

Non-Traditional Models of Applied Learning in Teacher Education through K-12 School-University Partnerships

**LISA BUCHANAN, LYNN SIKMA, CHRISTINE LIAO,
AND JAMES DEVITA**
UNC Wilmington

*Keywords: School-University Partnerships, Teacher
Education, Collaboration, Community Engagement*

Abstract

This article presents three different non-traditional models of partnership and applied learning experiences in teacher education. The projects from different content areas in the same licensure program showcase the possibilities of new approaches to school-university partnerships in bringing applied learning to teacher education. We discuss the project approaches, learning outcomes, and challenges for stakeholders, and provide suggestions for creating meaningful and successful applied learning initiatives. Implications for applied learning in teacher education are also explored.

Introduction

PK-12 school university partnerships have historically provided applied learning opportunities in the form of practicums and internships, yet teacher education courses rarely look beyond the traditional field experience model in creating such opportunities. Over the last four years, faculty from different content areas in the Elementary Education and Higher Education programs in the College of Education have committed to partnering with local public school, teachers, and administrators to create innovative applied learning experiences. In this article, we provide analysis of and examples from these three applied learning projects, and then discuss the implications and challenges of implementing applied learning experiences between educator preparation programs and school partners.

Applied learning in teacher education has a long history in discourse on practical field experience, which provides students with opportunity to practice their learning in real-world settings (D'Amico, 2015). In reviewing the existing literature on the discussion of field experience in special education, Nagro and deBettencourt (2017) concluded that the value of field experience is undisputed despite there is a need for more research on the impact of field experience on students in different settings. Different models of field placement, such as in a multicultural setting (Segal, 2011), online (Compton & Davis, 2010; Kennedy & Archambault, 2012), or international setting (Malewski, Sharma, & Philion, 2012; Winslade, 2016), have been discussed. Yet, despite different settings, most field experience models are based on the traditional observation or teaching format.

There are, of course, other models of teaching that engage learners in applied experiences that move beyond traditional field placements. Boyer (1996) emphasized the need for education to engage students in social issues through practical, real world experiences. Service learning, which connect academic content to work with communities, particularly through volunteering, is one form of applied learning that aligns with Boyer's vision (Furco, 1996). In fact, service learning is one of the most popular applied learning strategy in higher education (Jenkins & Sheehy, 2011). Applied learning experiences in higher education have been shown to benefit students in meaningful ways. Critical reflections demonstrate that students glean meaningful insights about their learning and development from their engagement in applied learning experiences (Ash, Clayton, & Atkinson, 2005; DeVita et al., 2016). Reporting from the American Association of Colleges and Uni-

versities (AACU) notes enhanced learning and development of diverse skills from participation in a range of applied learning experiences: internships, faculty-mentored research, and directed independent studies, among others (Kuh, 2008). Applied learning has been shown to be effectively integrated into academic courses as well, including online courses (DeVita et al., 2016; Gilboy, Heinerichs, & Pazzaglia, 2014) as well as within high school classrooms (Fulton, 2012).

Although literature on applied learning at the university is growing, little scholarship is available on applied learning in teacher education that moves beyond traditional models of field experience and partnership between school and university. In teacher education, applied learning beyond field experience has taken forms mostly in service learning (Bates & Lin, 2015; Chen, 2004; Power et al., 2017; Taylor, 2002) and research (Bray & Miller, 2014). With sporadic examples available, we consider our projects valuable in providing new models of applied learning in teacher education.

We argue that these three examples are non-traditional models of applied learning and partnership in teacher education because the activities contain characteristics of authentic learning which include involving real-world problems, providing open-ended inquiry, engaging students in social learning, and empowering students “through choice to direct their own learning” (Rule, 2006, p. 2). Moreover, the projects created unique school-university partnerships. The partnerships we created are grounded from the needs of school teachers and created reciprocity in the partnership (McNall, Reed, Brown, & Allen, 2009). It is in the mutual school-university partnership, our projects succeed and fruit.

A University-Wide Commitment to Applied Learning

Before presenting these three examples, we provide a brief description of the role of the university and our departments in supporting each of the three partnerships. ETEAL, or Experiencing Transformative Education through Applied Learning, is an administrative unit at the University that supports integration of applied learning across campus (see www.uncw.edu/eteal). ETEAL provides a range of supports to faculty and staff on campus who want to integrate applied learning in practice, including a portfolio of grants, professional development workshops, and specialized initiatives, such as the 2-day Applied Learning Summer Institute. By the end of Spring 2018, ETEAL had funded initiatives in every academic department on campus as well as with the library,

Division of Student Affairs, and other non-academic units. ETEAL's Strategic Plan Status Report (Boersma & Hicks, 2017) noted that students had taken courses with ETEAL-awarded faculty over 28,000 times from Fall 2013-Spring 2017, and highlighted that there are nearly 8,000 applied learning experiences on campus each year. In a March 2018 address to campus, UNC System President Margaret Spellings recognized UNCW's commitment to applied learning: "The idea of applied learning — enabling students to learn through experience and not confining an education to books and lectures — is fairly simple in theory. But implementing it is hard, and UNC Wilmington has done it well. And that means students retention is up, graduation rates are up, and students are leaving with skills and knowledge that serve them well in the workforce."¹ Applied learning is integrated into all aspects of campus at UNCW, which is being recognized for its efforts as well as for the positive outcomes associated with supporting applied learning initiatives.

Applied learning is a cornerstone of our College of Education. All preservice teachers enrolled in our programs complete a comprehensive number of hours of applied learning in school classrooms, with all programs moving from an active observer in early field experience to full student teaching during their last semester. At the very basic level, field experience with children in classrooms is applied learning in teacher education. However, we argue that applied learning in teacher education can extend well past this traditional model as the three projects discussed in this article demonstrate. We would be remiss to not acknowledge the role of our departments' largely constructivist aims and administrative support in helping us see all three projects through to completion and even into subsequent semesters. Both departments supported the work through available fundings and made extensive efforts to highlight and celebrate the uniqueness of each project. For example, school partners were invited to a faculty meeting to present about their work alongside their faculty collaborators. The depth of these partnerships and the subsequent learning opportunities provided to the students were valued and prioritized by department administration and treated as models of applied learning.

¹see <https://uncw.edu/news/2018/03/unc-system-president-margaret-spellings-presents-state-of-the-university-address.html>

Three Successful Models of Applied Learning in Elementary Teacher Education

Here, we provide three examples of non-traditional applied learning in elementary teacher education. Each example offers a model for expanding applied learning in the classroom. The first example focusing on STEM education was led by Dr. Lynn Sikma. The second example describing the performance of social justice project was co-led by Dr. Christine Liao and Dr. James DeVita. The third example outlining the book club model was led by Dr. Lisa Buchanan. Each of the projects also involves a partnership with local school teachers as described below.

Engaging a Teacher Leader in Elementary STEM Education

My partnership with Victoria began in the spring of 2015 when I was supervising a student intern in her fifth grade classroom. While there, I was struck by her prioritization of science, atypical for most elementary teachers. Whereas most elementary classrooms I observe in do not have a dedicated daily time slot for science, she allotted 30-60 minutes for it every morning and her classroom walls were filled with science posters and anchor charts. An entire wall in her classroom was devoted to Science Olympiad because she volunteered as the school's coach. When I spoke to her about this unusual emphasis on science, she expressed a passion for STEM (Science Technology Engineering and Math) and the importance of exposing students to STEM activities, but was also quick to point out her insecurities in her content and pedagogical knowledge related to the subject, despite nearly two decades as a classroom teacher. This juxtaposition led to an informal discussion about possible projects we could collaborate on that would help with these insecurities.

Shortly after the discussion of project possibilities occurred, Victoria received notification that she was chosen to be a Master Teacher, a PDS initiative at the university aimed at building leadership capacity in practicing teachers. As part of the three-year program, each Master Teacher is partnered with a faculty member whose interests align with theirs and together, they develop and implement a mutually beneficial professional growth opportunity. Since my area of concentration is elementary science, I was chosen to be Victoria's Master Teacher faculty associate to help her pursue growth in the area of STEM education.

For her Master Teacher project, Victoria developed and housed a set of STEM kits for her school. Each kit included an authentic STEM activity utilizing all four aspects of STEM that could be modified for grades K-5 so that every teacher in her school could utilize them. Each kit contained all the materials needed to implement the activity, including consumables, literature, and a detailed lesson plan that included grade level modifications. Each month, she would develop two new kits that were taught during a Friday STEM enrichment time she created for the fifth grade. Each Friday, she would give up her plan time to implement a kit with one of the three fifth grade classrooms. On a rotating three week schedule, each class would skip their weekly assigned enrichment class (music, art, or PE) to attend STEM time with her (Figure 1). At each stage, she would make modifications to the kit based on how the lesson went, with the result being a refined kit at the end of week 3 that was ready to share with other teachers.

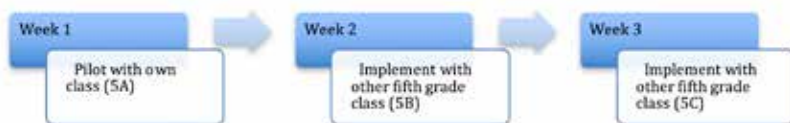


Figure 1. Kit implementation schedule

As a mentor for Victoria throughout the kit development, I was able to use examples from our collaboration in my elementary science methods course. Not only was I able to connect course discussions to authentic classroom learning observed in Victoria's classroom, but I was also able to utilize Victoria as a tangible example of how elementary teachers can successfully teach science despite not feeling confident in their pedagogical content knowledge. In an effort to further benefit my students, I invited Victoria as a guest lecturer in my methods course. She presented on lesson planning in science and how to utilize standards to drive instruction. Throughout her presentation, she spoke extensively about her own science content insecurities, but how she overcomes them in order to effectively teach her lessons. She emphasized the importance of making time to teach science at the elementary level. She discussed her STEM project, her insecurities about it, and why she felt so passionately about creating authentic STEM activities for students across grade levels. In two hours, she managed to link all the major course components I had talked to my students about in a practical, meaningful way, providing immediate buy-in. Though Victoria always worked as a partnership teacher for interns, she never considered herself a teacher educator. This experience provided her with another

opportunity to stretch beyond her comfort zone and to see herself as a leader. The participation in my course also impacted Victoria's instruction in her classroom. Prior to her presentation, she came early and sat in as I modeled an inquiry-based lesson for my students. In the weeks that followed, she modified the kits and her daily science instruction to include more inquiry.

Though Victoria's role as a Master Teacher has recently ended, we have not ended our collaboration. We are constantly considering ways to enrich the learning opportunities for our students and each other. Building upon our work, she continues to guest lecture in my science methods course every semester about standards-driven lesson planning in science and provides students with a plethora of resources related to science teaching. The following week, she serves as a consultant for students as they write their own science lessons, actively reviewing plans and providing resources and ideas. Currently, we are implementing a collaborative learning experience for our students centered on experimental design and science fair that embeds a portion of my course in her classroom. As part of the project, Victoria presented a mini workshop to my students on how to provide feedback to elementary students, specifically in science. All of these learning experiences, which have evolved and deepened over time, began with Victoria's own personal applied learning project.

Integrating the Arts Beyond A Single Classroom

This collaborative applied learning project aimed to create authentic arts integration experiences for Elementary Education major undergraduate students in the Integrating the Arts course and Higher Education major graduate students in a Social Justice in Education course. The collaboration also involves dance students from a local high school and middle school. The stages in this project include research and filmmaking, film to dance choreography, dance teaching and practice, final performance, and arts-integrated lesson based on the performance. Figure 2 shows the stage, process, and groups involved in this project. The culminating event of the project was a Film-Dance performance, called the *Performance of Social Justice*, which was held at the local middle school and including the middle school students, teachers, and administrators as the audience (Figure 3). After the public performance, undergraduate students enrolled in the Integrating the Arts course created lessons based on the performance and representation of social justice topics; the undergraduate students then taught their lessons to middle school students who attended the performance.

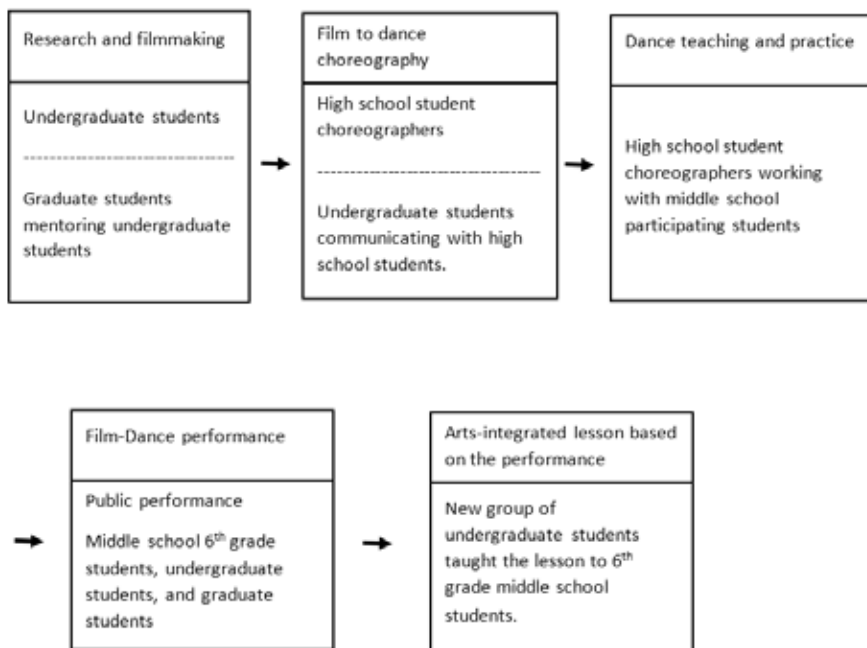


Figure 2. Stages, process, and groups involved in the project



Figure 3. Final Performance

This unique applied learning project began in the Fall semester with the undergraduate students' field experience in local elementary schools. The undergraduate students researched social justice issues in their field experience school setting. During the research timeframe, they also interacted with the graduate students to learn more about social justice issues in education. The graduate students' role was to serve as mentors to the undergraduate students. This allowed the graduate students to apply their learning in the higher education mentoring setting, which was an important skill for these higher education major graduate students.

The undergraduate students applied their learning about using the arts to create meaning by developing films to represent social justice issues in their field experience schools. Working in groups, they used a variety of strategies of filmmaking for their films, such as interviewing, remixing, and animation. These films were shown at the end of the semester to the public and shared with the collaborating high school students. We brought the high school students to the university campus and provided an opportunity for them to interact with the undergraduate students to learn more about their film and the topics.

After receiving the films, the high school student choreographers worked to create dances based on the social justice topics represented in the films. The high school students worked with the middle school participants to create the dance performance. Their challenge was to create a film and dance elements that effectively represented the social justice topics explored in the project. The project required multiple layers of collaboration among levels of education (elementary, middle, high school, undergraduate, and graduate courses), and challenged students on how to demonstrate learning and development across those levels through integrated media (film and dance).

Through partnering with the local high school dance director and the middle school, this applied learning project was unique in that it involved students from different levels to collaborate and different types of applied learning were utilized at different stages in this project. These applied learning aspects of the project included research, mentorship, field experience, creative approaches, and practical application in the field. For example, the undergraduate students were involved in mini research on social justice issues in their field experience schools at the beginning. The graduate students were placed in mentorship roles. The collaboration between all the groups of students to create the performance was creative applied learning. The creating and teaching of an arts-integrated lesson to middle school students was the practical experience embedded within the course. This multi-leveled collaboration and applied learning approach not only provided different groups of students with a specific applied learning experience but also added layers of learning experiences they cannot obtain through a single applied learning assignment. Each component was an applied learning experience for the respective group of students involved, and all components were essential to preparing students to complete the final product of the whole applied learning experience.

Although the project was successful, there were several challenges throughout the process. Communication was one of the most significant challenges because the project involved different groups. Class schedules, for example, made it difficult to find a time for graduate students to visit the undergraduate students' class even within the same College at the University. The communication between graduate students and the undergraduate was largely through email and online resources (e.g., Google docs). This was a slow and sometimes inefficient way for communication. Similarly, although we were able to bring the high school dance students to the university campus for the film screening

and interaction with the undergraduate students, the communication between these two groups of students was limited due to time constraints. Some groups of undergraduate and high school students continued to communicate through email after the meeting, but not all groups did. Furthermore, because of the time needed for this project, the project timeline crossed from the Fall semester into the Spring semester. The undergraduate students in the Spring semester participated in a different applied learning experience and finished the last piece of the project—teaching an arts-integrated lesson based on the performance to the middle school students. However, because they were not the filmmakers, their understanding of the films and the topic was limited compared to the undergraduate students who created the films. Moreover, most of the students who created the films were not able to attend the final public performance because they have other classes during the day. Even though there are challenges, we believe that this can be considered a successful new model of applied learning that will benefit students beyond a single classroom. Through regular, ongoing conversations and meetings among the experience collaborators (Elementary Education instructor, Higher Education instructor, High School dance instructor), the project provided significant learning opportunities to all students involved.

Applied Learning in a School-University Partnership Book Club

This project joined three fourth grade public classrooms and undergraduate elementary preservice teachers enrolled in a social studies methods course for a semester-long historical fiction book club. Throughout the semester, fourth graders and preservice teachers exchanged penpal letters about the book, *Serafina and the Black Cloak*, and then met together on the elementary campus to discuss the book and engage in small group activities planned in collaboration between the three teachers and my preservice teachers. In the semester prior to implementation, Caroline, Joanne, Rachael and I planned and implemented the logistics and made spaces for each other within the semester for the project to unfold.

The model we developed is unique in that we built on established relationships within our strong professional development system to bring a different form of applied learning to the program through the methods course and K-12 classroom partnership. In this specific project, preservice teachers' applied learning experience was couched within their elementary social studies methods course, where throughout the semester, preservice teachers and elementary students worked together in

the book club. The partnership school for the project was not a school that students were placed in for their required field experience, so this project provided an additional school experience beyond the program requirements for all students enrolled in the methods course.

The evolution of the partnership design. This unique partnership between College Park Elementary and UNCW began in 2014 when I supervised Caroline as a student intern. Joanne was Caroline's partnership teacher for internship, and immediately, I was invited into their shared space as co-teachers. I spent time during her internship semester in the classroom observing their planning and collaboration, and stayed in touch with Caroline post-graduation. Following her internship, Caroline was hired at College Park Elementary, and eventually both began teaching fourth grade. In the first year of the book club, I worked with Caroline to create the initial design of the project. We used a small group literature circle model and then a whole group novel study model. It was fairly low key in the first year, focusing on bringing the fourth graders and elementary preservice teachers together in the elementary classroom. In the following year, we piloted two classrooms matched with two sections of the methods course and we all read the same book. In 2016, Rachael joined us in the book club model in the 2016-17 school year as the third teacher in this phase of implementation. That year we developed a model with three classrooms and two courses for a total of 75 elementary students, 40 preservice teachers, three classroom teachers, and one university faculty.

Figure 4 illustrates the design of the book club project.



Figure 4. Book club project design

Why is this partnership unique? This project is unique for three reasons. First, this project is embedded in a methods course where teaching faculty and classroom teachers collaborate to create the project; this is not the process generally used in programs where universities work with schools to place students in host classrooms. Traditionally, placements are created to fulfill requirements for observation and teaching prior to a full semester internship and not for work that joins the methods course objectives, faculty, and classroom teachers, and students. As a result, this opportunity actually expands preservice teachers' experiences in elementary classrooms prior to full time student teaching. Second, this project has consistently valued reciprocity among stakeholders. That is not to say that traditional placements do not reciprocate benefits for teachers, students, preservice teachers, and university programs, but the depth and breadth of those advantages varies really across field placements. Third, it improves the methods course by incorporating an applied learning experience within the methods course. If the methods course is created as a space for preservice teachers to learn about and then simulate various pedagogy, what better location to implement the pedagogy highlighted in the methods course than in an actual elementary classroom with the support of the classroom teacher and university faculty?

Stakeholder responsibilities. Having worked through numerous iterations of the applied learning book club model, we have identified several stakeholder responsibilities that we believe help to make this model work. First, we acknowledge the continual stakeholder flexibility in both growing and improving this experience for all students. Part of this responsibility of flexibility requires that we are responsive to students in both settings and adjust the work based on feedback from students in both settings. Second, we have prioritized the development of clear and mutual goals that, while they flex at times based on restraints of time and enrollment, remain fairly constant since our first implementation of book club. Our three shared stakeholder goals are to expand students' experiences with teaching and learning using historical fiction; to increase opportunities for elementary and university students to learn alongside one another rather than in separate spaces; and to improve the curriculum in both the elementary classroom and methods course through the project. Third, we are responsible for upholding the quality of applied learning possible through school-university partnership. To this end, we regularly review our project to assess the preservice teachers' experiences and feedback. We also articulate to our peers

in teacher education who are interested in beginning or expanding an applied learning project three steps that we have found to be essential when considering if a collaboration might be a good fit for applied learning: begin by spending adequate time in each other's spaces; look for common themes between your two spaces that might become the vehicle for the applied learning experience; and build on good work that you are already doing.

Implications and Challenges of Applied Learning in Non-Traditional School-University Partnerships

These models of school-university partnership applied learning are not without challenges, therefore we present the common logistical and political challenges and supports we experienced in creating and sustaining our partnerships across these three projects. Consistent with most applied learning experiences, funding and time were the biggest two hurdles for these projects. Funding was sporadic and not designated for such initiatives by the College or departments, therefore faculty secured university or community funding. While all authors were successful at receiving funding from multiple campus entities (ETEAL, Community Engagement, College of Education), grants were relatively small and as a result, required adaptations to project design and delivery. This exacerbated issues related to time, as the design and implementation of these projects, which occurred over and above the workload of the teachers and faculty members involved, was generally undercompensated. Additionally, some items could not be funded through state monies and were covered out-of-pocket by collaborators.

Time was a large constraint, both in scheduling and implementation. The planning and design for projects occurred before each semester began, including setting dates/times for project execution. This can be difficult in the school setting, as often unplanned activities arise that take precedence over partnership projects viewed as largely optional activities. K-12 teachers' schedules are regimented and they are regularly stretched for time. Adding these extra activities can be burdensome, even when stakeholders enjoy and are invested in the work. Faculty made significant changes to their course sections when compared to sections not involved in the applied learning projects and meeting times had to align with both school and university schedules.

Additional logistical challenges developed in securing K-12 administrative support. It was essential that communication about the reciprocity

of the project and the impact on K-12 students was clear. The STEM and book club projects occurred in the same school, and the principal was generally supportive of this type of work and allowed for teacher flexibility in implementing projects and presenting on their work. Though we worked through unanticipated roadblocks, the principal seemed to see the value for students when teachers were engaged in applied learning projects. Similarly, the dance-film collaboration required multiple meetings with school administrators and teachers to coordinate activities; while positive, teachers and administrators frequently expressed concerns about how university partners would infringe on the school's time and resources.

Implications for Teacher Education

One of the main struggles and goals for teacher education programs is bridging theory to practice and helping students see the connection between coursework and field application. Preservice teachers learn theory and methods in their university coursework and then apply their learning in placement classrooms during field placements and internships. By embedding authentic experiences into coursework, preservice teachers can make concrete connections between course material and classroom implementation. The projects described here model a different approach to applied learning typically seen in traditional school-university partnerships, as the teachers are collaborators (and often catalysts) in the experience, rather than hosts. As a result, this collaboration enabled mutual benefits. In a traditional field experience model, the school students do not usually receive applied learning experience but are usually the "guinea pig" of the teacher education student. In our examples, the K-12 students were involved in active applied learning experience while the preservice teachers were mentored from both the faculty and partnership teachers. Through our partnership and mentor roles as faculty, we also aided in the professional development of the teachers as they concurrently shaped what we did as teacher educators.

Implication for School-University Partnerships

School-university partnerships represent a wide spectrum of work and intensity, from placing field experience students in classrooms to Faculty-in-Residence models. Ideally, an outcome of these partnerships is that they are mutually beneficial for both university and school stakeholders, but in reality, they are often askew, leaning more heavily toward the university (e.g. field placements). Each of the partnerships described here are mutually beneficial to both stakeholder groups,

in part because of the primary role the K-12 teachers played in each project's development. Beyond that, we believe these types of partnerships strengthen the school-university partnership as a whole in that a different kind of value is placed on (and hopefully felt by) the teachers involved in each project. Victoria, the STEM teacher, commented,

This has really altered my view of the university, as I now see it as a partner in educating students, rather than a separate entity. I feel that the university actually views me as a partner in preparing future teachers instead of just a classroom teacher for an intern placement.

Finally, applied learning within a school-university partnership should generate questions among stakeholders; to this end, we offer the following questions for faculty when establishing a non-traditional model of applied learning: To what extent do we partner in such initiatives? How will we bargain for support in that in between space where faculty are still full time teaching? Do we request course buyout? Do we hope to change the trend of applied learning as "another (unfunded) thing to do" in the methods course?

Implications for Programs

Regarding the implications for programs, we would argue that these partnerships are somewhat intrinsic. We do them and prioritize them because we see the value in them for our students. We urge program faculty to consider the implications of non-traditional applied learning for their programs. We suggest the following initial steps: consider ways to harness current relationships towards these aims while seeking out new relationships that offer reciprocity for stakeholders; seek opportunities beyond traditional field experience; and prioritize what programs are already doing that can be improved with that experience couched within the field rather than the simulated university classroom. So many experiences in the methods course only simulate the classroom experience; applied learning in the field allows the implementation of planning and teaching that otherwise lacks the context of interaction with learners. Finally, partnerships often generate from teachers expressing a need in their classroom, but how can we flip this so that partnerships are stemming from faculty reflecting on their needs and ways they can enhance their teaching with the help from a school partner?

Conclusion

As the three examples in this paper illustrate, applied learning in teacher education has tremendous potential, particularly in regards to fusing methods courses and K-12 classrooms. Though these applied learning experiences are not without challenges, all three are illustrations of what is possible for teacher educators when we think deeper about applied learning experiences and move past the traditional field-experience-as-applied-learning model of teacher education.