

Case Study of Completer Impact and Effectiveness



Exploring the impact of BU completers on P-12 student learning and the effectiveness of the program's recent completers' reading instruction

Case Study: Research Design

Introduction

Teacher effectiveness and impact on student learning are critical components of an Educator Preparation Program (EPP). The ultimate goal of every educator is to impact student growth. Moreover, reading and comprehending grade-level appropriate text are critical skills students must learn to succeed in the 21st century. If an educator preparation program is not providing instruction that proves completers are impacting student growth and that completers are equipped to teach students to read, then that program should be reevaluated. Teacher preparation programs must monitor and track their completers to ensure teacher growth and students' ability to read and achieve learning targets across all content areas. Standard 4 of the CAEP accreditation process requires that EPPs supply evidence of (4.1) completers' contribution to an expected level of student learning growth and (4.3) that program completers perceive their preparation as relevant to the responsibilities they encounter on the job and that their preparation was effective.

Reading scientists have concluded that learning to read requires mastering the foundational skills of phonemic awareness, phonics, fluency, vocabulary, and comprehension (Dehaene, 2009; Stanovich, 2000). However, scientifically-based reading research has not fully transformed instructional practice (Castles, Rastle, & Nation, 2018), leaving a science-to-practice gap. This gap has proven challenging to close (Seidenberg, 2017). For example, foundational skills are taught in balanced literacy but are often not taught explicitly (Rayner et al., 2012; Seidenberg, 2017), nor to mastery (Moats, 2007).

Additionally, identifying words using pictures and context cues before sounds/letters are used extensively in balanced literacy, despite no evidence to support this strategy for early readers (Kilpatrick, 2017).

This case study was conducted in 2022-2023 to determine completers' impact on student growth and achievement and to examine the methods and data used to assess the effectiveness of the program's completers in teaching reading. The results of the case study are summarized below. Overall, Bethel University program completers are proving to have a positive impact in increasing student achievement in most areas where data was gathered. In addition, completers felt prepared to teach reading but reported that they did not possess sufficient knowledge in practices related to the Science of Reading.

Literature Review

Teacher Preparation

The connection between teacher preparation and effectiveness and impact on student learning is critical to the success of any teacher education program. The research between the education and preparation of a teacher and their effectiveness when impacting students' learning is limited. Teacher education in the areas of pedagogy and content knowledge are the areas most often researched for the relationship between teacher effectiveness and impact on student learning. According to Darling-Hammond (2006), the effectiveness of teacher education programs is often defined as having three critical components: (a) effective integration between coursework and clinical fieldwork, (b) constructive field experiences that are closely supervised, and link theory to practice, and (c) collaborative school partnerships that serve diverse populations by providing models of differentiated teaching practices.

The research suggests that teacher preparation programs should include “how to teach” as well as “what to teach” in their teacher licensure programs. Darling Hammond believes that when universities fully embrace this model, they will be able to incorporate the “how to teach” and the “what to teach” model. When universities integrate these ideas into their teacher preparation programs, it is widely believed we will see growth in student achievement and success.

Science of Reading

Low reading proficiency rates, exacerbated by interrupted learning, have made proven, research-based solutions a top priority for educators. While 95% of students can learn to read when using instruction based on the Science of Reading, currently, only 35% are reading proficiently (Foorman, et al., 2019). This demonstrates that many districts and schools do not have equitable access to instruction grounded in the Science of Reading. The pandemic only intensified the opportunity gap and highlighted the need for more individualized student support and instruction. As school leaders look for solutions to accelerate learning for all students, many are turning to the Science of Reading. The Science of Reading provides proven, evidence-based practices to best teach reading and support students of all abilities. Students, and their teachers, do not have time to waste on unproven practices (Such, 2021).

Learning to speak a first language is a natural process for children, but learning to read is not. Children vary in reading ability and the skills they bring to the classroom, each requiring individualized and differentiated instruction to succeed (Willingham, 2017). That is why it is so critical teachers learn about the components of this complex process. The good news is we know more today about the essential elements of effective reading instruction than ever before—how children learn to read, the causes of reading difficulties, and how to prevent them. The Science of Reading incorporates decades of

research into how students learn and how reading should be taught to a wide range of learners.

Surprisingly, only 51% of pre-service teaching includes the Science of Reading (Dombek, et al., 2021).

Bethel University intends to change this statistic by focusing on best practices rooted in the Science of Reading.

Teacher Efficacy

Self-efficacy is defined as people's beliefs regarding their capability to succeed and attain a given level of performance. Bandura (2002) identified four sources of efficacy. These are mastery experiences (experience success firsthand), vicarious experiences (success modeled by others), social persuasion (where trusted sources give feedback and encouragement), and affective states (physiological effects). Pre-service teacher preparers and school leaders can design intentional support by providing opportunities for the pre-service and in-service teachers to experience self-efficacy. John Hattie (2018) found Collective Teacher Efficacy has the most significant effect size for impacting student achievement. Collective Teacher Efficacy is a shared belief among teachers in a school that together, their efforts will positively impact student learning. When teacher efficacy is a focus for all stakeholders in EPPs, completers prove to be highly effective.

Student Learning

The fact that teachers impact student learning is a common belief held by people connected to all levels of education. It is important to study student achievement and the growth of teachers who have recently completed their first years of teaching. In this study, we focused on candidates who were between their first and fifth years of teaching in both public and private school settings. It is understood

that there are many variables when looking at student achievement. This study did not look at variables such as poverty, race, absenteeism, or the type of school students attended.

Methodology

This study is a case study using a mixed methods approach. According to Creswell (1994), case studies are a strategy of inquiry in which the researcher explores a program, event, activity, process, or one or more individuals in depth. This case study looked at the effectiveness of 52 completers, specifically their impact on student learning and their ability to teach reading. It is a multi-site, mixed methods collective case study. Collective case studies offer the advantage of allowing comparisons to be made across several cases and/or replication.

Sample

This case study includes 52 completers who graduated from Bethel University between 2018 and 2023. There were 32 undergraduate completers and 20 Transition to Teaching (TTT) completers. These completers served in a variety of schools, both public and private, as well as urban and rural. The completers that were interviewed also held a variety of roles in education. The survey instrument also included principals and their observations and data about program completers they have hired in the last five years.

Description of participants

Participants in the survey included 34 elementary teachers and 18 secondary teachers teaching in various content areas. All survey completers were graduates of Bethel University within the last five years. Data were also collected from several educational leaders who serve on an Advisory Board for Bethel University. These leaders serve in most of the districts in the region where completers are teaching.

Data collection instruments

For this study, completers were sent a survey focusing on the InTASC Standards and effective reading instruction. They were asked to supply contact information for a more in-depth interview. Three respondents were willing to participate in the more in-depth interview sessions, and their responses are incorporated into the data below.

Section 1: Case Study Sample – Bethel Education Program Completers (n = 52)

| Completers Graduation | | Type of Student | | What they are Teaching – Cont. Area | | Where they are Teaching | |
|-----------------------|----|------------------------|----|-------------------------------------|----|---------------------------------|----|
| Spring 2019 | 19 | Transition-to Teaching | 20 | Elementary | 34 | Public | 43 |
| Fall 2019 | 2 | | | Secondary Math | 4 | Private | 5 |
| Spring 2020 | 8 | Undergraduate | 32 | Middle Schl. Science | 3 | Preschool | 1 |
| Fall 2020 | 3 | | | Secondary English | 2 | Related field outside Education | 2 |
| Spring 2021 | 6 | | | High Schl. Science | 4 | | |
| Fall 2021 | 3 | | | Secondary Social Studies | 2 | Field Other | 1 |
| Spring 2022 | 5 | | | Secondary Other | 3 | | |

| | | | | | | | |
|--|--|--|--|--|--|-------------------|--|
| | | | | | | than Education | |
|--|--|--|--|--|--|-------------------|--|

Question 1: How did Bethel University Prepare you to understand how learners grow and develop? (INTASC 1)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|--|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| <p>"I am so grateful for my education from Bethel. When I started teaching, everyone complimented me on how easily I transitioned into my position. I always say that it was because of Bethel and all of the ways my professors prepared me for that moment."</p> <p>"This has been my first year of teaching, and it truthfully has been an amazing experience. I strongly believe that Bethel prepared me for this. I owe a lot of credit for my pedagogy knowledge and instruction to Dr. Bennett. I model a lot of my class off of how he taught. I can never thank him enough for all he did for me. "</p> | | | |

Question 2: How well did Bethel University prepare you to use your knowledge and understanding of individual difference and diverse cultures and communities to create an inclusive learning environment that enable each learner to meet high standards? (INTASC 2)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|---|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| <p>"Bethel did a great job of helping me understand the variety of learners I would have in my classroom and different ways to help them all achieve. While this remains a challenge, the things I learned while at Bethel have helped me meet the needs of all my learners."</p> | | | |

Question 3: How well did Bethel University prepare you to work with others to create environments that support individual and collaborative learning? (INTASC 3)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|---|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| <p>"Bethel helped me understand how different students learn and what to do to support them."</p> | | | |

Question 4: How well did Bethel University prepare you to understand the central concepts, tools of inquiry, and structures of discipline? (INTASC 4)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|--|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| <p>" I was not prepared for classroom management at all. I think Bethel did a good job with teaching us the foundation of education, but when it came time to actually teach a class, I had a hard time. I can write a kick-</p> | | | |

butt lesson plan, but managing a class, handling girl drama, state testing, etc, I was highly unprepared. I felt lost for about the first 1/2 of the year. This job is no joke.”

Question 5: How well did Bethel University prepare you to understand how to use content concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem-solving? (INTASC 5)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|---|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| “I remember some of the strategies we learned to engage learners and help them with problem solving. I still use them today.” | | | |

Question 6: How well did Bethel University prepare you to understand and use multiple methods of assessment to engage learners in their own growth to monitor learner progress and to guide your decision-making? (INTASC 6)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|--|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| “Our school focuses on data-based instruction. Bethel taught me how to create data using good assessment tools and how to analyze the data so I could make a good teaching decision.” My partner teachers felt I was ahead of many other hires in this area and I felt confident.” | | | |

Question 7: How well did Bethel University prepare you to plan instruction that supports every student in meeting rigorous learning goals? (INTASC 7)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|---|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| “I never would've thought my first year of teaching would include a pandemic and e-learning teaching for 11 weeks, but with all, I learned about integrating technology into my lessons and different educational apps and programs, I'm making it through okay.” | | | |
| “Bethel’s lesson planning template helped me establish habits that I now include in my everyday planning even though I do not write the plans out in as much detail.” | | | |

Question 8: How well did Bethel University prepare you to understand and use a variety of instructional strategies to encourage learners to develop a deep understanding of content? (INTASC 8)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|---|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |

“Bethel University prepared me to teach children because of the variety of fieldwork, the knowledgeable professors and my student teaching placement. I am grateful for my experiences and relationships with staff and peers during my time at Bethel.”

Question 9: How well did Bethel University prepare you to engage in ongoing professional development learning and use evidence to continually evaluate your practice? (INTASC 9)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|--|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| “Bethel stressed the idea that teachers were always growing and learning themselves. This concept has helped me understand that I have to keep reading and learning from others so I can apply new learning to my teaching.” I have so much to learn.” | | | |

Question 10: How well did Bethel University prepare you to seek appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth and to advance the profession? (INTASC 10)

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|---|----------------------|-------------------|-------------------|
| 46 | 6 | 0 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| | | | |

Question 11: How Satisfied were you with Bethel University’s teaching training you received?

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|---|----------------------|-------------------|-------------------|
| 33 | 18 | 1 | 0 |
| Supporting Evidence from Survey Comments and/or Interviews | | | |
| | | | |

Question 12: What was your assigned Teacher Effectiveness rating this year?

| Highly Effective | Effective | Improvement Necessary | Not Effective |
|------------------|-----------|-----------------------|---------------|
| 17 | 34 | 1 | 0 |

Section 2: Case Study Sample – Understanding the Science of Reading and Bethel Education Program Completers (n = 10)

Question 1: How satisfied are you with the teacher training you received at Bethel University?

| Very Satisfied | Pretty Satisfied | Somewhat Satisfied | Not Very Satisfied | Supporting Evidence |
|----------------|------------------|--------------------|--------------------|-------------------------|
| 7 | 3 | 0 | 0 | No evidence was shared. |

Question 2: How well do you feel Bethel University prepared you to teach Reading?

| Very Well Prepared | Prepared | Somewhat Prepared | Not Very Prepared | N/A |
|--------------------|----------|-------------------|-------------------|-----|
| 5 | 3 | 1 | 0 | 1 |

Question 3: Is your district/school currently implementing the Science of Reading?

| Yes | No | Don't Know |
|-----|----|------------|
| 3 | 3 | 4 |

Question 4: How well did Bethel University's program prepare you to understand the Science of Reading?

| Very Well Prepared | Prepared | Somewhat Prepared | Not Very Prepared | N/A |
|--------------------|----------|-------------------|-------------------|-----|
| 1 | 2 | 0 | 0 | 7 |

Question 5: In what areas could Bethel University have helped you feel better prepared to teach reading, as well as understand the Science of Reading?

| |
|---|
| Go deeper into the Science of Reading - more information and practice during our reading courses. |
| I think more opportunities to work with reading curriculums currently implementing Science of Reading (ie. CKLA/Amplify) would have been so helpful in our peer-taught lessons. |
| I felt that Bethel did a good job at preparing me for teaching reading. I had the unique situation of being the class that got sent home during COVID while in Reading Methods. I am not a person that learns well online. I do better face-to-face in the classroom, so missing that face-to-face interaction created a small gap for me, but that was out of the professor's hands. |

I have heard about the Science of Reading, but we're not using it yet in my school. I would have liked more training or information on this while I was at Bethel.

I do not teach reading.

Question 6: How well did Bethel University’s program prepare you to understand the Science of Reading?

| Very Well Prepared | Fairly well Prepared | Somewhat Prepared | Not Very Prepared |
|--------------------|----------------------|-------------------|-------------------|
| 1 | 2 | 4 | 0 |

Question 7: What evidence would you use to support your rating? Check all the apply. If you selected "Other," please provide information about the evidence you cited above.

| Formative Assessment Data | Summative Assessment Data | Benchmark Data | Observation Feedback | Yearly Evaluation Results | Other |
|---------------------------|---------------------------|----------------|----------------------|---------------------------|--------|
| 10 | 10 | 3 | 8 | 6 | 1- SRA |

Summary

After analyzing the data collected, it is evident that Bethel graduates impact student learning in various ways. The completers are helping to raise test scores and can use data to determine the next steps in the instructional process. Evidence was provided to support these claims – Teacher Evaluation process, Test Scores, Growth-Model data, etc. Most graduates enter the workforce and receive either “Highly Effective” or “Effective” teacher ratings. Bethel graduates feel prepared overall for the challenges and demands of impacting student growth in their teaching or content areas. The data collected from undergraduates and those in the Transition to Teaching program indicate that Bethel University completers are successful in their assignments and feel prepared to do their job.

One area evident when reviewing all the data from the case study was the need for improvement in teaching reading – particularly reading instruction rooted in the Science of Reading. As was shared previously, those researching the Science of Reading have concluded that learning to read

requires mastering the foundational skills of phonemic awareness, phonics, fluency, vocabulary, and comprehension (Dehaene, 2009; Stanovich, 2000). However, scientifically-based reading research has not fully transformed instructional practice (Castles, Rastle, & Nation, 2018), leaving a science-to-practice gap. The data collected from Bethel completers mirrors these results. While candidates feel ready to teach, the one area they mention needing more experience and a deeper understanding is the Science of Reading.

Candidates reported varying levels of understanding of the research behind the Science of Reading. Some school districts used the research extensively, while others just began discussions on the topic. Data suggests that about half the school districts where Bethel completers are teaching have fully implemented the research behind the Science of Reading. One student commented, “I have heard about the Science of Reading, but we're not using it yet in my school.” Another shared, “I would have liked more training or information on this while I was at Bethel.”

Suggestions for the Future

We know more today about the essential elements of effective reading instruction than ever—how children learn to read, the causes of reading difficulties, and how to prevent these difficulties. The Science of Reading incorporates decades of research into how students learn and how reading should be taught to a wide range of learners. With only 51% of pre-service reading methods instruction including the Science of Reading; Bethel University intends to change this situation by focusing on best practices rooted in the Science of Reading.

Bethel University plans to use the research related to the Science of Reading to improve reading methods courses and instructional delivery. This will improve the completer’s reading instruction and ensure it is grounded in scientifically-based reading instruction. Bethel will focus on the core

components and effective teaching strategies that are deeply rooted in the research. In the future, Bethel graduates will enter the educational world with a deeper understanding of the research connected to the Science of Reading.

According to Dr. Louisa Moats, in her landmark article “Teaching Reading is Rocket Science,” (2017),

The fact that teachers need better training to carry out deliberate instruction in reading, spelling, and writing should prompt action rather than criticism. It should highlight the chronic gap between what teachers need and what they have been given. It should underscore the obligation of licensing programs to combine coursework with practice on a range of predefined skills and knowledge. The deficiencies in teacher preparation represent both a misunderstanding of what reading instruction demands and a mistaken notion that any literate person should be able to teach children to read. We do not expect that anyone who appreciates music can teach music appreciation, or that anyone who can balance a checkbook can teach math.

Just about all children can be taught to read and deserve no less from their teachers. Teachers, in turn, deserve no less than the knowledge, skills, and supported practice that will enable their teaching to succeed. There is no more important challenge for education to undertake.

Bethel University Educator Education Program has reviewed the evidence from the case study and embraces Dr. Moats's words: we believe our mission is to train highly effective teachers who positively impact student achievement and can teach all students how to read.

References

- Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology*, 57(2), 269-290.
- Castles, A., Rastle, K., and Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19(1), 5–51.
<https://doi.org/10.1177/1529100618772271>
- Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*. Sage Publications, Inc.
- Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(3), 300–314. <https://doi.org/10.1177/0022487105285962>
- Darling-Hammond, L., & Berry, B. (2006). Highly qualified teachers for all. *Educational leadership*, 54(3), 14.
- Creswell, J. W. (1994). *Research design: Qualitative and quantitative design*. Thousand Oaks, CA: Sage Publications, Inc.
- Dehaene, Stanislas (2009). *Reading in the brain: The new science of how we read*. New York: Penguin.
- Dombek, J.L., Lee, L., Foorman, B., & Underwood, P. (2021). *Integrating reading foundations: A tool for college instructors of pre-service teachers (REL 2021-060)*. U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast.
https://ies.ed.gov/ncee/edlabs/regions/southeast/pdf/REL_2021060.pdf
- Donohoo, J., Hattie, J., and Eells, R. (2018). The power of collective efficacy. *Educational Leadership*, 75(6), 40-44.
- Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2019).

Foundational skills to support reading for understanding in kindergarten through 3rd grade (NCEE 2016-4008). National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education.
<https://ies.ed.gov/ncee/wwc/PracticeGuide/21>

Griffin, Rebecca (2017). Reading research for struggling and reluctant readers: NW Commons: Orange City Iowa.

Hattie, John (2018). Collective teacher efficacy according to John Hattie. Visible Learning.

Moats, L.C. (2020). Teaching reading is rocket science: What expert teachers of reading should know and be able to do. *American Educator*, 44(2). <https://www.aft.org/ae/summer2020/moat>

Moats, Louisa (2007). Whole-language high jinks: How to tell when “Scientifically-based reading instruction” isn’t. Thomas B. Fordman Institute: New York.

Rayner, Keith, Pollatsek, Alexander, Ashby, Jane, and Clifton Jr., Charles (2012). The psychology of reading. Psychology Press: New York.

Seidenberg, M. (2017). Language at the speed of sight: How we read, why so many can’t, and what can be done about it. New York: Basic Books.

Stake, R. E. (1995). The art of case study research, sage.

Stanovich, K. E. (2000). Progress in understanding reading: Scientific Foundations and new frontiers. New York: Guilford Press.

Such, C. (2021). The art & science of teaching primary reading. Corwin UK.

Willingham, D. (2017). The reading mind: A cognitive approach to understanding how the mind reads. Jossey-Bass, A Wiley Brand.