Literacy Candidates' Perception of Competence in an Online Master of Science in Literacy Program

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Abstract

This article describes how college instructors in a graduate literacy degree program surveyed candidates to determine their sense of self-efficacy as literacy intervention teachers, particularly after completing the professional sequence of diagnosis, practicum I and practicum II in the program. Results were positive. Candidates' sense of competence with regard to delivering appropriate literacy intervention services increased across the span of these capstone courses in the program. Recognizing the importance of teachers' sense of self-efficacy and that a program or span of clinical courses can never fully prepare candidates for all the challenges in the multi-faceted role of a school literacy specialist/literacy coach, the authors sought to determine whether the program's professional sequence created a positive trajectory of growth in candidates' sense of self-confidence related to designing and implementing literacy interventions.

Introduction

In the fall of 2009, a northeastern College launched online Master of Science (MS) literacy programs, leading to certification as a literacy specialist at the elementary or secondary level. Just as for candidates in on-campus programs, a requirement for program acceptance in the online programs is that candidates are certified to teach in some area, PreK-12. From the beginning, faculty was highly supported with training on course design and delivery; technology services for instructors and candidates remain timely and effective. The online literacy programs — for elementary or secondary level literacy certification — were designed to mirror the college's on-campus MS in literacy programs that have been in existence for decades and have been consistently recognized by the International Literacy Association (ILA) and nationally accredited by the Council for the Accreditation of Educator Preparation (CAEP). This recognition and accreditation comes after cyclical reviews of program reports; data consistently reflect candidates' content and procedural knowledge at acceptable to target levels on assessments that have demonstrated reliability and validity as defined by CAEP (CAEP Board of Directors, 2013). While the programs meet ILA and CAEP standards, program instructors have sought to further probe candidates' self-perception related to specific knowledge and competencies acquired in prerequisite courses and applied during the capstone professional sequence. This information is used to enhance program *quality assurance* and *continuous improvement* expected by CAEP. Quality assurance calls for data from multiple measures, including candidates' impact on P-12 students. Programs are required to reflect continuous improvement that is sustained, evidence-based, and reflective of completers' teaching effectiveness (CAEP Board of Directors, 2013).

Online MS Literacy Programs at the College

Admission data reflect that the 33 credit hour online literacy programs at the college have had continuous

increases in enrollment. Some local literacy candidates take advantage of online options, creating a hybrid program by taking a combination of on-campus and online literacy courses. The on-campus literacy programs have operated for more than 30 years at this college that was founded in 1870. Alumni are literacy specialists or highly effective classroom teachers in area schools; several have become adjunct faculty in the college's literacy program. With this over-time documented evidence of success related to the outcomes of our on-campus literacy program, we wanted to initiate a measure of online candidates' disposition or sense of self-confidence about personal acquisition of competencies the program was designed to develop. Overall, online candidates' measured performance is meeting expected standards across common assignments in courses. Data is maintained in electronic portfolios. At Program Improvement Day each June, program faculty review a year's data, discuss adjustments in directions and/or rubrics for core assignments, and check alignment of rubric line items with ILA and CAEP standards.

The capstone professional sequence of 9 credit hours follows 12 credit hours of prerequisite courses that build candidates' content knowledge related to research on theory and methodologies associated with effective literacy instruction. The professional sequence begins with an online diagnosis course that includes practicum experience working with a client who is tested and tutored. Along with examination of formal and informal testing measures, candidates administer various assessments, analyze resulting data, and report findings. Furthermore, they plan instructional lessons for the client who is tested — lessons that address needs identified from measures administered. Conclusions from this diagnostic instruction are added to the case report for the client. Following the diagnosis course (3 credits), online candidates come to campus to complete practicum I and II (6 credits) in a summer session. Meeting ILA standards at the highest level requires demonstration of competency as an effective literacy instructor and literacy coach. At points in their program, literacy candidates complete coaching/staff development assignments; these are designed to be incremental in complexity, preparing candidates to assume the consultant role of a literacy specialist with staff development responsibilities.

In the third summer of this online practicum, we decided to survey online candidates to determine whether their responses would align with data showing positive results on assessments. Specifically, our question was, Did candidates' self-perception of competence in working with students who struggle with literacy-related skills show growth at the end of the professional sequence? We were not concerned about significance testing at this point, realizing that a program or span of clinical courses is just a beginning; it can never fully prepare candidates for all of the challenges in the multi-faceted role of a school literacy specialist/literacy coach. Significant changes would be expected after practice in the role, but a direction of positive change during this clinical sequence would be an expected beginning. The authors sought to determine whether the program's coursework and professional sequence created a positive trajectory of growth in candidates' sense of self-confidence related to designing and implementing literacy interventions.

A teacher's self-efficacy (e.g., awareness of areas of competence and areas in need of development) is key for self-initiated continuous learning as a professional, balancing the acquisition of current research-tested content and procedural knowledge. Bandura's (1997) theory of self-efficacy suggests that when people perceive themselves as capable, they are likely to assume difficult tasks, expend effort, persist, and have the motivation necessary for meeting the challenge — each an essential disposition for effectiveness as a teacher. Directly measuring the impact of the college's online literacy programs' components (i.e., courses and practicums) on candidates' sense of self-efficacy was deemed to be an essential element in determining their readiness to successfully assume the role of literacy specialist and coach. Results would be a measure of candidates' achievement and program effectiveness.

Review of Literature

Research on Teacher Effectiveness

Common Core State Standards (CCSS) have added challenges in preparing literacy specialists — ones ready to assist students in P-12 schools meet rigorous standards (Buffum, Mattos, & Weber, 2010; NGA & CCSSO, 2009; Race to the Top, 2009; Stumbo & McWalters, 2010) and coach teachers who work with them to implement *disciplinary* (i.e., connected to content area topics) literacy instruction (Subban, 2006). Addressing the body of literacy content, pedagogy, and dispositional attributes essential for effectiveness requires continuous program assessment.

Along with the acquisition of pedagogical knowledge, Hoffman and Pearson (2000) conclude that teachers must possess dispositions (e.g., self-directed learning) that ensure continual professional growth. To that end, effective programs for teacher preparation also require candidates' ongoing reflection on perceptions, values, and other factors influenced by their educational and field (i.e., practicum) work (Korthegan, 2010). However, this self-reflection must be integrated throughout course content and practicum experiences (Holloway, 2001; Mandel, 2006). Varied models for teacher reflection have been suggested; reflections encourage candidates to consider what they've learned through the particular assignment or task and how it has impacted their professional thinking (Anders, Hoffman, & Duffy, 2000; Cochran-Smith & Zeichner, 2005; Pearson, 2001; Risko, Roller, Cummins, Bean, Block, Anders, & Flood, 2008; Roskos, Vukelich, & Risko, 2001).

Simply increasing the amount of information presented in courses doesn't ensure that teachers will know how to apply it effectively and differentially (Snow, Griffin, & Burns, 2005). To become effective literacy teachers, candidates must discern — in the situation — specifically *what* students need to learn and *how* to teach that content, skill, or strategy to them (Reutzel, Dole, Read, Fawson, Herman, and Jones, 2011). ILA standard 6, related to professional learning and leadership, measures a candidate's display of positive dispositions related to the pursuit of professional knowledge and behaviors required to enhance literacy learning across a school community (ILA, 2010).

Doyle (1990) explained, "Research and theory do not produce rules or prescriptions for classroom application but rather knowledge and methods of inquiry useful in deliberating about teaching problems and practices" (p. 6). As a complex set of cognitive processes that lack a universal order of operations, teachers need to appreciate that literacy skills cannot be taught solely through training in specific methodologies (Scribner & Cole, 1981). Showers, Joyce, & Bennett (1987) suggest that educating teachers to perform instructional practices in a rigid procedural manner does little to ensure students' achievement or motivation for learning. Instead, preparation programs should ensure that teachers acquire the knowledge and confidence that enables them to select and use the best practice for the learner in the moment.

Teacher expertise, including formal knowledge, practical knowledge, and ways of thinking, seems to have a significant effect on student achievement (Ferguson, 1991). Cochran-Smith and Lytle (1999) described these knowledge dimensions as *knowledge-for-practice* (knowledge of instructional strategies and learning theory), *knowledge-in-practice* (insights acquired from reflection on practice), and *knowledge-of-practice* (knowledge from immediate experience), noting that successful teachers continuously and fluidly move among them (p. 250). Therefore, courses in a literacy program must be designed to achieve a balance of course work and practicum experiences to ensure candidates' attainment of both content and procedural knowledge. Candidates also need to acquire competence in individual and collective reflection on practice and students' achievement.

Alignment of Literacy Program Goals with Research

MS in literacy candidates are expected, among other outcomes (e.g., in ILA and CAEP standards), to demonstrate that they can effectively determine what, why, when, where, and how to deliver literacy instruction and interventions, appreciating the complex interaction among these categories in each situation. They should clearly recognize their transformation from classroom teacher to literacy specialist at transition points in the program, especially before and after the professional sequence. And, they are prepared for a multifaceted, changing role as a literacy coach in the school, supporting other teachers as they implement research-based practices for literacy instruction and interventions in their classroom (Casey, 2006). The literacy program described includes multiple requirements for application of knowledge throughout course work. For example, candidates complete and report on a running record they've done with a reader, an analysis of a student's writing sample, and a spelling assessment on a student. They write lesson plans and mini lessons for literacy instruction as well as a dual lesson plan for content area instruction — one that recognizes the diverse needs of readers and writers in a classroom. The unit plan, a common assignment in another course, outlines an extended design for differentiated instruction related to a curricular topic. Included with each of these assignments, candidates write a reflection on the content and procedural knowledge they've acquired in the process of its completion. At the end of their professional sequence, candidates write an *integrated reflection*, commenting on the totality of the program as well as personal transformations they've perceived. Specifically, in this assignment candidates

are prompted to examine and describe their learning across common assignments (i.e., identified major assignments) in courses and in the professional sequence. This written reflection expresses professional growth they perceive as well as identification of goals for further learning and how these will be achieved. The authors (practicum instructors) reviewed these reflections; they particularly noted common themes related to candidates' disposition about working collaboratively with peer candidates, cooperating teachers, summer school faculty and administration, and the college instructors across the professional sequence. Candidates' confidence with and understanding of the planning and implementation involved for efficacious literacy instruction was also revealed. These reflections included statements, such as those in Figure 1.

• Collaboration was of extreme value during this practicum.

• My views on co-teaching/collaboration have been greatly impacted by this experience

• This practicum has not only taught me how important a literacy specialist is in a school district, but has also given me tools that I can use in my own classrooms.

• I learned that there are not only a variety of learners in our classrooms, but also that they require interventions in different areas.

• Being a literacy specialist also means that I will have to be responsible for evaluating many students using a variety of assessments.

• A literacy coach is there to work as a teammate who supports teachers in their efforts to meet students' literacy needs.

•Before I began my master's program, I didn't think that just getting another degree was really going to change the way I teach. Instead, it has changed the way I think.

•I have learned that I need to take it upon myself to conduct research and familiarize myself with current teaching issues and practices.

Figure 1: Reflections from Candidates

In addition to qualitative data from reflections, the survey was created to provide an additional measure of candidates' sense of professional self-efficacy. In preparing survey questions the authors considered ILA (2010) standards at the literacy specialist/coaching level as well as the checklist of competencies that the cooperating literacy specialist and college instructor use to evaluate candidates in practicum courses. Candidates responded to questions before and after the professional sequence that includes diagnosis, taken online in the first summer session (May-June), and the practicum courses (I and II), completed in July.

Methodology

The Candidates

The totally female cohort of candidates (44) in this group had an average GPA of 3.91. Each holds initial certification as a classroom teacher. Of the candidates who worked in schools, fifty-three percent held positions as full time classroom teachers, 28% as substitute teachers, and 5% as teaching assistants. Five percent taught outside of the state in which the college resides. Years of teaching ranged between 1 and 7 years; twenty-five percent of those substituting worked 5 days per week. Each candidate had completed 12 hours of prerequisite course work related to research on literacy theories and methodology

The Survey

The survey constructed for this pilot study focused on candidates' confidence in their ability to teach students struggling with literacy skills. A further set of statements was an attempt to delve into specific areas of candidates' perceived sense of pedagogical competence when working with all students as well as with other teachers. Candidates completing this program are expected to be highly skilled teacher leaders who are prepared to work effectively as a literacy teacher in any classroom, as a building literacy specialist, or as a school or district literacy coach. Rather than a straightforward positive or negative response, a Likert scale was used; this allowed candidates to express a degree of agreement or disagreement with statements.

Data Analysis

Across questions posed, the percent of strongly agree went up; the trajectory was toward a positive increase. In some cases, strongly disagree did as well. It may be that the more candidates learned and applied in their practicum placements, the more they realized there was still much more to know. Although they had acquired an abundance of new competencies, there would always be additional theory and methodology to know in order to meet the multi-faceted role of a literacy specialist and resolve complex etiologies for reading difficulties. Refinement of questions or follow-up interviews after future surveys would add clarity in this area. Such awareness motivates an ongoing search for professional development; it reinforces our premise that teacher candidates are not finished when they graduate. School districts have a responsibility to provide ongoing staff development (Resnick, Alvarado, Elmore, 1996).

There was a trend toward higher percentages in the post survey on responses focused on literacy intervention and coaching. A large increase was noted in candidates' confidence with differentiating instruction, tasks, and resources to meet students' diverse needs — competence required for *disciplinary* literacy instruction (Subban, 2006). There was only a slight positive difference on statements about general literacy instruction with struggling readers. It may be that candidates felt confident about their current skills with teaching developmental reading to struggling students, but recognized growth in their ability to plan intervention lessons that targeted literacy difficulties. That would also need to be examined more closely with additional questions — or follow up interviews. See Table 1 for candidates' confidence related to general literacy instruction. Table 2 reports changes in confidence with literacy diagnosis, instruction, and intervention in classrooms of diversity. Table 3 focuses on the professional aspects of the literacy specialist as leader, coach, and teacher researcher.

Table 1.

Confidence Related to General Literacy Instruction

Statement	Average percent	Average percent
I am confident in my ability to teach struggling readers…	Pre professional sequence responses	Post professional sequence responses
Lessons that address basic literacy skills in reading.	48%	50.67%
Lessons that address basic literacy skills in writing.	44.93%	50.67%
Lessons that integrate basic literacy skills in other content areas	42.42%	50%

Table 2.

Candidates' Degree of Confidence with Literacy Diagnosis, Instruction, and Intervention in Classrooms of Diversity

Statement	% Strongly agree		% Agree		% Neutral		% Dis-agree		% Strongly dis-agree	
I am confident in my ability to…	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
successfully teach all students,	30.32	60	27.91	15	25.58	5	11.63	7.50	4.65	12.50

differentiating my instructional process, the task, and resources used to meet students' diverse needs										
diagnose literacy related difficulties that my students experience, using a variety of informal and standardized measures	9.30	50	23.26	17.50	41.86	12.50	25.58	12.50	0	7.5
successfully plan for literacy related intervention for my students when they have literacy related difficulties.	9.3	50	23.26	22.5	39.53	7.5	27.91	10	0	10
successfully prepare a professional report on a literacy related diagnosis and plan for intervention for a student	4.65	52.5	23.26	15	27.91	15	34.88	7.5	9.3	10
successfully structure a classroom environment that has a tone, tenor, and physical arrangement that fosters learning, risk-taking, and a sense of community.	44.19	57.5	23.26	17.5	18.60	5	6.98	7.5	6.98	12.5
share the results of my literacy related diagnosis and	23.26	55	23.26	15	32.56	10	13.95	10	6.98	10

intervention with all stakeholders (e.g. the student, parents, other teachers)										
successfully teach, diagnose, and plan interventions for students in any demographic category in the grade levels of the literacy certification I am working toward	53.49	60	16.28	15	13.95	7.5	4.65	7.5	11.63	10

Table 3.

Candidates' Degree of Confidence with Literacy Leadership, Coaching, and Research

Statement	% Strongly agree		% Agree		% Neutral		% Disagree		% Strongly disagree	
I am confident in my ability to…	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
successfully work collaboratively with professional colleagues	53.49	60	16.28	15	13.95	7.5	4.65	7.5	11.63	10
successfully act as a literacy coach in a school or district	16.28	37.5	11.63	25	44.19	22.5	23.26	7.5	4.65	7.5
successfully teach, diagnose, and plan literacy interventions for students in any demographic category in the grade levels of the literacy	11.63	52.50	30.23	15	27.91	15	20.93	5	9.3	12.5

certification I am working toward (i.e. Birth-Grade 6 or Grades 5-12).										
successfully read and understand research articles on studies in the field of literacy, including determining the appropriateness of the design and data analysis completed by the authors	32.56	52.5	32.56	17.5	20.93	12.5	4.65	7.5	9.3	10
successfully implement "teacher research" in my classroom or participate with university researchers conducting a study	32.56	50	30.23	15	25.58	17.5	2.33	7.5	9.3	10
collaboratively design and implement a district wide literacy program	4.65	35	27.91	22.5	32.56	17.5	23.26	17.5	11.63	7.5

It was especially important to find that candidates' confidence with leadership outcomes (e.g., collaboration with colleagues, coaching, research analysis, and participation in research) was positive. The coaching aspect was added to our program to meet International Literacy Association standards. It includes instructional components and assignments across courses — ones designed to developmentally increase candidates' competence and confidence in this emerging and critical role of literacy specialists as instructional leaders in schools. Since its implementation, we have been interested in measuring the success of this endeavor in additional ways. The particularly intense nature of the on-campus practicum in the online program lent itself to collegial co-operation and trust. In each of the placements, there were tasks to be accomplished in a limited time period, making collaboration essential.

Results also reflect an increase in candidates' confidence across all areas as noted in the pre/post percentages for strongly agree. We found lower percentages in neutral and disagreement across the positive statements of competence used in each prompt, seeming to indicate a shift from *not sure* or *unsure* of abilities to a sense of empowerment. Candidates' appeared to have a budding self-awareness of instructional competencies required in the literacy specialist/coach role. Data reflect that course content,

assignments, feedback, and practicum experiences allowed students to realize professional growth and feel optimistic about their potential to mature as a literacy specialist and/or coach.

Conclusions

Data from multiple assessments (e.g., detailed assignment rubrics, competency checklist completed in practicum courses), reported to achieve the status of ILA recognition, reflect that literacy candidates' experiences in the program encouraged them to take ownership of their learning; candidates can self-reflect to identify areas of professional need, research information to meet needs, and discuss their growth with colleagues, supervisors, and instructors. Such professional dispositions, advocated by researchers (Darling-Hammond, 2010; Korthegan, 2001; Korthegan, 2010), have stimulated reflective pedagogy as well as candidates' developmental and incremental acquisition of literacy related professional knowledge, skills, and dispositions.

Although a pilot study, data from this survey have provided insight that's led to adjustments in courses that precede the professional sequence as well as those that comprise it. The expectation is that, with revisions in the program and practicum in particular, totals on the agree side of the scale would increase while neutral and disagree responses would be diminished. Without making the survey too lengthy, questions could be analyzed to determine whether they are capturing the most salient information and details. Year-by-year, new statements — ones that reflect our latest queries on programs' effectiveness — could replace those that have consistently reported positive attributes. We also acknowledge a need to refine wording in statements to further elicit nuances of emotions and perceptions. This requires constructions that encourage authentic responses, lessening the possibility that completers fail to reveal personal transformations, or lack thereof, that they perceive. Additionally, each cohort of candidates taking the survey represents a unique assembly of demographic groups, reaching far beyond the campus and state in which it resides. Along with typically expected variance within any cohort of candidates, online candidates come with differences in the structures and culture of their professional situations, state-by-state and country-by-country. Our efforts to improve our program assessment persist, recognizing that only with accurate data on candidates' performance and self-perceptions can meaningful program improvements be made.

References

Anders, P.L., Hoffman, J.V., & Duffy, G.G. (2000). Teaching teachers to teach reading: Paradigm shifts, persistent problems, and challenges. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 719–742). Mahwah, NJ: Erlbaum.

Bandura, A. (1997). Self-efficacy: Toward a unifying theory of behavioral change.   Psychology Review, 84, 191-215.

Buffum, A., Mattos, M., & Weber, C. (2010). The why behind RTI. *Educational Leadership*, *68*(2), 10-16.

CAEP Board of Directors. (2013). *CAEP accreditation standards*. Washington, D.C.: Council for the Accreditation of Educator Preparation.

Casey, K. (2006). *Literacy coaching: The essentials*. Portsmouth, NH: Heinemann.

Cochran-Smith, M., & Lytle, S. L. (1999). Relationship of knowledge and practice: Teacher learning in communities. In A. Iran-Nudged, & P.D. Pearson (Eds.), *Review of research in education* (Vol. 24). Washington, D.C. American Education research Association. 249-305.

Cochran-Smith, M., & Zeichner, K. (eds.). (2005). *Studying teacher education: The report of the*

AERA panel on research on teacher education. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61, 35-47.

Doyle, W. (1990). Themes in teacher education research. In W. Houston (Ed.), *Handbook of Research on Teacher Education*, New York, NY: Macmillan. 3-24.

Ferguson, R. F. (1991). Paying for public education: New evidence on how and why money matters. *Harvard Journal on Legislation,* 28(2), 465-498.

Hoffman, J.V., & Pearson, P.D. (2000). Reading teacher education in the next millennium: What your grandmother's teacher didn't know that your granddaughter's teacher should. *Reading Research Quarterly, 35*, 28–44.

Holloway, J. (2001). The benefits of mentoring. *Educational Leadership, 58*(8), 85-86.

International Literacy Association (ILA). (2010). Standards for Reading professionals. Newark, DE: ILA.

Korthegan, F. (2001, April). *Linking practice and theory: The pedagogy of realistic teacher*

education. Paper presented at the annual meeting of the American Educational Research

Association, Seattle, WA.

Korthegan, F. (2010). Situated learning theory and the pedagogy of teacher education: Towards an integrative view of teacher behavior and teacher learning. *Teaching and Teacher Education, 26*, 98-106.

Mandel, S. (2006). What new teachers really need? *Educational Leadership, 63*, 66-69.

Pearson, P.D. (2001). Learning to teach reading: The status of the knowledge base. In C.M. Roller (Ed.), *Learning to teach reading: Setting the research agenda* (pp. 4–19). Newark, DE: International Reading Association.

National Governors' Association, (NGA) & Council of Chief State School Officers (CCSSO). (2010). *Common core state standards initiative: Preparing America's students for college and career.* Washington, D.C.: authors.

Race to the Top. (2009). *Race to the Top Assessment Program*. Washington, D.C.: U.S. Department of Education.

Resnick, L. B., Alvarado, A. J., & Elmore, R. F. (1996). Developing and implementing high-performance learning communities. Solicitation proposal RC-96-1370 submitted to the U.S. Department of Education.

Reutzel, D.R., Dole, J., Read, S., Fawson, P., Herman, K., & Jones, C. (2011). Conceptually and

methodologically vexing issues in teacher knowledge and assessment. *Reading Research*

Quarterly, 27(3), 183-211.

Risko, V.J., Roller, C.M., Cummins, C., Bean, R.M., Block, C.C., Anders, P.L., & Flood, J. (2008). A critical analysis of research on reading teacher education. *Reading Research Quarterly, 43*, 252-288.

Roskos, K., Vukelich, C., & Risko, V.J. (2001). Reflection and learning to teach reading: A critical review of literacy and general teacher education studies. *Journal of Literacy Research, 33*, 595–635.

Scribner, S., & Cole, M. (1981). *The psychology of literacy*. Cambridge, MA: Harvard University Press.

Showers, J., Joyce, B., & Bennett, B. (1987). Synthesis of research on staff development; a framework for future study and state-of-the-art analysis. *Educational Leadership*, 45(3), 77-87.

Snow, C., Griffin, P., & Burns, M. S. (2005). *Knowledge to support the teaching of reading:*

Preparing teachers for a changing world. San Francisco: Jossey Bass.

Stumbo, C., & McWalters, P. (2010-2011). Measuring effectiveness: What will it take? *Educational Leadership, 68*(4), 10-15.

Subban, P. (2006). Differentiated instruction: A research basis. *International Education Journal*. 7(7), 935-947.