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**Examining and Expanding the Impact of Practice-Based Teacher Education at
National Louis University
Faculty Research Residency Final Report 2017-18**

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Abstract

This study investigated the perceptions about literacy preparation of recent graduates from NLU's multiple teacher preparation programs. Specifically, the researchers surveyed NLU students who graduated between 2014-17 to determine which literacy concepts/practices they felt were most important in their first year of teaching and how well prepared they were to teach those concepts/practices. In addition, graduates were asked to consider the instructional practices they encountered during their NLU coursework and whether these practices were helpful in learning to teach literacy. Graduates were also asked to consider how well prepared they were to teach literacy in general. Initial analysis of data led the researchers to conclude the following: 1) Perception of preparedness varies by programs, with students in programs that implement more practice-based literacy learning reporting far better preparedness than students in the other programs; 2) Across programs, students find practice-based classroom experiences to be more helpful than more traditional experiences; 3) In several programs, high numbers of respondents did not appear to have opportunities to teach literacy with actual P-12 students; 4) Though there are some literacy practices that graduates seemed relatively well-prepared to teach, there are gaps between perception of importance of literacy practices and how well prepared our graduates felt to teach them. In particular, in the areas of writing, classroom discussion, and comprehension, survey respondents felt unprepared during their first year of teaching.

Statement of the Research Problem

A growing number of studies indicate that theoretical knowledge about teaching and learning is most effectively learned through actually teaching. Ironically, traditional teacher preparation programs provide teacher candidates with relatively few opportunities to teach (Darling-Hammond, 2006). To address this, researchers such as Ball and Forzani (2011) argue that teacher education programs must develop a "common core of learning to teach" including focus on high-leverage practices, or fundamental teaching practices that are constantly used across grades and subject areas to help students learn content. A practice-based teacher education program (PBTE) accelerates teacher learning of these high-leverage practices (e.g. Ball & Cohen, 1999; Grossman & McDonald, 2008; Zeichner, 2012).

National Louis University has made an important contribution to this shift toward practice-based approaches through the development of the Adaptive Cycles of Teaching (ACT) which has been successfully at the elementary levels for pre-service teachers (e.g. Freedman, Phillips & Salmon,

2015) and has been explored for use with in-service teachers (Phillips, Salmon, & Freedman, 2016). In Adaptive Cycles of teaching, university instructors introduce a high-leverage practice, giving teachers several examples of the practice and guiding them through determining its key features. Teachers plan and teach three to four lessons of the same high-leverage practice, videotaping themselves implementing the practice with students in real elementary classrooms and collecting formative assessment data. Instructors provide feedback on these videos through a mobile, cloud-based software system. Once teachers have had sufficient opportunity to refine their teaching, the cycle begins again with another high-leverage practice.

While ACT has been successful at the elementary level (BA students only) and in K-8 buildings, a similar process has yet to be enacted within the MAT elementary, middle grades or secondary level for several reasons. First, since NLU's MAT elementary and secondary programs are considerably larger, expanding to that level means finding ways to do the work at scale. Second, from a literacy standpoint, identifying agreed-upon core practices becomes more complex as literacy becomes more specialized and discipline-specific at the secondary level. In addition, content area teachers are less likely to see an explicit focus on literacy instruction as their responsibility (Shanahan & Shanahan, 2008). Nonetheless, given the success of the Adaptive Cycles of Teaching and the positive momentum (and funder interest) in practice-based approaches, it was logical to investigate how practice-based teacher education can be expanded to our Middle Grades Education (MGE) and Secondary Education program. This mixed methods study (Cresswell & Clark, 2007) aims to (1) determine what learning experiences NCE graduates felt were most helpful in preparing them to teach essential literacy skills/concepts, (2) determine how prepared graduates felt to teach these practices in their first year in the classroom (3) understand how responses may vary across programs, in particular between programs that use ACT to those that do not and (4) determine how important candidates felt the literacy skills and concepts were at their own schools, including gaps in perceived importance of particular literacy skills/concepts and perceived level of preparation to teach these skills, along with additional skills identified by graduates but not included in our survey.

In the winter of 2017-18 we surveyed a cross-section of recent NCE graduates. After gathering demographic information, graduates were asked what learning activities at NLU they felt best prepared them to teach literacy practices. Then they were asked to rate how prepared they felt to teach a series of practices and how important the practice was in their particular context. Practices were organized using a model of literacy progression that categorizes literacy practices as basic, intermediate and advanced to reflect how they become increasingly specialized (Shanahan and Shanahan, 2008). In addition, we asked candidates what additional practices they considered to be high-leverage at their school. We hypothesized that practices associated with practice-based teaching would be highly rated. This data was analyzed in order to gain insight into how prepared graduates who experienced the ACT practice-based teaching approach felt in comparison to graduates who did not experience this approach, along with other differences between programs. The results of this study will help us ensure that learning experiences that

graduates find most helpful are well-represented in our coursework and that literacy practices that graduates find most important but feel relatively less prepared to teach are given priority. This research will also be used to further refine the list of high-leverage secondary literacy practices by seeing what additional practices candidates found most important in their own contexts.

This study occurred in concert with the efforts of NLU's Practice-Based Teaching Work Group, of which the first researcher is a member. The Practice-Based Teaching Working Group is an ad-hoc group formed to help expand PBTE beyond the BA elementary level at NLU. Over the summer of 2017, this group researched existing practice-based teacher education models and synthesized a list high-leverage literacy practices for potential inclusion in a model of middle and secondary practice-based teacher education. They chose one practice (facilitating an effective discussion) and identified faculty members willing to pilot it during the 2017-18 school year. Using cycles of design-based research (DBR) (Reinking & Bradley, 2008), they met at the end of each quarter to examine data from pilots and identify emergent enhancing and inhibiting factors, using these to make decisions about how to adjust and improve their teaching practice. We viewed the pilots and data stepbacks as a form of professional development (PD) for faculty, and used DBR to adjust the PD efforts (Cobb, Jackson & Dunlap, 2016). In a sense, the study reported on within this paper is encompassed within these larger design-based research efforts. For instance, the preliminary findings from the study informed interpretation of the last data stepback and the retrospective analysis of findings across the year. For example, the study findings influenced the decision to emphasize enactment and coaching for the Faculty Research Residency study that the group designed. Therefore, this paper will include recommendations for how study findings should inform a practice-based teacher education model for middle and secondary education, including revisions to coursework and implications for these related efforts.

Research Questions

This research was undertaken to answer the following questions:

1. What learning experiences did NCE graduates feel were most helpful to prepare them to enact high-leverage literacy practices during their first year in the classroom?
2. How prepared did NCE graduates feel they were to teach these literacy practices during their first year?
3. How do the responses of NCE graduates vary across programs [e.g. candidates experiencing Adaptive Cycles of Teaching (ACT) vs other programs]?
4. How important do candidates feel the high leverage practices were in their contexts? What practices do candidates rate as highly important, yet felt underprepared to teach? What practices that they deemed important were not included in our survey?

Literature Review

Practice-based teacher education. There is a strong theoretical and empirical basis for practice-based teacher education programs (e.g. Ball & Cohen, 1999; Ball & Forzani, 2011; Grossman & McDonald, 2008; Zeichner, 2012). Practice-based teacher education is premised on the theory that teachers learn best by actually teaching. In PBTE, teachers often view *representations* such as videos of the practice, *decompose* the practice by breaking it down into its constituent parts, and *approximate* the practice by *rehearsing* it in settings of reduced complexity, such as their higher education classroom. They then *enact* the practice in a K-12 setting with *coaching and feedback*, and *revise* their teaching based on synthesizing this feedback along with formative assessment data (Grossman, Hammerness & McDonald, 2009).

National Louis has played an important role in this movement toward practice-based teacher education through the Adaptive Cycles of Teaching or ACT, made possible by University support of previous Faculty Research Residencies (e.g. Freedman, Salmon, Degener & O'Connor, 2016). The second researcher helped to identify elementary-level high-leverage literacy practices in collaboration with NLU colleagues through study of the Chicago Teacher Partnership Program (CTPP) schools, along with their own knowledge of literacy theory and pedagogy. These high-leverage practices included an emphasis on balanced literacy instruction and effective instructional discourse in the context of writing mini-lessons, shared reading lessons, word study lessons, guided reading lessons, and teacher read aloud (Freedman, Phillips & Salmon, 2015).

In recent years, similar practice-based teacher education models have expanded nationally at both the elementary and secondary levels. For example, the [Core Practice Consortium](#) is a collaboration between several leading research universities focused on defining the high-leverage practices at the center of practice-based teacher education. Members of this consortium are conducting research to articulate these practices both within and across disciplines (e.g. Fogo, 2014).

Design-based research as professional development. In spite of this important work, there is no consensus about the best way to help candidates learn from practice, or for that matter, how to help faculty to make the transition to PBTE (Zeichner, 2010). However, studying one's own practice is one way to promote faculty learning in ways that traditional professional efforts cannot (Cochran-Smith & Lytle, 2004). Design-based research (DBR), which includes iterative cycles of instruction, data collection and analysis, is a powerful form of studying teaching and learning in all its complexity (Reinking and Bradley, 2008). In our work, members of the Practice-Based Teaching Working Group volunteered to pilot incorporating PBTE in their existing coursework. The group as a whole engaged in DBR in the form of data stepbacks at the end of each quarter, determining enhancing and inhibiting factors and making revisions to the next cycle of implementation. While DBR has been used to study professional development

efforts (Cobb, Jackson & Dunlap, 2016), our approach frames the process of engaging in DBR as professional development in and of itself.

The increasing specialization of literacy development. Shanahan and Shanahan (2008) developed a model of literacy progression that captures the increasing specificity of literacy practices, from basic processes that occur any time a text is read, to intermediate practices including generic comprehension strategies and reading skills involved in reading longer texts, to disciplinary literacy, which includes the specialized literacy practices of the disciplines. The first stage, basic literacy, includes universal literacy skills which are foundational in teaching children to read such as concepts of print, decoding using phonics and phonemic awareness, sight word recognition, and building fluency with simple, short texts (NICHD, 2000). The second stage consists of generic comprehension and writing strategies that could be applied across content areas, such as such comprehension strategies like Question-Answer Relationships (QAR) (Raphael, 1982) and K-W-L (Ogle, 1986) and writing-to-learn techniques such as quick writes, summary writing, and journaling. They also included strategies for learning more complex academic vocabulary such as using context clues, and building reading fluency for longer texts.

In contrast to intermediate literacy, disciplinary literacy involves employing the specialized practices that experts use to read and write disciplinary text. For example, Wineburg (1991) determined that historians use specialized heuristics, or short-hand thinking tools, such as contextualization (thinking about how the historical circumstances may have shaped a document's content). There have also been studies that have compared the reading practices of experts across the disciplines. While practices such as close reading, sourcing, and corroboration are common across the fields of history, math and chemistry, they are enacted in specialized ways for particular purposes (Shanahan, Shanahan & Misischia, 2011). The Common Core State Standards were also designed to include these advanced literacy practices (NGACPB & CCSSO, 2010).

The survey was designed with a section to address each of these stages of literacy. Since there are not clear-cut distinctions between when students engage in these practices, all candidates were asked to respond to questions about all areas, with the understanding that, for example, primary-level candidates would probably be more likely to feel prepared to teach basic literacy, and secondary candidates would likely be more prepared to teach disciplinary literacy. In addition, though not often explicitly taught at the middle and secondary levels, basic literacy skills are in use every time a student reads a text.

Discussion as a high-leverage practice. One of the goals of the survey was to determine what practices candidates considered high-leverage in their own contexts to inform the selection of practices as a part of our middle and secondary model of practice-based teacher education. The first practice that we agreed to choose for the focus of our pilots of practice-based teacher education was facilitating an effective discussion. Discussion has been identified as an essential

teaching practice (National Board for Professional Teacher Standards, 2002). Ineffective discussions, where teachers control the discourse and ask lower-level questions, have been shown to limit student learning and engagement (e.g. Alexander, 2008). In contrast, leading an effective discussion requires that teachers take roles as facilitators of learning, engaging in collaborative construction of new knowledge with students (e.g. Reznitskaya, 2012). However, dialogic teaching rarely occurs even within education programs for learners achieving at or above grade level. Diverse students, who are more likely to receive remediation or scripted curriculum, are less likely to experience dialogic teaching. Therefore, it is all the more important for novice teachers to learn how to use this practice effectively in order to remedy this unfortunate pattern.

Methods

Data collected for this study consisted of survey data (e.g. Fowler, 2014; Berends, 2006), which was used to inform the ongoing design-based research and program improvement efforts. It was analyzed using mixed methods, specifically quantitative analysis for the scaled survey items and qualitative analysis for the open-ended responses. Qualitative analysis of open-ended items is ongoing.

The survey had three main sections. The first asked for demographic data, including which teacher preparation program the participant had completed, how many years the participant had been teaching, what grades and subject area they taught, what educational position they held, and the location of their first teaching position. The second section asked participants to consider the learning experiences they'd had during their coursework at NLU and how helpful those experiences were in preparing them to teach key literacy concepts/skills. If they didn't experience it, they were asked to select "N/A". The third section had three subsections divided into basic literacy, intermediate literacy, and disciplinary literacy. Each section had a list of literacy skills or concepts and scale items requiring two distinct two responses. The first query asked students how well their experience at NLU prepared them to teach a particular literacy skill or concept. They responded using a scale of "not at all prepared, somewhat prepared, well prepared, and very well prepared." The second query asked them to consider how important the skill or concept was during their first year of teaching. They responded by selecting "not important, somewhat important, or very important."

At the end of each section there were two open-ended items. The first item asked what skills or concepts they were most effective in teaching in their first year within the classroom. The second item asked how they assessed these literacy skills during their first year of teaching. At the end of the survey, they were asked if there were any additional literacy skills or concepts that were not reflected on the survey that were particularly important and how they taught those concepts. There was a final open-ended prompt that simply asked them if they have anything

additional they would like to say about the preparation they received at NLU. The open-ended data have yet to be analyzed.

The surveys were administered online through Survey Monkey during the winter of the 2017-18 academic year. A list of recent graduates was acquired from NLU's Office of Institutional Advancement. The surveys were sent to recent graduates (2014, 2015, 2016, and 2017) of the NCE's BA and MAT programs, including, for BA, the Early Childhood Education, Elementary Education and Special Education programs, and for MAT, Early Childhood Education, Elementary Education, Middle Grades Education, Secondary Education and Special Education programs.

The survey was sent to 2,170 total graduates. 182 email addresses were no longer in use, meaning a total of 1,988 were successfully sent. Participants were offered an incentive of a five-dollar Amazon gift card upon completion of the survey, along with being entered in a drawing for a \$50 Amazon gift card. They consented to participate at an early step in the survey. If they declined to consent, their data was not included in the analysis. The response rate was 17%, although only 6% of respondents completed the entire survey. Since the survey consisted of several discrete sections, incomplete surveys still provided usable data in many instances.

Halfway through the administration window, the decision was made to reorder survey items (moving the questions about what learning experiences were most beneficial from the last section to the first section of the survey) to ensure a more balanced completion of survey items. While the completion rate was not particularly strong, we believe this is due to the length of the survey and not any sort of systematic response that would skew our data. In addition, this completion rate was stronger than the response rate for a recent survey of alumni conducted by the university.

Though we did not collect data about age or gender as part of our survey, the respondents are drawn from the demographic makeup of our graduates as a whole, who are more likely female than male, and often fall within the ages of 24 and 50. The largest number of responses (35.96%, 123 responses) came from the MAT Elementary Education program. The MAT Secondary Education (28.95%, 99 responses) and MAT Special Education (15.79% 54 responses) also accounted for a large portion of the remaining responses. Detailed information about program response rates is contained in Table 1.

Table 1: Teacher Preparation Programs Represented by Survey Respondents (n=342)

<u>Program</u>	<u># of Respondents</u>	<u>% of Respondents</u>
BA Early Childhood	7	2%
BA Special Education	2	0.6%
BA Elementary Ed.	25	7%
MAT Early Childhood	14	4%
MAT Special Education	54	16%

MAT Elementary Ed.	123	36%
MAT Middle Grades	11	3%
MAT Secondary	99	29%

Sixty-one percent of our respondents indicated that their first teaching job was as a classroom teacher, while 19% were special education teachers, 9% were teacher assistants, and fewer than 2% were interventionists. The remaining 10% indicated a variety of jobs including substitute teacher, education director, ESL or ELL teacher. There were also a number of respondents who indicated that they did not get a job in teaching.

Respondents represented a wide range of grade levels in their first year of teaching (refer to Table 2). Forty-three percent of respondents reported that they taught all subjects in primary or elementary, while 19% indicated that they were ELA teachers. Twenty-one percent taught math, science or social studies, while 16% selected the “other” option, indicating that they taught foreign language, technology, art, music, and business, or more than one subject area (e.g. reading/math, reading/Spanish, etc.). Table 3 provides a detailed breakdown of content area represented by survey participants.

Table 2: Grade Level during First Year of Teaching (n=341)

<u>Grade Level</u>	<u># of Respondents</u>	<u>% of Respondents</u>
PreK	19	6%
K	17	5%
1	27	8%
2	27	8%
3	21	6%
4	21	6%
5	15	4%
6	10	3%
7	20	6%
8	13	4%
9	18	5%
10	11	4%
11	5	1.5%
12	1	0.3%
PreK-2	2	1%
3-5	13	4%
6-8	14	4%
9-12	52	15%
Other	35	10%

Table 3: Content Area during First Year of Teaching (n=339)

<u>Content Area</u>	<u># of Respondents</u>	<u>% of Respondents</u>
Primary (all areas)	60	18%
Elementary (all areas)	86	25%
English/Language Arts	65	19%
Science	30	9%
Math	25	7%
Social Studies	18	5%
Other	55	16%

As noted above, the survey was only given to recent graduates, but it was most likely to be completed by graduates who had already been teaching for four years. Table 4 shows the distribution of respondents by years of teaching. Table 5 shows the teaching positions that respondents currently hold.

Table 4: Years of Teaching Experience of Respondents (n=335)

<u>Years of Teaching</u>	<u># of Respondents</u>	<u>% of Respondents</u>
0	23	7%
1	42	13%
2	58	17%
3	62	19%
4	150	45%

Table 5: Current Teaching Position of Survey Respondents (n=341)

<u>Current Teaching Position</u>	<u># of Respondents</u>	<u>% of Respondents</u>
Classroom Teacher	195	57%
Special Education Teacher	61	18%
Teaching Assistant	8	2%
Interventionist	6	2%
Instructional Coach	5	1.5%
Reading Specialists	1	0.3%
Other	65	19%

Data were analyzed using descriptive statistics on the SurveyMonkey platform, typically comparing the percentage responses to particular items amongst different groups. For example, we might compare the BA Elementary Ed program and the MAT Early Childhood program, both of which use versions of ACT, to other programs. However, while the BA Elementary Ed program has been using Adaptive Cycles of Teaching for the entire time, the MAT Early Childhood program has just begun using ACT in the last two years. Planned future analysis will include qualitative analysis of open response items through open coding and constant comparative analysis (Corbin, Strauss & Strauss, 2014). We also intend to complete regression analysis using variables such as the level of preparedness and to determine the statistical significance of patterns within survey responses.

We also made choices in how to compare percentage responses. For instance, in analyzing the question about what learning experiences were most helpful, we analyzed differences in practices students found “very helpful”, rather than combine somewhat helpful and very helpful for the sake of analysis. That is because nearly all established instructional practices are somewhat helpful, so combining the categories wouldn’t have provided much of a meaningful contrast to study.

Additionally, we had to decide what programs to include in the analysis. For the purpose of this paper, the smallest program (MAT Early Childhood) included in our analysis was $n=14$, to ensure there were enough responses to ensure differences were not likely to be due to chance.

When candidates rated the helpfulness of different learning experiences, the percentage indicating N/A seemed high overall (16%). We examined this further and found that there were indeed differences between program. For example, more than a quarter of secondary students reported that they didn’t have opportunities to teach literacy skills to actual students in grades 9-12.

We also looked at the cumulative level of perceived preparedness by grade band and compared the most and least helpful practices as identified by graduates who felt very prepared, somewhat prepared, somewhat unprepared, and very unprepared.

Changes to study design. Initially, after the surveys were completed, data was intended to be collected from school leaders at one partner school in order to get their thoughts about what practices were considered high leverage in their context. In the interim, a partnership was established with this partner school and the National College of Education emphasizing transforming student teaching. The school ended up focusing the partnership efforts around transforming student teaching. To this end, the school ended up surveying their own teachers about what practices they felt were high leverage, under the guidance of Kavita Matsko, using a list of high-leverage practices proposed by TeachingWorks, an organization at the University of Michigan that engages in practice-based teacher education. This data will be used when selecting additional practices for this effort.

In addition, there was initially a plan to conduct a focus group of AP teachers at the partner school to determine what practices were high leverage. However, due to a number of competing initiatives, rather than a focus group of Maine West AP teachers, design-based research (DBR) was undertaken in one AP teacher's classroom. The goal of this work was part of a larger effort to increase Latinx student enrollment and success in advanced coursework. The emphasis was on dialogic teaching (Bakhtin, 1984; Reznitskaya, 2012), a process where teacher and students collectively build knowledge through discussion of challenging texts and ideas. The goal of this dialogic teaching was to improve the writing of evidence-based arguments. At the end the second cycle of DBR, there were improvements in student writing for focal Latinx students who were members of a student group the research team formed to support Latinx student success in AP. These students also experienced growth in reading comprehension as measured by the Star assessment (Renaissance Learning, 2010) and all students experienced increases in writing self-efficacy. Enhancing and inhibiting factors from this research will be used to inform how the high-leverage practice of discussion is taught at NLU.

Findings from Part Two of Survey, Literacy Learning Experiences during NLU Coursework

Graduates appear to value learning experiences consistent with practice-based teacher education. In analyzing the survey results, we saw clear evidence that graduates across all programs valued learning experiences that focused on actively learning about and practicing literacy instructional practices (such as instructor modeling, teaching actual P-12 students, getting feedback about that teaching, and self-reflection on teaching) more than experiences that were further removed from actual practice (such as reading textbooks, writing about the practices, and reading literacy research). Table 6 provides the percentage of respondents that indicated a literacy practice was “very helpful” on the literacy survey.

Graduates appear to value approximations of teaching within university classrooms less than other elements of practice-based teacher education. We were somewhat surprised that candidates did not find approximations in the classroom as helpful as some other practices. However, we believe this may have less to do with the value of approximations in general, and more to do with how we used these approximations. For example, approximations ideally include immediate teacher feedback and opportunities to refine practice. However, we know from experience that approximations in literacy methods courses often rely primarily on peer feedback and include few opportunities to refine practice in a meaningful way. In addition, some faculty members do not provide opportunities for enactment in the field because their courses do not have a field-based component. Approximations as a form of rehearsal may seem limited in usefulness to candidates who have no chance to actually enact what they practice in K-12 classrooms. ACT teachers have narrowed the feedback that they expect peers to give early on in

the practice-based teaching cycle to those aspects that are readily observable by a novice, and emphasize teachers giving the bulk of the feedback.

Table 6: Percentage of Survey Respondents Indicating “Very Helpful” about Coursework Experiences (n=257)

<u>Learning Experience</u>	<u># Responding “Very Helpful”</u>	<u>%</u>
Teaching literacy practices to P-12 students	134	53%
Getting feedback on lessons from peers and instructor	127	50%
Seeing literacy practices modeled by instructor	126	49%
Reflecting on my own literacy practices	126	49%
Receiving coaching on literacy practices from a field coach	119	47%
Reading research about literacy practices	74	29%
Analyzing case studies of literacy lessons	71	28%
Writing or completing classwork about the literacy practices	67	26%
Reading textbook selections about the literacy practices	45	18%

Graduates value teacher modeling more than videos of practice. Though the use of teaching videos is seen by the field as an effective and efficient way for pre-service teachers to see literacy teaching in practice (e.g. Sherin, 2004), our graduates indicated that teacher modeling of literacy practices was more helpful to them than watching videos. Only 31% (n=80) of respondents indicated that “watching and discussing videos of literacy practices” was very helpful, while 49% (n=126) indicated that “seeing literacy practices modeled by the instructor” was very helpful. It is interesting to note, though, that 15% (n=38) of respondents responded N/A when asked about viewing videos, indicating that this was not a classroom experience they had while NLU students. By contrast, only 9% (n=24) responded N/A regarding teacher modeling, indicating that teacher modeling of literacy practices is a more common classroom experience for our graduates than watching videos of literacy practices.

The degree of exposure to practice-based experiences appears to vary by program. The data were analyzed across programs to determine if there were differences in classroom experiences depending on the program that students completed. While there were some consistencies (e.g. graduates do not tend to find textbook reading especially helpful, no matter the program; graduates do tend to find teaching literacy to actual P-12 students to be very helpful), it became clear that our graduates did not all have the same opportunities for practice based experiences. In particular, we noted the high percentage of respondents from some programs selecting N/A when asked about “teaching literacy practices to actual P-12 students”. Of our MAT Secondary graduates, more than a quarter responded “N/A” to this question. Table 7 breaks down the responses to that survey item by program. It is interesting to note that no respondents from the BA Elementary Ed program and the MAT Early Childhood program responded “N/A”, because these are the only two programs currently engaging in Adaptive Cycles of Teaching (ACT). Also noteworthy is how helpful graduates, across programs, do find having opportunities to practice in the field.

Graduates’ reported feelings of preparation to teach literacy practices varies by program. Overall, our graduates do not report feeling well prepared to teach these literacy skills and concepts upon graduation. In fact, only 25% of all respondents indicated that they felt “very prepared.” When broken down by program, we can see that there is a very different sense of preparedness among respondents, with BA Elementary students having a far higher sense of preparedness than respondents from other programs. Table 8 provides responses across programs and overall for the question regarding preparedness. The difference in percentages of respondents who report feeling unprepared or somewhat unprepared is also striking. While none of the BA Elementary respondents indicated they were not at all prepared and only 6% indicated they were somewhat unprepared, 24-33% of respondents across the other programs indicated that they were not at all prepared or somewhat unprepared. While the sample size is small, it is important to note that these students appear to have benefitted from the ACT program, where

they engaged in cycles of practice-based teaching around high-leverage practices and received video coaching on their instruction.

Table 7: Responses regarding helpfulness of “Teaching Literacy Practices to Actual P-12 Students”, broken down by program

Program	N/A	Very unhelpful	Somewhat unhelpful	Somewhat helpful	Very helpful
MAT Secondary (n=99)	27%	1%	9%	18%	44%
MAT Special Ed. (n=54)	18%	0	5%	33%	45%
MAT Elem. Ed. (n=123)	10%	4%	7%	20%	59%
MAT Early Childhood (n=14)	0	0	0%	17%	83%
BA Elem. Ed. (n=25)	0	6%	0%	29%	65%

Even graduates who did not feel prepared found practice-based experiences to be the most helpful. Not surprisingly, respondents who felt the most prepared found multiple sorts of classroom experiences to be very helpful. The more overall preparedness our graduates felt, the more they deemed classroom experiences to be very helpful. Even experiences such as textbook reading were rated more highly by respondents who felt best prepared. In contrast, respondents that indicated they were not well prepared were less likely to rate any classroom-based experiences as very helpful. Table 9 breaks down respondents into the four levels of preparedness, and examines the classroom literacy experiences that each category found most and least helpful. It is worth noting that regardless of how well-prepared respondents felt, they nonetheless found experiences that were consistent with a practice-based approach to teacher preparation to be the most helpful and experiences reflecting a more traditional approach to be least helpful.

Table 8: Responses to “How well prepared were you to teach literacy practices in your classroom?” by program

	Not at all prepared	Somewhat unprepared	Somewhat prepared	Very well prepared
BA Elementary Ed	0	6%	41%	53%
MAT Special Education	5	23%	43%	25%
MAT Secondary	7	22%	43%	22%
MAT Elementary Ed	13	11%	54%	20%
MAT Early Childhood	8	25%	50%	17%
All respondents (n=257)	9%	17%	47%	25%

Table 9: Most helpful and least helpful classroom experiences, by self-reported level of preparedness to teach literacy

Level of preparedness	Most helpful classroom experiences (% saying this practice was “very helpful”)	Least helpful classroom experiences (% saying this practice was “very helpful”)
Very well prepared (n=62)	Reflecting on my own teaching of practices (88%) Getting feedback from peers and instructors (88%) Seeing practices modeled by instructor (81%) Teaching literacy to actual P-12 students (80%)	Reading textbook selections about the practices (42%)

Somewhat well prepared (n=119)	Teaching literacy to actual P-12 students (52%) Seeing practices modeled by instructor (49%)	Reading textbook selections about the practices (13%)
Somewhat unprepared (n=42)	Teaching literacy to actual P-12 students (36%) Seeing practices modeled by instructor (31%)	Reading research (2%) or textbook selections (2%) about the literacy practices
Very unprepared (n=22)	Receiving coaching in the field (23%) Teaching literacy to actual P-12 students (18%)	Writing or completing classroom assignments about the practices (4%)

Findings from Part Three of Survey: Importance and Preparation to Teach Literacy Skills and Concepts

As detailed above, this part of the survey asked teachers to consider literacy concepts/practices within the categories of basic, intermediate, and disciplinary literacy. They had to assess each concept/practice within the categories according to how important it was during their first year of teaching as well as how prepared they felt to teach it. Within the basic literacy section, respondents found the following concepts/practices to be most important to understand during their first year:

- Reading is a meaning making process
- Writing process appropriate for beginning readers
- Development of phonological awareness
- Development of phonemic awareness
- High frequency word recognition

For each of these items, there was a gap between respondents' sense of importance and their own sense of preparedness; the largest gaps were with phonological awareness and writing process appropriate for beginning readers. (See Table 10.)

Table 10: Importance and Understanding of Basic Literacy Concepts/Practices (n=208)

	Percent indicating very important to understand during first year	Percent indicating they were well- or very well-prepared to teach it
Reading is a meaning making process	69%	58%
Writing process appropriate for beginning readers	67%	50%
Development of phonological awareness	63%	48%
Development of phonemic awareness	60%	49%
High frequency word recognition	59%	50%

Within the intermediate literacy section of the survey, respondents ranked the following items as highly important to understand during their first year of teaching:

- Finding main idea of a text and summarizing
- Using generic comprehension strategies
- Monitoring comprehension and using fix-up strategies
- Writing process appropriate for intermediate grades
- Close reading
- Engaging in effective discussions

While teachers felt relatively better prepared to teach generic comprehension strategies, there remained a gap in all of these items between the level of importance and how prepared teachers felt to teach each of them. (See Table 11.)

Table 11: Importance and Understanding of Intermediate Literacy Concepts/Practices (n=149)

	Percent indicating very important to understand during first year	Percent indicating they were well- or very well-prepared to teach it
Finding main idea of a text and summarizing	71%	46%
Using generic comprehension strategies	68%	56%
Monitoring comprehension and using fix-up strategies	65%	49%
Writing process appropriate for intermediate grades	65%	41%
Close reading	63%	48%
Engaging in effective discussions	60%	43%

Within the disciplinary literacy section of the survey, the following concepts/practices were seen by respondents to be the most important for them to understand during the first year:

- Adapting generic comprehension strategies to meet specialized demands of disciplinary texts
- Writing process within specific disciplinary contexts
- Engaging in peer discussions appropriate to the discipline
- Using text evidence to support conclusions (such as quoting or citing) in a way appropriate to the discipline
- Writing arguments about disciplinary content

Generally speaking, lower percentages of respondents deemed these concepts/practices to be important during the first year, and the gap between importance and understanding was not as wide for disciplinary concepts as it was for basic and intermediate literacy concepts, primarily due to teachers feeling skills were less important. (See Table 12.) This is likely because a large percentage of our respondents were primary teachers who are less likely to focus on disciplinary literacy than their peers in the upper grades. Another pattern is that as the grade levels go up, teachers feel relatively less prepared to teach literacy practices, whether they be disciplinary in nature or not.

What became apparent from all three sections of this part of the survey was the gap for all teachers of all grade levels between their understanding of teaching the writing process and the importance of being able to do so. In addition, within the intermediate and disciplinary sections, it seems clear that being able to engage students in meaningful discussions is important, but teachers do not feel well prepared to do so.

Table 12: Importance and Understanding of Disciplinary Concepts/Practices (n=122)

	Percent indicating very important to understand during first year	Percent indicating they were well- or very well-prepared to teach it
Adapting generic comprehension strategies to meet specialized demands of disciplinary texts	54%	53%
Writing process within specific disciplinary contexts	53%	43%
Engaging in peer discussions appropriate to the discipline	50%	47%
Using text evidence to support conclusions (such as quoting or citing) in a way appropriate to the discipline	46%	41%
Writing arguments about disciplinary content	45%	27%

Implications for NCE

While candidates overall did not feel particularly well prepared to teach literacy practices during their first year in the classroom, graduates found learning opportunities associated with practice-based teacher education, such as opportunities to practice with real students, more teacher modeling, and more peer and teacher feedback, to be most helpful. As a further endorsement of practice-based teacher education, more than twice as many BA Elementary Ed students (who are taught using Adaptive Cycles of Teaching) said they were very well prepared than any other program, and none of these BA students said they were not at all prepared. In addition, only 8% of Early Childhood Education students, a program who has also been piloting the use of ACT,

said they were not at all prepared, a much lower number than any program other than BA Elementary Education. These patterns affirm the National College of Education's investment in practice-based teacher education.

There are several related efforts underway to help provide candidates with more experiences to engage in practice-based teacher education. For instance, there is currently a seed grant and a Faculty Research Residency focused on PBTE, with an emphasis on video coaching and feedback around high leverage practices such as discussion. The feedback is given by faculty and supervisors within practicum courses with field placements and student teaching placements. The work of the practice-based teaching working group is ongoing, and many members have updated their syllabi to include more opportunities for practice-based teaching. For example, the first author updated his RLR 540 and MGE 520 courses to incorporate aspects of the high-leverage practice of discussion, including viewing several representations of the practice and engaging in the practice as a learner, decomposing the practice to determine its essential elements, approximating the practice within the classroom along with coaching and support, and making revisions to instruction. There are also efforts underway to provide faculty with an opportunity to elect to join a practice-based teaching interest group during select meeting times, focused on the identification and development of additional high leverage practices, and Pam Grossman, dean of Graduate Education at the University of Pennsylvania and a heavyweight in the field of practice-based teaching, is addressing to the university and meeting with leadership to advise us around ways to accelerate our progress.

However, though these efforts are promising first steps, they are not sufficient. Though this Faculty Research Residency proposal had initially proposed sharing findings with the instructors of SEC 504, these findings make it clear that we need to take a look at how we are teaching literacy across the board and make systematic changes to increase practice-based teaching and build in more opportunities to work with actual P-12 students early and often, if we want future candidates to feel better prepared to teach high-leverage literacy practices than these teachers were. The preliminary data from this study was presented this spring with NCE faculty at the at the NLU Faculty Research Symposium. Colleagues were intrigued by the findings and they sparked thoughtful dialogue about the differences in responses across programs. These conversations are just the start of how we intend to use this data with faculty. We intend to visit programs to share data and have them determine how we can use these findings within our programs. We will also share the practices that graduates found most effective with adjuncts and have them plan for how they can include more of such practices in their instruction. Based on the findings of a prior faculty research residency, practice-based teaching takes a considerable investment of time and resources to be done effectively. There is also a substantial learning curve, as teachers who engaged in pilots actually felt less confident in their ability to teach using practice-based teaching after the pilots ended, because we believe they now understood the challenge and complexity of such work. Therefore, we hope the university will support the

expansion of the Practice-Based Teaching Working Group and provide regular opportunities for faculty from Teacher Prep to and NCE as a whole come together to further these efforts.

From a literacy standpoint, the survey results indicate a consistent need for more writing instruction. There was a gap between how important teachers felt writing was and how prepared they felt to teach it. Our survey covered the last four years of NCE graduates. Given that writing is emphasized within the Common Core State Standards, and this was within the time frame when the standards were being implemented, it may make sense to look at the writing priorities of the CCSS to ensure we are covering these in our own programs. For instance, the standards emphasize argumentative writing, a core way of generating new knowledge in the disciplines. Argumentative writing was an area that candidates felt was important, and yet felt relatively unprepared to teach in their first year. Only 27% of candidates felt somewhat prepared or very well prepared to teach argument writing. While 71% of candidates said finding the main idea and summarizing was important, only 46 percent felt somewhat prepared or very prepared to teach it.

Discussion was another area that graduates felt was important, and yet felt relatively unprepared to teach their first year. Discussion is also the first high-leverage practice identified by the practice-based teaching working group. Given that it is a fundamental teaching skill (National Board for Professional Teacher Standards, 2002) that is also emphasized in the CCSS, and given that even veteran teachers can have difficulty facilitating discussions, it is clear that discussion is indeed a good choice for further emphasis. This year, research supported by a faculty research residency of which the first author is a member will study the kinds of coaching and feedback that supervisors give candidates during field placements, focusing on their use of tools developed as a result of this year's pilots with faculty engaging in design-based research, including the Discussion Features Guide and a related rubric. It will be interesting to see if these efforts help candidates feel more capable leading effective discussions in the future.

They also do not seem to feel that discipline-specific practices are relatively as important. While this is perhaps not surprising given that the emphasis on disciplinary literacy is relatively recent, disciplinary literacy is central emphasis of the Common Core State Standards. In the earlier grades, the standards expect a balance of literary and informational text, and beginning in sixth grade, they include separate expectations for reading in history and science and technical subjects. All teachers are expected to help prepare students to meet these standards. The pressure many middle and secondary teachers feel to "cover" content often leads to a "pedagogy of telling" (O'Brien, Stewart, & Moje, 1995), which limits student opportunities to construct their own meaning from disciplinary text. By apprenticing students into the ways that experts use reading, writing, thinking and speaking to produce and critique new knowledge, teachers can help students become more engaged citizens who are able to deal with skills such as reading across complex texts and handling the onslaught of false and misleading information they encounter online (Wineberg, 1991). Therefore, a greater emphasis should be placed on

disciplinary literacy within teacher preparation coursework at the middle and secondary levels. One problem may be that RLR 540, the literacy course for content area teachers, which has been redesigned with a disciplinary literacy emphasis, occurs relatively early in the course sequence, and has recently been switched to a blended mode, making practice-based teaching opportunities more challenging. Still, even elementary teachers can help prepare students for disciplinary literacy by helping students see the differences among different types of texts, giving them opportunities to read across multiple texts, helping them understand specialized vocabulary, and guiding them to use disciplinary thinking when they engage in inquiry projects. (Shanahan & Shanahan, 2014).

Implications for the field

This study has a clear relationship to P-12 learning for several reasons. Practice-based teacher education has been shown to be effective at NLU and nationally as a way to prepare graduates who are more classroom-ready. This study contributes to the development of a practice-based teacher education model for the middle and secondary levels something that many higher education institutions are developing and refining. We are optimistic that a shift toward practice-based teacher education will improve educational outcomes for the future students of our NCE graduates.

The related design-based research that occurred in lieu of interviews and focus groups with teachers at the partner school is informative for the field as well. In a recent meeting, the incoming Assistant Superintendent of Curriculum and Innovation for District 207 indicated that many north suburban schools are seeking support for raising their “[challenge index](#),” a measure of how many students take AP and other advanced classes, and indicated that he felt there would be many schools interested in partnering to increase student enrollment and success in advanced coursework. Sharing interventions to boost Latinx student enrollment and success in advanced classes will not only help support social justice aims for these students by providing them greater access to the sorts of courses that lead to future college scholarships and work opportunities, it will help us position ourselves to address the needs of partner schools in the region.

The study does appear to have contributed to a strengthening of the relationship between the university and the partner school, with the potential to expand the partnership to feeder schools in District 62. For instance, the first author recently applied for an Officers’ Research Grant from the W.T. Grant Foundation to expand the Ascend group to three elementary and two middle schools. As part of an emergent partnership with the district to help transform student teaching, we can ensure our instruction is explicit in areas where Maine West is less strong, and our teacher candidates may be less likely to see models of effective practice in their teaching placements.

Sharing of Study Findings beyond NLU

Study findings have been and will be shared beyond National Louis University. After further analysis is complete, including qualitative analysis of open-ended items and regression analysis, we plan to write up the results of our study and submit them to the Literacy Research Association (LRA) Annual Meeting. We also plan to submit them for publication in *Literacy Research: Theory Method and Practice*, a peer-reviewed journal open to scholars who present at LRA. We also intend to present our research at the American Educational Research Association Conference.

Finally, the findings from the design-based research in the AP classroom including enhancing and inhibiting factors were shared with school and district leaders in the spring of 2018, leading to threefold expansion of the Ascend program of which the focal students in the design-based research were a part for the coming school year. In addition, this research was presented at American Reading Forum (McCarty and Pappageorge, 2017) and AERA (McCarty and Pappageorge, 2018). A book chapter about this work is in press will be published during the fall of 2018 (McCarty, Pappageorge and Rueda-Alvarez, in press).

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