

## Emerging Scholarly Practitioners: Utilizing Course-Embedded Research Projects

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### ABSTRACT

The purpose of this research project was to explore doctoral student learning and development as scholarly practitioners through one innovative method: a course-based self-study. This self-study empowered doctoral candidates in three key forms of data collection: 1) two project-based course assignments; 2) a survey on course-based student learning; and 3) a self-reflection on learning in the self-study. Results indicate positive impacts in addressing real-life problems and in connecting students to cohort members. The application of skills and knowledge in a course-embedded self-study connects to the Carnegie Project on the Education Doctorate (CPED) principles of creating scholarly practitioners and also developing activist leaders who build coalitions and focus on researching real life social justice issues. This study can serve as an exemplar for similar EdD programs who are developing scholarly practitioners.

### KEYWORDS

*self-study, Doctor of Education, scholarly practitioners, teacher as researcher*

Adult learning theory and critical professional development call for active, critical engagement of adult learners, including for doctoral students. Doctoral students develop in numerous ways, both professionally and personally, across their programs, often taking on new identities. Buss et al. (2014) explored doctoral student development as learners, leaders, and action researchers, and then suggested a new identity status, scholarly and influential practitioners (SaIP). Doctor of Education (Ed.D.) programs have a responsibility to develop educational leaders who are able to serve a diverse and dynamic landscape; programs must engage students as reflective, critical, and equity-focused scholarly practitioners and activists (Carnegie Project on the Education Doctorate [CPED], 2021). Research with 200 participants at 65 CPED-member institutions revealed that an activist includes four facets: coalition builder, vocal risktaker, visionary leader, and social justice champion

(Becton et al., 2020). Doctoral programs must “maximize impact on the field and cultivate activism among program graduates who will lead systemic transformation in education” (Ryan & Watson, 2021, p. 11). Little research, however, has explored how doctoral programs most effectively implement this mission.

Research on doctoral student learning indicates that authentic, project-based experiences have the potential to lead to transformative learning. For instance, one Ed.D. program that engaged graduate students with real-life district research projects found a mutually beneficial partnership between the districts and the emerging scholarly practitioners (Ralston et al., 2016). Additional research that utilizes course-embedded projects that help scaffold Ed.D. learning and development have seen benefits in the growth of scholarly practitioners (Caskey et al., 2020). This study provides



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another methodology to act as an exemplar for similar Ed.D. programs who seek to incorporate project-based research that promotes equity, reflective practice, and helps students connect problems of practice and their dissertation research with the end goal of becoming activists who lead transformative change in education.

## PURPOSE STATEMENT

The purpose of this research project was to explore doctoral student learning and development as scholarly practitioners. This study entailed a dual approach to reaching this purpose: first, doctoral students were engaged in project-based learning within their Ed.D. course; second, the doctoral students engaged in a self-reflective research project about their learning in the course activities. The second phase was a course-based self-study about doctoral student development. The research question for this study was: How did a course-based self-study research project impact student learning in the following areas: relevance, connectivity to their cohort, and identity development?

## THEORETICAL FRAMEWORK

The theoretical framework utilized in this study was andragogy or adult learning theory (Knowles, 1970). This theory provided the foundation for the course itself, which was titled Adult Learning, Organizational, and Group Dynamics. Andragogy argues that adult learning must be (a) problem-oriented, (b) honor and include the adult learners' experiences, (c) internally motivate the learners, and (d) self-directed (Knowles, 1970). The pedagogies used within both phases of this study emphasized these four characteristics.

Additionally, this self-study sought to engage doctoral students in critical, active self-reflection and engagement with real world problems of practice, drawing on the concept of critical professional development (CPD) (Kholi et al., 2015). CPD engages adults in their learning by providing them control of their learning experiences and focusing on shared needs of the learners. Higher education faculty members who also engage in CPD can have positive impacts on their identity development as social justice educators (Dover et al., 2020). Practitioner inquiry, such as the self-study approach implemented in this study, is key for learning within a CPD framework (Picower, 2015).

## METHODOLOGY

This research utilized a self-study methodology, where 13 doctoral students enrolled in a three-year CPED-member, in person doctoral program were the participants and also the researchers. The professor served as a mentor and co-researcher in the teaching, learning, and research process. The goal of utilizing this methodology was to apply the Carnegie Project on the Education Doctorate (CPED, 2021) principles to develop scholarly practitioners, which involves using signature pedagogy (i.e., teaching and learning grounded in problems of practice, theory, and research), inquiry as practice, laboratories as practice, dissertation in practice, problems of practice, mentoring and advising, and embedding research into course-based assessments and learning.

Self-study in teacher education connects with calls from Dewey (1933) to integrate reflective thinking as a form of critical learning practice and from Schön (1983) to utilize real-world problem solving, both as means of becoming reflective practitioners. While self-study

can feel like a "messy sandpit" (Peercy et al., 2018, p. 259) to the researchers involved in a self-study, the learning outcomes can shape the direction of dissertation research and professional practice. Additionally, the professor involved in a self-study project with students also aims to improve their practice in the midst of the research study as well (Loughran, 2018; Peercy et al., 2018).

## Participants

Participants in this study included 13 doctoral students enrolled in the second year of a three-year Ed.D. program, in addition to their teacher educator, who was the professor of the course. The doctoral students were well-experienced educators, with an average of 25.46 years of experience in education ( $SD = 6.55$ ), primarily serving as principals, assistant principals, and teachers in Alberta, Canada. International Review Board (IRB) approval was obtained from the participating institution prior to commencing the research, and all participants consented prior to participating.

## Data Sources

There were three key forms of data utilized in this study: artifacts of learning from course-based assignments, a post-course survey about student learning, and reflective feedback following student engagement in data analysis in the self-study. The use of multiple data sources allowed for triangulation of the data, and the survey went through several iterations of peer review and revision to ensure trustworthiness (Creswell, 2013).

### Artifacts of Learning

First, artifacts of learning were collected from two project-based course assignments, descriptions to follow. The first assignment asked students to create a theoretical framework for future use in their dissertations. The second project-based assignment asked students to interview an educational leader they admired and create a technology-based presentation, such as a video lecture or podcast, to demonstrate connections from the interview to their theoretical framework and course-based readings.

### Survey Data

The second data set was a survey about student learning related to the two project-based course assignments. This survey included 11 items; five of these items were quantitative with a scale from 1 = strongly disagree to 7 = strongly agree, followed by open-ended responses to the quantitative questions. For instance, one survey item was: This project-based assignment allowed me to make connections between theory and problems of practice, followed by an open-ended prompt: Please explain how this project-based assignment allowed you to make connections between theory and problems of practice. The final open-ended question of the survey was: Is there anything else you would like to share about the impact of this assignment on your learning? These items were developed based on the research questions: identity development, relevance, and cohort connectivity. Data from the survey were analyzed by student research teams during a collaborative data analysis work session.

### Reflective Feedback

After analyzing their survey data, which they compiled into written results for a research article, students completed another

reflective feedback questionnaire about their experience participating in the self-study research project. The items in this final questionnaire included: 1) What did you learn about yourself as a researcher from participating in this collaborative research writing project? and 2) What else did you learn from participating in this ongoing research project? This post-self-study written reflection from doctoral student participants was needed to capture participant learning from the self-study itself.

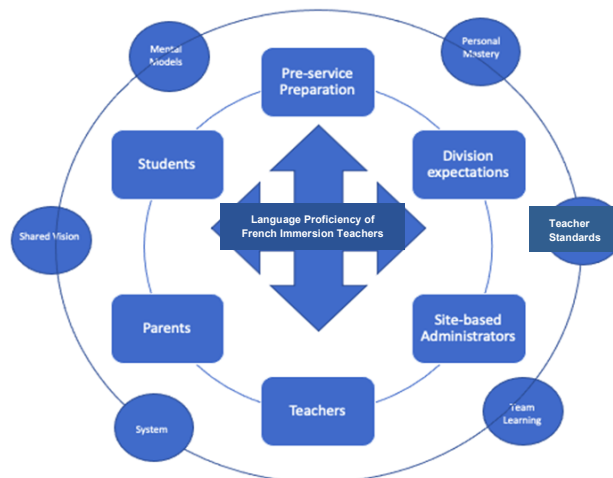
### Context: Course and Course-Embedded Project

The context for this learning research project was a doctoral course on adult learning theory, sequenced in the second year of a three-year, cohort-based Doctor of Education program. Due to the COVID-19 pandemic, this cohort began online in May 2020 but shifted to in-person instruction in September 2021. While in the course, students were also in the beginning stages of preparing their dissertation proposals, which is important to the context of the potential relevance of the research component of the course. The course that was part of this self-study included two project-based key assessments.

#### Key Assessment 1: Theoretical Framework

The first required students to create a theoretical framework that included a minimum of two theories and a visual conceptualization of how these theories intersected with their research topic. Figure 1 shows an example of one student's theoretical framework developed from Senge's (2006) learning organization framework in relation to their research on French immersion teacher language acquisition. The outer circle includes the five interrelated components of Senge's learning organization framework. They provide a lens through which the perspectives of key school division employees related to the language proficiency of

Figure 1. Participant Theoretical Framework (adapted from Senge, 2006)



French immersion teachers can be explored. Additional stakeholders and district teacher standards are also included in the framework.

A second participant exemplar of a theoretical framework is included in Figure 2. This student was researching social emotional learning in relation to teacher preparation. The framework touches upon several theories and pedagogical approaches: including (a) Social Cognitive Theory (Bandura, 1977), (b) Self-Determination Theory (Deci & Ryan, 1985), (c) Culturally Responsive Teaching (Gay, 2002), and (d) the Collaborative for Academic, Social, and Emotional Learning (CASEL) 5 Framework (CASEL, 2020). The funnel shape of the framework demonstrates how pre-service teachers acquire skills and knowledge throughout their teacher preparation program.

Figure 2. Participant Theoretical Framework on Social Emotional Learning in Teacher Preparation

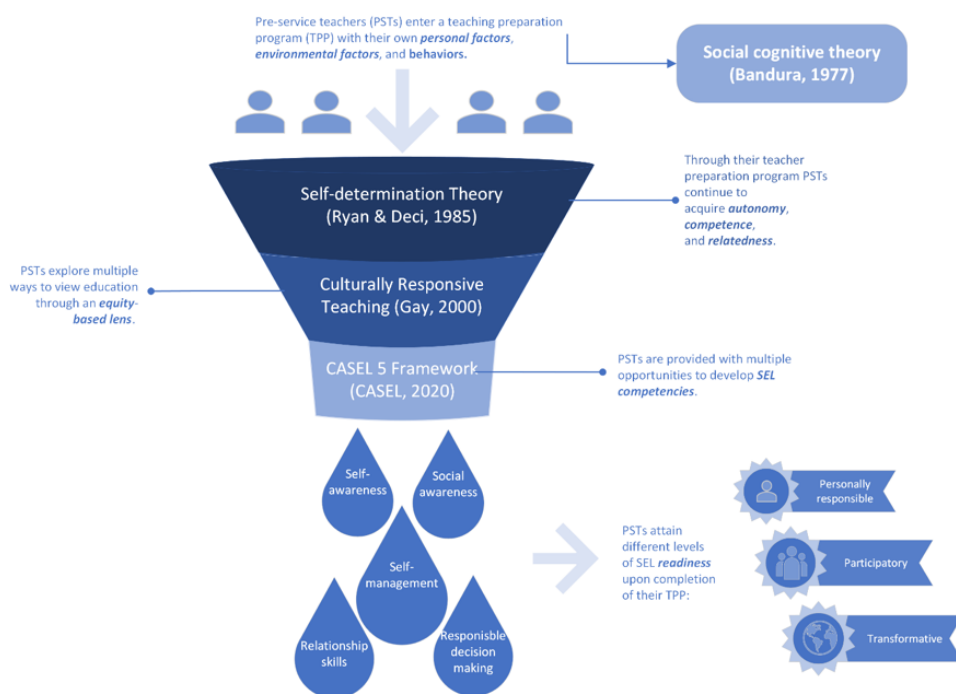
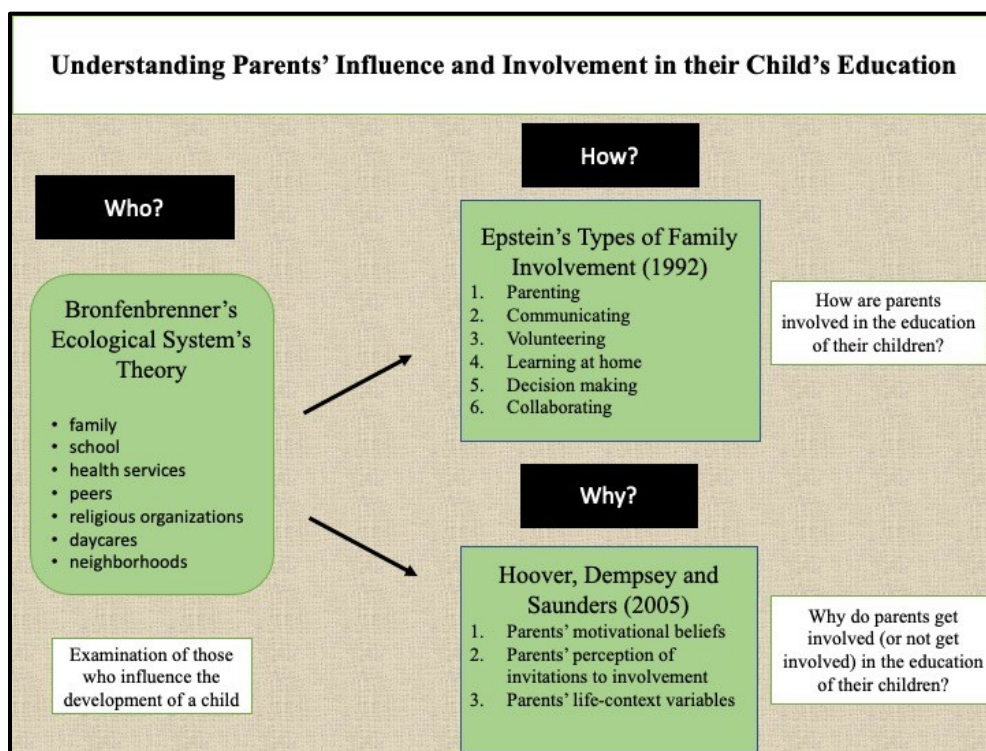


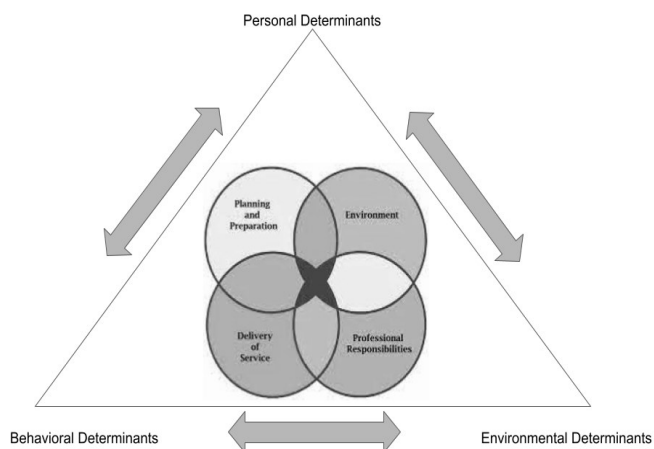
Figure 3. Participant Theoretical Framework on Parent Involvement in Education



A third example of an Ed.D. participant's theoretical framework can be seen in Figure 3, which is related to research on parental involvement in schools. Bronfenbrenner's (1979) theory examines the principal influencers who affect the development of a child. Epstein's (1992) model points out how family involvement exists in education through six types of family involvement. Finally, Hoover-Dempsey et al. (2005) highlight why families get involved in their child's education, including such things as motivation, perceptions of invitation, and life-context variables.

A final example of a participant's theoretical framework can be seen in Figure 4. This student participant was researching teacher learning around guided reading instruction at the elementary level.

Figure 4. Participant Theoretical Framework on Teacher Learning (adapted from Bandura, 1971 and Danielson, 2017)



Bandura's (1971) theory is reflected in the triangle showing the personal determinants, environmental determinants, and behavioral determinants, which represent the factors influencing a child's learning process and development. Danielson's (2017) Framework for Teaching components of planning and preparation, classroom environment, instruction, and professional responsibilities are shown in the center of the triangle as the central factor - the teacher - in the child's learning.

**Key Assessment 2: Educational Leader Interview**

The second course-based project was to interview an educational leader and analyze the interview through the theoretical lens of the student's theoretical framework. This leadership interview had to be shared with the class on a forum using a digital platform of the student's choice. The students were extremely creative in their platform choices and end products. One student, for example, created a playlist by choosing songs to represent each aspect of the interviewed leader's style. Other students created a documentary film, performed a video lecture, wrote a digital book, or recorded a TED Talk. While students were only required to watch or listen to two other projects and respond to them in the forum, most students described watching or listening to all of them.

**Self-Study**

Following completion of these two course-based projects, students were surveyed about their learning experiences in the course. Following this data collection point in the course, the class intentionally became a self-study. The curricular decision to embed a self-study into this theory-focused course emerged when considering the timing of the course in respect to dissertation preparation. These Ed.D. students had completed four research courses: Introduction to



Educational Research, Advanced Qualitative Research, Advanced Quantitative Research, and a Research for Evaluation and Action course, in which these students engaged with district-based research projects. At this point in the Ed.D. program, they were preparing to defend their dissertation proposals. The goal of the self-study element of the course was to provide an opportunity for these developing researchers to collaboratively design and engage in a research project, allowing them to apply the course-based research skills and knowledge in a new setting. Collectively, the class and professor determined the research questions, the data analysis methods, created a shared document from which to work, and separated into smaller research teams. Student participants were grouped into micro research groups of two or three participants, and they were asked to analyze certain survey items from the data collected in the survey and report it for a research paper. Following this experience of analyzing and reporting data, students were asked to reflect in writing one final time about their learning experiences participating in the collective research project. Due to time constraints in that the course had completed, these data were analyzed by the teacher educator, who was the professor of the course, and reported in this paper.

## Data Analysis

Data were triangulated across the multiple sources to make sense of the research questions across the three domains: relevance, connectivity, and identity. Quantitative data were analyzed with descriptive statistics in Excel to determine the mean and standard deviation of each Likert-scale type survey item. Qualitative data were analyzed in two cycles of open coding (Saldaña, 2015). Researchers worked independently within their micro research teams to identify emergent themes. After all open-ended items were coded by each researcher on the team of two or three participants, these data analysis teams came together to compare identified themes. The second cycle of coding then occurred, where research teams determined the most salient themes and re-coded data according to these themes.

## FINDINGS

The purpose of this research project was to explore doctoral student learning and development as scholarly practitioners and activists through a course-based self-study research project. More specifically, the study sought to investigate the impacts in the following areas: relevance, connectivity to their cohort, and identity development.

### Perceived Relevance of Course-Based Self-Study

First, the perceived relevance of the course-based self-study was explored. It appears these practitioner-scholars largely found participating in the self-study to be relevant, with 75% of students strongly agreeing that the project-based assignments allowed them to make connections between theory and practice, and 50% strongly agreeing that the projects were relevant to their dissertations (see Table 1). The quantitative survey data results ( $n = 13$ ) can be seen in Table 1. Likert-type items were scaled from 1 = strongly disagree to 7 = strongly agree.

This connection of theory to practice was evident when examining the products created through both the theoretical framework assignment and the educational leader assignment as described earlier. Figures 1 to 4 show evidence of how students

**Table 1. Student Perceptions Regarding the Relevance of Participating in the Project-Based Assignments**

Survey Item Regarding Relevance	M (SD)	Percent Strongly Agree
This project-based assignments allowed me to make connections between theory and problems of practice.	6.00 (0.91)	75
This project-based assignments are relevant to my dissertation.	5.25 (1.53)	50

linked the theories of various researchers together in meaningful connections that helped them make sense of their dissertation topics on a deeper level.

When coding the qualitative data from multiple sources regarding relevance, three key themes emerged: real life connections, research practices, and approaches to problems of practice. One participant spoke explicitly to the connection between theory and practice, saying: "Listening to the leader I interviewed brought some of the theories we have explored to light in a real lived experience." Another highlighted the value of the course learning in preparing for their dissertation research, specifically stating how "This project helped to shape how we evaluate and approach research," while another described how it helped solidify learning around the entire process of interviewing: "This was great practice for developing interview questions, as well as presenting the information. It also gave me ideas of how much data I could get from a half an hour interview. The presentation as well was great practice for the upcoming proposal."

Another practitioner-scholar described how the presentation component helped prepare them specifically for their upcoming dissertation defenses: "Sharing the videos helps us to prepare for presenting information in a professional manner. I do believe that this helps us to polish our delivery of material in clear and concise ways which will help in our dissertation defense and in future presentations of our research." These particular course-based projects appear to have been perceived as relevant by these scholars.

### Perceived Impact of Course-Based Self-Study on Connectivity to Cohort

Second, the perceived impact of the course-based self-study on connectivity to cohort was explored. This project was designed to be collaborative in nature in two different ways: both in pairings (i.e., micro research teams) and across the cohort overall (i.e., the collective research team of the class and professor). These mechanisms were designed strategically to increase connections, relationships, learning, and networks across and within the cohort. The impact of these attempts was measured through the survey item provided in Table 2 ( $n = 13$ ). It appears the project had a strong positive impact on connectivity within the cohort, with 83% of students strongly agreeing. This was the highest rated item of all the items.

**Table 2. Student Perceptions of the Impact of the Project-Based Assignment on Connectivity to Cohort**

Survey Item Regarding Connectivity to Cohort	M (SD)	Percent Strongly Agree
This project-based assignment impacted my connectivity to my cohort.	6.08 (0.86)	83

*Note.* 1 = strongly disagree; 7 = strongly agree.

When coding the qualitative data from multiple sources regarding connectivity to the cohort, the qualitative data identified various ways this project helped them connect to their peers. The participants seemed to find the interview and technology aspects to be especially community building. For instance, one participant said, "Watching and commenting on my cohort work was extremely welcoming. It showed many different skills of people within the cohort as well as an opportunity to get a better understanding of their [theoretical] framework." Participants also described how "presenting the leadership interviews using technology that was new showed vulnerability," which increased connectivity to the cohort and built relationships. In addition, these activities seemed to provide new insights into each individual's leadership styles: "I loved watching all of the interviews. I feel that each cohort member was so creative. Their choice of leader, their choice of platform, and their key takeaways also revealed a lot about who they are as leaders as well." Overall, the responses to the impact of this project on connectivity was positive.

### Perceived Impact of Course-Based Self-Study on Identity Development

Third, and arguably most importantly, the perceived impact of the course-based self-study on identity development was explored. It does appear participating in this project had an impact on students' perceptions of themselves as a leader, with 75% strongly agreeing that the project impacted their learning about themselves as a leader. It also appears that participating in this project had a positive, although somewhat less so, impact on students' perceptions of themselves as practitioner-scholars or researchers. This item was rated the lowest of all survey items ( $n = 13$ ), with 50% strongly agreeing; see Table 3.

**Table 3. Student Perceptions of the Impact of the Project-Based Assignment on Identity**

Survey Item Regarding Identity Development	M (SD)	Percent Strongly Agree
This project-based assignment impacted my learning about myself as a leader.	5.50 (1.19)	75
This project-based assignment impacted my identity development as a practitioner-scholar.	5.17 (1.57)	50

*Note. 1 = strongly disagree; 7 = strongly agree.*

When coding the qualitative data from multiple sources regarding identity development, the qualitative data triangulated these findings that these doctoral students did learn and grow as both leaders and scholarly practitioners through both the course assignments and the process of researching their cohort. In terms of growing as a leader, these results largely mirrored the previous findings regarding relevance and community building. Several student participants described reflecting on their leadership values. For example, one student stated, "I learned more about my core values and beliefs and the actions that I take as a leader that is reflective of my values and beliefs." Others explicitly stated the values that were explored: "Through analyzing the values of the leader I interviewed: [including] courage, compassion, capacity building, good listening... I was able to think about my identity."

These students also described identity development as researchers. For instance, one student said:

I think working together on this project helped to define my role

as a professional researcher. We learned so much just collaborating and making decisions together. I wish the entire course was collaborative work like this. We enjoyed coding together and learning from each other.

Another practitioner-scholar appreciated applying the research process in this project: "I think it helped show us more efficient ways to code data. It also helped to model how to write research papers. I found the writing part of this process extremely valuable." Students were able to practice skills and also reflect on how a research study can be developed and implemented in a real-life setting. Another agreed, saying:

I think that listening, reflecting, and commenting on the other projects created an opportunity to be a practitioner-scholar. I had to really listen to make connections to previous learning and connections throughout the interview projects. There were threads that ran through all of the interviews - relationships, being knowledgeable in your field, high expectations, equity, communication, trustworthy, strength.

While identity development is not a brief process, it appears participating in this course and associated projects enhanced these practitioner-scholars' identities as both leaders and researchers.

### DISCUSSION

It appears that a course-embedded self-study can help doctoral students apply concepts learned in research courses as a way of scaffolding future dissertation data collection and analysis. The application of skills and knowledge connects back to the CPED principles of creating scholarly practitioners and also developing activist leaders who build coalitions and focus on researching real life social justice issues. This embedded self-study supports CPD, which advocates for learner control and a focus on shared needs. The applicable nature of the skills and knowledge applied in this course-based research study, in addition to collaborative micro-research teams, are examples of CPD in action.

The three key themes of relevance, connectivity, and identity explored in this research project have been researched previously in the limited research on Ed.D. student development. For instance, Labaree (2003) explored meaningful and relevant learning for Ed.D. students, identifying the challenge of Ed.D. students shifting their thinking from experiential practice to theoretical lenses. This project-based self-study allowed Ed.D. students to make direct connections between their dissertation theoretical frameworks and their practices. Furthermore, the explicit connections participants were able to make between theory and practice support andragogical principles of problem-oriented learning that honors the lived experiences of the adult learner (Knowles, 1970).

The identity development of Ed.D. students is perhaps the most heavily researched aspect of literature on Ed.D. students (i.e., Buss et al., 2014; Caskey et al., 2020; Murakami-Ramalho et al., 2008). One study (Caskey et al., 2020) scaffolded student researcher identity development by asking students to draw pictures of their researcher identity and then write a reflective narrative with an understanding that doctoral students will be more successful when they have established their identity as researchers. The two key dimensions of developing a researcher identity were agency, or the ability to make changes, and the research process dimensions. In Caskey et al.'s (2020) study, embedded reflective writing

opportunities aided student identity development, and students displayed a stronger researcher identity in the spring as compared with the fall. This self-reflective practice was also a beneficial aid in student development in this self-study. For instance, one participant said, "I think that listening, reflecting and commenting on the other projects created an opportunity to be a practitioner scholar." The project-based self-study appeared to help students in their identity development as scholarly practitioners.

The cohort-model for Ed.D. programs is frequently mentioned in existing literature as an area of potential benefit for students and an area in need of future research (i.e., Wagner, 2014). This increasingly popular program model has seen increased retention rates and can provide more support for students (Lei et al., 2011). Furthermore, Fifolt and Breaux (2018) found that students valued the peer and faculty relationships established within a cohort model. The diversity of cohort membership continues to increase, and Martin et al. (2021) call on predominantly White faculty members to integrate diverse voices, particularly Ed.D. practitioner-scholars who have shared their experiences developing as researchers, into the curricula. The community created in a cohort appears to be enhanced when members share their lived experiences and feel a sense of collectiveness (Martin et al., 2021). In this self-study, Ed.D. student participants frequently mentioned the impact of the cohort on their individual learning, particularly as they engaged with the leadership interview projects created by group members. For instance, one participant commented on how they "love learning from the brilliant people in my cohort. I have learned more about each individual as a leader as well as about their strengths as presenters and tech[nology] users." The interactive nature of the project-based self-study helped to grow cohort connectivity.

Additionally, the self-study component of this research project also benefited from cohort collaboration, with one participant saying, "Working with another person on the qualitative analysis was incredibly helpful. We could brainstorm categories together," and another stating: "I think working together on this project helped to define my role as a professional researcher. We learned so much just collaborating and making decisions together... We enjoyed coding together and learning from each other." There appears to be many potential benefits to collaborative, cohort learning.

## Limitations

Several limitations must be considered when interpreting these results cautiously. This was just one case study of one course in one doctoral cohort of only 13 students. Future research is necessary to understand how this course might operate differently under different conditions and with other cohorts of practitioner-scholars with varying research interests.

Further, while the findings described above reflect general overarching positive impacts of this particular course-based research project, it is important to note it was not perfect in implementation nor perceived impacts. In terms of implementation, one practitioner-scholar described how "the project felt like a performance and felt forced and awkward." As this was the first attempt at adding a self-study to the project-based learning, future improvement of the link between the two components would be helpful. In terms of perceived impacts, one student described little impacts in terms of identity development because "I think I had a really strong self-identity as a researcher going into this project." Students join graduate programs with various levels of research competency, and this variance must

be considered when designing collective research projects. Providing leadership roles around a self-study project for Ed.D. students with more developed research skills could be a method for empowering and engaging students in the research process.

## Recommendations

Despite these limitations, several recommendations arise for Ed.D. programs to consider. The first recommendation is to consider implementing project-based learning into Ed.D. courses. It appears project-based learning can provide Ed.D. students with opportunities to make connections between theory and practice. This approach to learning integrates numerous of the CPED principles (2021), including transforming the classroom into a laboratory of practice where students can engage with real life problems and enhance their scholarly expertise.

The second recommendation is for Ed.D. programs to consider embedding a self-study into non-research Ed.D. courses. Research skills take time to build, and a spiraled curricula (i.e., interleaving) may help scaffold Ed.D. student learning and application of research skills (Firth, 2021). Ed.D. programs that continue to revisit and build on research skills learned earlier in Ed.D. programs could help students be better prepared for future challenges such as the dissertation, better connect to their cohort, and enhance their identities as researchers and leaders.

The third recommendation is for Ed.D. programs is to consider embedded, strategic, and explicit ways to prepare practitioner-scholars for future challenges (i.e., their upcoming dissertation), to help them better connect to their cohort, and to enhance their identities as researchers and leaders. Other researchers have found unique mechanisms such as utilizing research-practice partnerships to help Ed.D. students develop as scholarly practitioners (Ralston et al., 2016). This ability to adapt and differentiate instruction to meet student needs is imperative in uncertain times. This study occurred during the COVID-19 pandemic, which research has found added unique stressors for doctoral students and impacted dissertation work flow (Ralston & Smith, 2022). It is therefore critical that Ed.D. curricula tailor course work to the unique needs of students and to consider the context of the learning experiences.

## CONCLUSION

It appears that a course-embedded self-study can help doctoral students apply concepts learned in research courses as a way of scaffolding future dissertation data collection and analysis. During the self-study data analysis work session, students were visibly excited about planning and engaging in the data analysis with their peers. One participant stated, "I enjoyed being both a participant and a researcher. It was fascinating to watch a research study unfold as we were working." This self-study occurred in the spring semester of the second year of a three-year doctoral program, which seemed to be the perfect time to apply two years of learning prior to these students collecting their dissertation data. The application of skills and knowledge connects back to the CPED principles of creating scholarly practitioners and also developing activist leaders who build coalitions and focus on researching real life social justice issues. This process provided demystifying clarity for students and helped participants to see that the role of the researcher is to tell a story with the data you have: "I really appreciate qualitative data and the story it tells." The beauty of the self-study is that the researchers are the



characters in their story; these doctoral students continue to develop as educational leaders, seeking truth within their research about themselves as learners. One practitioner-scholar summed it up well, stating: "I think I am beginning to see how research can be a part of my real life beyond the Doctorate program."

## REFERENCES

- Bandura, A. (1971). *Social learning theory*. General Learning Press.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Becton, Y. J., Bogiages, C., D'Amico, L., Lilly, T., Currin, E., Jeffries, R., & Tamim, S. (2020). An emerging framework for the EdD activist. *Impacting Education: Journal on Transforming Professional Practice*, 5(2), 43–54. <https://doi.org/10.5195/ie.2020.131>
- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.
- Buss, R., Zambo, R., Zambo, D., & Williams, T. (2014). Developing researching professionals in an EdD program. *Higher Education, Skills and Work - Based Learning*, 4(2), 137–160.
- Carnegie Project on the Education Doctorate (CPED). (2021). The CPED Framework. <https://www.cpedinitiative.org/the-framework>
- Collaborative for Academic, Social, and Emotional Learning (CASEL). (2020). *SEL: What Are the Core Competence Areas and Where are they Promoted?* <https://casel.org/sel-framework/>
- Caskey, M. M., Stevens, D. D., & Yeo, M. (2020). Examining doctoral student development of a researcher identity: Using the draw a researcher test. *Impacting Education: Journal on Transforming Professional Practice*, 5(1). <https://doi.org/10.5195/ie.2020.92>
- Creswell, J. (2013). *Qualitative inquiry & research design: Choosing among five approaches*. Sage.
- Danielson, C. (2017). *Kentucky framework for teaching*. Kentucky Department of Education. <https://education.ky.gov/teachers/PGES/TPGES/Documents/Kentucky%20Adapted%20Danielson%20Framework%20for%20Teaching%20with%20OPGES%20frameworks.pdf>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer Science + Business Media.
- Dewey, J. (1933). *How we think*. Heath and Company.
- Dover, A. G., Kressler, B., & Lozano, M. (2020). "Learning our way through": Critical professional development for social justice in teacher education. *The New Educator*, 16(1), 45–69. <https://doi.org/10.1080/1547688X.2019.1671566>
- Epstein, J. L. (1992). School and family partnerships in Alkin, M. (Ed.), *Encyclopedia of educational research* (6<sup>th</sup> ed., pp. 1139-1151). Macmillan.
- Fifolt, M., & Breaux, A. P. (2018). Exploring student experiences with the cohort model in an executive EdD program in the Southeastern United States. *The Journal of Continuing Higher Education*, 66(3), 158–169. <https://doi.org/10.1080/07377363.2018.1525518>
- Firth, J. (2021). A systematic review of interleaving as a concept learning strategy. *Review of Education*, 9(2), 642–684.
- Gay, G. (2002). Preparing for Culturally Responsive Teaching. *Journal of Teacher Education*, 53(2), 106–116.
- Hoover-Dempsey, K. V., Walker, J. M. T., Sandler, H. M., Whetsel, D., Green, C. L., Wilkins, A. S., Closson, K. (2005). Why do parents become involved? Research findings and implications. *The Elementary School Journal*, 106(2), 105–130. <https://doi.org/10.1086/499194>
- Knowles, M. (1970). *The modern practice of adult education: Andragogy versus pedagogy*. Association Press.
- Lei, S., Gorelick, D., Short, K., Smallwood, L., & Wright-Porter, K. (2011). Academic cohorts: Benefits and drawbacks of being a member of a community of learners. *Education*, 131(3), 497–504.
- Loughran, J. (2018). Learning about self-study of teacher education practices. In J. K. Ritter, M. Lunenberg, K. Pithouse-Morgan, A. P. Samaras, & E. Vanassche (Eds.), *Teaching, learning, and enacting of self-study methodology: Unraveling a complex interplay*. (pp. 1-7). Springer.
- Martin, S. B., Gournaris, K., Jaffery, Z., Hatfield, L., Jung, S. J., Xiang, L., Anderson, I., & Caskey, M. M. (2021). EdD graduate perspectives: Uplifting our own voices. *Impacting Education: Journal on Transforming Professional Practice*, 6(1), 45–52. <https://doi.org/10.5195/ie.2021.124>
- Murakami-Ramalho, E., Piert, J., & Militello, M. (2008). The wanderer, the chameleon, and the warrior: Experiences of doctoral students of color developing a research identity in educational administration. *Qualitative Inquiry*, 14(5), 806–834. doi:10.1177/1077800408318309
- Peercy, M. M., Alkandil, D., Cauffman, R., Hudson, S., Lane, S., Petillo, A. E., Reeves, E., & Sonnier, A. (2018). "Standing in a messy sandpit": The learning side of self-study research. In J. K. Ritter, M. Lunenberg, K. Pithouse-Morgan, A. P. Samaras, & E. (Eds.), *Teaching, learning, and enacting of self-study methodology* (pp. 259-273). Springer.
- Picower, B. (2015). Nothing about us without us: Teacher-driven critical professional development. *Radical Pedagogy*, 12(1), 1–26.
- Ralston, N. C., Tarasawa, B., Waggoner, J. M., Smith, R., & Naegele, Z. (2016). Developing practitioner-scholars through university-district research partnerships. *Journal of Public Scholarship in Higher Education*, 6, 94–107.
- Ralston, N. C., & Smith, R. (2022). The pandemic as a soundtrack for the dissertation journey: Obtaining flow during unprecedented times. *Journal of Research on Leadership Education*. <https://doi.org/10.1177/19427751221125257>
- Ryan, A. M., & Watson, S. (2021). Impact and inclusion: Transforming an EdD program into a crucible for systems change. *Impacting Education: Journal on Transforming Professional Practice*, 6(1), 11–16. <https://doi.org/10.5195/ie.2021.123>
- Saldaña, J. M. (2015). *The coding manual for qualitative researchers* (3rd ed.). SAGE Publications.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. Broadway Business.
- Wagner, T. L. (2014). *A retrospective analysis of leadership identity development and career paths of doctoral student completers in one leadership program*. Ashland University.