that I am now using to bring palpable evidence to my arguments and uphold the legitimacy of my voice. The monograph, I also hope, would re-direct attention away from me as the sole Latino faculty member focused on social justice issues to the actual opp(regre)ssive and contradictory practices in our program.

The results from the first year of this study were presented at the inaugural meeting of Science Educators for Equity, Diversity and Social Justice (SEEDS) [Rodriguez, 2018], and other papers fully describing the research findings so far have been submitted for publication to other journals. For more context, I offer below a brief description of the study and significant findings.

The Transdisciplinary and Critical Cross-Cultural STEM Education (TC3-STEM) Project

I have been very fortunate to teach science methods courses for aspiring high school and elementary school teachers as a graduate student, and later as a faculty member, at various universities. This was my first time, however, teaching the elementary science methods course at my current institution. Two colleagues had recently retired, so this opened up the opportunity for me to conduct a research project and teach in a mid-western cultural context again.

Eager to embark on this new venture, I began the ongoing Transdisciplinary and Critical Cross-Cultural STEM Education (TC3-STEM) Project. This study involves teaching the elementary school science methods course using a transdisciplinary pedagogical approach. This requires teaching at least two of the core curriculum areas (i.e., mathematics, science, social studies, and language arts) with the integration of either engineering and/or technology. Since the project is informed by sTeC or sociotransformative constructivism (Rodriguez, 2011/1998), knowledge is conceptualized as socially constructed and mediated by sociocultural, institutional, and historical factors. This approach is also congruent with critical cross-cultural education (May & Sleteter, 2010); that is, we reject predominant and neoliberal notions of multiculturalism, which have focused excessively on discourses of “equality,” “cultural acceptance/tolerance,” “inclusion,” or “cultural recognition.” These superficial notions of multiculturalism have failed to yield systemic, long-lasting institutional and social change. The reasons for this failure are abundant and visible in the daily news, and we have been horrified by the increased incidences of hate-based violence across the country and around the world. Therefore, we prefer to use the term critical cross-cultural education because it shines light on the importance of teaching and learning about power dynamics across cultural groups and how power is at the

---

1 These are practices that are oppressive and regressive at the same time (Rodriguez, 2010)
core of effecting social change—social change that could be ushered in by a more scientifically literate and engaged citizenry (Rodriguez, 2011/1998).

To accomplish our goals, the TC3-STEM Project consists of a series of modules (lesson and activities) designed to engage and model for the participant pre-service teachers how to teach science using a transdisciplinary and critical cross-cultural approach. After each lesson, participants had multiple opportunities to metacognitively deconstruct the activities and discuss potential barriers/support they expected they would encounter when using these activities in their present and future teaching contexts. An important aspect of the TC3-STEM modules is that they were designed to bring attention to two of the most pressing world challenges: access to clean water (two modules) and food security (three modules). Given the current demands on teachers imposed by the Next Generation Science Standards (NGSS) [or the state-level equivalent], our modules were designed to integrate engineering and scientific practices. However, instead of viewing the NGSS as a manual for uncritically socializing school children into potential skilled labor for corporations (Rodriguez, 2015a), the TC3-STEM modules provide multiple opportunities for participants to explore how they can assist school children in enacting their own sense of agency and embracing the role all of us can (should) play in sustaining a healthy community/planet (Hodson, 2014). For example, for one of the access to clean water modules, students conducted water quality testing using commercially available water test kits, compared their results with local city water quality reports, and learned to interpret this data. Another activity in the same module consisted of carrying out water taste tests to determine if they could tell the difference between bottled, filtered, or tap water. Students were then guided through a discussion about the millions of plastic bottles that are discarded as waste, and how this growing source of pollution is impacting the planet. After constructing bar graphs to represent their results, students were expected to write full arguments to explain the data and develop a transformative plan (e.g. carry their own re-usable water bottle, use a water filter instead of bottled water, recycle, write a recycling plan with the whole family, etc.). Finally, in order to integrate engineering practices, students were challenged to construct a water filter using only natural and easily available materials. The specific engineering challenge prompted them to create a filter that can turn a cup of dark muddy water into completely colorless, transparent water, free of debris. For this activity, students first have to research how various cultures around the world have used natural materials to purify and preserve water. Pre-service teachers find this activity engaging, meaningful, and surprising, and they are often shocked to discover that their filters (made of naturally occurring materials) can actually produce transparent water.

In terms of the TC3-STEM research design, we involved two cohorts of science methods students. As mentioned earlier, we conducted pre- and post-surveys (with a total 30 participants), as well as focus group interviews with a total of 15 students. Similar to many teacher education programs in the US, 98% of the participating pre-service teachers were Anglo, middle-class females, with very limited experiences with cultural diversity. Field-based observations during the students’ practicum were also conducted. This practicum was a component of both the science and mathematics methods courses, and it consisted of 27 hours of field work at a local school (i.e., three hours a week for nine weeks).

The Wilcoxon Signed Rank Test for paired samples was used to analyze the Likert scales component of the surveys (Bridge & Sawilowsky, 1999; Klotz, 1963), and a constant comparison approach was used to analyze the participants’ short answers from the surveys and the focus group interviews (Strauss & Corbin, 1998). Broadly speaking, our research questions sought to investigate the impact of the TC3-STEM Project on pre-service teachers’ perceptions of their preparedness to teach science using a transdisciplinary and cross-cultural STEM approach. Findings exhibited statistically significant growth for both cohorts, and—in fact—most students commented that they wished they had been provided with more opportunities to learn about STEM integration across other curriculum areas throughout their teacher preparation. Again, detailed results of this study will be shared in other publications. For the purpose of this manuscript, however, I wish to highlight that while these positive results were cause for celebration, the barriers we encountered during the pre-service teachers’ field-based practicum—and the (lack of) response from our teacher education...
(Re)engaging Our Ethical Commitments and Becoming Activists in Our Own Backyards ... by Alberto J. Rodriguez ...

program—ignited in me the need to write this autoethnography.

During field observations, informal conversations during class, and focus group interviews, we found that most participants in the first cohort were not allowed to teach science during their practicum. In other words, pre-service teachers are expected to teach three science lessons during the last three visits of their nine-visit school practicum, in addition to other shorter science and mathematics methods-related assignments. Partner schools receive a letter from the mathematics and science methods professors at the beginning of term describing our assignments and expectations, and once again requesting the principal’s and supervising teachers’ support. However, our interviews revealed that the vast majority of students in the first cohort did not see their supervising teachers teach science and social studies, neither were they allowed to teach all three of the expected science lessons. In fact, most participants were allowed to teach only one science lesson. The participants were told that science and social studies were taught for shorter periods at other times of the academic year, and that all teachers needed to adhere to a strict schedule that favored mathematics and language literacy instruction in order to prepare students for mandated assessments. Unfortunately, this phenomenon is not new and not unique to my institution. That is, denying school children access to science and social studies instruction to make more room for mathematics and language arts’ “drill and practice” in response to mandated assessments is a widespread practice across the US (which began soon after President Bush’s 2001 No Child Left Behind Education Act). The National Science Teachers Association (NSTA) has even finally taken a stand against this pervasive practice and produced a statement calling for equal time and attention to science instruction (NSTA, 2018). What makes this issue even more contradictory in our case is that pre-service teachers in our program are expected to take more science content courses than commonly expected by other teacher education programs because our institution is a strong STEM university. Adding to this spiral of contradictions is the call for the NGSS to prepare teachers to effectively integrate science and engineering practices across all grades.

Given this context, for year two of the project, I modified the post-survey for the second cohort of science methods students in order to better assess the extent of the problem and to discern whether this was just an unusual circumstance. In addition, I more purposely provided students with strategies for advocating for themselves, ensuring that they be provided with multiple opportunities to see their supervising teachers teach science, and being able to teach science during their school practicum to meet course requirements. I also began to inquire whether other science methods instructors (including graduate students and lecturers) had encountered similar situations in this and/or other partner schools. The anecdotal evidence gathered through these inquiries was confirmed by the second cohort of participants’ responses.

In short, out of the 16 pre-service teachers participating in the second cohort of the study, 47% never saw their supervising teacher teach science even once. Five students saw their teachers teach science once or twice, and four of them saw their teachers teach science three or four times. This situation was worse for social studies. Almost 53% never saw their supervising teachers teach social studies even once, and only 5 out of 16 students saw their supervising teacher teach this subject twice. For those who saw their supervising teachers teach science, we asked how long they spent teaching a science lesson. Five students gave responses such as “the lessons were not very long, maybe 20-25 minutes.”

It was evident then that the progress I was making in my science methods course by focusing on transdisciplinary and critical-cross cultural STEM education was being truncated by the very field-based experience that was meant to provide our pre-service teachers with opportunities to enact what they were learning in actual school contexts. Given the well-documented challenges commonly associated with assisting pre-service teachers—who are members of the dominant culture—in deeply integrating issues of equity, diversity, and social justice into their science curriculum and pedagogy (Rodriguez, 2011/1998, 2015b; Rodriguez & Kitchen, 2005; Underwood, & Mensah, 2018), and given the continuing pressure from the NGSS and state standards to prepare teachers with the knowledge and skills to integrate engineering practices, as well as address the needs of all learners, the barriers our pre-service teachers were encountering in their school
placements were extremely disheartening. In the next section, I explain how I sought to use the findings from this study to broadly expose these barriers and bring about change.

Expose
For this phase, I compiled the findings from the first two years of the TC3-STEM Project into a 56-page monograph, and I sent a copy of this document to all the members of the Elementary Teacher Education Committee, as well as to all members of the college administration and field practice coordinators (a total of 36 individuals). Since our college was preparing for accreditation review, I took the opportunity to tie some of my recommendations to relevant accreditation standards as follows:

1. According to the Council for the Accreditation of Educator Preparation (CAEP, 2018):

   Standard 2: Clinical Experiences - Rationale: High-quality clinical experiences are early, ongoing and take place in a variety of school- and community-based settings. These experiences integrate applications of theory from pedagogical courses or modules in P-12 or community settings and are aligned with the school-based curriculum (e.g., Next Generation Science Standards, college- and career-ready standards, Common Core State Standards). They offer multiple opportunities for candidates to develop, practice, demonstrate, and reflect upon clinical and academic components of preparation, as well as opportunities to develop, practice, and demonstrate evidence-based, pedagogical practices that improve student learning and development, as described in Standard 1 (emphasis mine).

   Standard 4.4 – Program Impact: Required component: The provider demonstrates, using measures that result in valid and reliable data, that program completers perceive their preparation as relevant to the responsibilities they confront on the job, and that the preparation was effective. (emphasis mine).

   Considering these standards and the findings from this study; the challenges participants faced regarding observing and/or teaching core curriculum areas such as science and social studies; the limited exposure to cross-cultural and STEM integration in participants’ school placements; and the continuing low grades assigned to [partner]schools due to the low performance and treatment of students of color and of students with other special needs, the [College of Education] administration and faculty should reflect and take collective action regarding the following question: What is our moral, ethical and professional responsibility to ensure that our pre-service teachers are afforded all the necessary opportunities to meet the professional standards for which our teacher education program has been accredited? (TC3-STEM Project report, p. 38).

   Out of the 36 individuals who received this report, only one has directly responded to it so far (and it has been five months to date). It is important to note that I am not criticizing these individuals for not directly responding to the issues raised in the monograph. I did not interview each person and explore their specific positionalities, perceived constraints, and working contexts. This autoethnography is not about them. It is indeed about me and how I chose to engage my own ethical commitments and responsibility to advocate for our pre-service teachers (and the thousands of school children they will influence throughout their careers). In my view, if we are truly committed to equity, diversity, and social justice, and expect our research work to influence and help advance the work of other professionals in teacher education, should we not then seek to enact those very commitments in our own backyards whenever we recognize oppressive practices?

   In any case, the deafening silent response I received after sharing the monograph in my college is worth briefly deconstructing here because silence can also be a powerful tool in the politics of domestication. This

---

2 In our state, schools are graded on two scores. One in response to federal accountability measures aimed at assessing the schools’ efforts to meet the needs of all students (e.g. ELLs, students of color, low income students, and students with disabilities), and the other to assess improvement in students’ academic achievement. This partner school received a federal grade of D and a state grade of C in 2018.
negative process of acculturation involves overt and covert practices designed to ensure compliance to existing explicit (or implicit) norms in order to preserve the status quo (Rodriguez, 2005, 2009). The politics of domestication are particularly challenging for scholars of color who, as mentioned earlier, are often hired with the expectation of contributing to advancing an institutions’ equity and diversity goals, only to then be silenced or ignored when we act on those expectations. In addition, the politics of domestication may also explain the pervasive low impact of teacher education research on the actual barriers and contradictions pre- and in-service teachers encounter in their school working contexts. For example, as mentioned earlier, the NSTA (2018) recently (and finally) released an official statement regarding the need to provide science instruction equal attention as other elementary school curriculum subjects. Although this statement is welcome, it comes decades too late, and six years after the National Research Council Conceptual Framework for the NGSS (2013) acknowledged this concern:

Over the past decade, accountability pressures—generated by the focus on student achievement as measured by high-stakes assessments—have heightened the curricular emphasis on mathematics and English/language arts and lowered attention to (and investment in) science, art, and social studies—especially at the elementary school level. In another California study—this one involving elementary school teachers in nine San Francisco Bay area counties—participants indicated that science is the subject area in which they felt the most need of professional development [21]. They also reported that they taught science less than one hour per week on average across the elementary school grades—with science instruction being more prevalent in the upper elementary grades than in the K-2 grade band (p. 282, emphasis mine).

Nevertheless, the NGSS’ fast-moving, standards-reform train, propelled by one of its strongest supporters—the NSTA—pushes on while the contradictory nature of teacher education programs and teachers’ actual working contexts, like the ones reported in this autoethnography, carries on.

In light of the silent response I received, what could possibly be my next option? How do I still leverage the research I conducted to disrupt the status quo and continue to advocate for pre-service teachers?

Disrupt

Naively, I must confess, I was expecting that the research monograph I shared in my college would instigate some conversations about improving our program, or at the very least, encourage college administrators to initiate a phone conversation (or a visit) with school partners to improve our memorandum of understanding regarding field-based experiences for our students. This is what I imagined the disrupt phase of being an activist in our own backyard would (should) have looked like. Since it was clear that this was not going to happen, I opted to take a more direct approach as one of the science methods instructors of record. I opposed the placement of pre-service teachers taking my course in the same school where our students were being denied opportunities to fulfill my course assignments and where our teacher education program was being prevented from fulfilling its obligations according to our own accreditation standards (as listed above). Citing ethical, moral, and professional conflicts with this “business as usual” approach, I requested that our student teachers be placed in a different school and that college administrators send a friendly reminder to the school principal and partner teachers regarding our memorandum of understanding for field-based experiences.

Needless to say, this direct approach created a “disturbance” in the normal order of things, and I was invited to a meeting with college administrators. To this meeting, I brought printed copies of the aforementioned TC3-STEM research monograph, with highlighted findings from the research project. This strategy reinforces the need to have completed the research and expose phases discussed above in order to be better positioned to advocate for students during this phase, as well as be better prepared for the next step—the transform phase.
After a cordial and promising meeting with college administrators, we reached an understanding. Pre-service teachers attending my science methods course in the next semester will be placed at a different school. While there was no guarantee that these students would be able to see their supervising teachers teach science, as well as be allowed to teach science (as required by the course), at least, this effort provided me with an opportunity to continue the TC3-STEM Project at a different partner school. With regard to contacting the principals at partner schools to revisit our memorandum of understanding and accreditation requirements, all the administrators were apprehensive to take this action. I understood their concern. They did not wish to appear to be “dictating” what partner schools should do; however, I pointed out, once again, that we had an ethical, moral, and professional responsibility not to look the other way either. This lack of inaction continues to fuel the dissonance between our efforts to prepare effective and culturally responsive teachers and the working realities of teachers today. That is, teachers’ working reality is often driven by the pressure to comply to mandated assessments and by contradictory and oppressive practices (e.g., the NGSS’ push to integrate science and engineering practices while science is not being taught—or rarely taught—in most elementary school grades). We could assist in interrupting this wasteful and negative socialization cycle by at least ensuring that our pre-service teachers have multiple opportunities to practice teaching what they are learning in our teacher education programs—and in my case, practice using more culturally and socially relevant STEM pedagogical approaches as modelled in the methods course. In response, it was agreed that I—as the instructor of record—should have a cordial conversation with the school principal to re-visit our course expectations and stress the importance of their support. The college administrators also agreed to keep addressing the issues I raised during teacher education reforms efforts that we were just starting in the college, prompted by our newly hired dean. They also agreed to include the TC3-STEM research monograph as part of the resource materials being gathered for the reform committee members to review.

These outcomes were helpful, but an important aspect of this phase of activist work is never to take anything for granted. We need to be ready to persevere, monitor and even shift to any of the previously mentioned phases in order to ensure that our efforts are heard, are meaningful and instigate transformative action. Again, perseverance is the primary device in an activist’s tool kit.

Conclusion

In this text, I have used critical autoethnography as a tool to explicate the barriers and successes I encountered in my efforts to address oppressive practices in my own teacher education program. Hoping to enhance clarity, I divided this study into four phases that were not meant to essentialize the complexity and physical and emotional demands involved in social justice work. Instead, these phases might provide useful examples of how we can be activists in our own backyards when we choose to (re)engage our ethical commitments. Essentially, this pragmatist account might encourage others to reflect and consider that after all, if our published (or on-going) activist work is meant to provide insights and promote social justice goals, should not those same goals, insights, and research findings be used to effect change at our own institutions—in our own backyards?

In these troubling times of “post-truths,” continuing social violence, and violence against our planet, more than ever, we—teacher educators/researchers—must double our efforts to make our research work matter. We need to collaboratively work to improve the professional opportunities of future teachers so that they are able to see, as well as practice, effective, culturally inclusive, and social-justice oriented teaching during their professional programs. We must also remain alert and wary of yet another fickle education reform effort (e.g. the Next Generation Science Standards) and of deceptive sloganisms (e.g., “Science for all,” “No child left behind,” “Race to the top,” etc.) [Rodriguez, 2011/1998, 2015a] that mainly serve the interests of short-sighted politicians or the deep treasure chests of major publishing companies (Owen, 2019).
I close with one final recommendation. Even though, we may not be able to achieve all objectives in our activist efforts—whether in our own backyards or elsewhere—it is essential that we keep in mind that the significance of our work cannot be measured by simplistic and binary codes, such as success vs. failure. Going back to Foucault (1997) and the practice of self-care, by exercising our freedom to act and (re)engaging our ethical commitments, we begin a labor of caring, not only for others, or for the advancement of our profession, but for our own personal growth as human beings.

References


Rodriguez, A. J. (under review). Exposing the concentric and contradictory circles of opp(regre)sive practices that prevent the advancement of teacher education. Submitted for review to the *Journal of Teacher Education*.


