University Instruction on Dyslexia:
Implication of Legislative Bill 1052

1. Project Description

In April 2018, the Legislative Bill 1052 passed in Nebraska requiring teachers and teacher candidates to receive education on dyslexia. This is a monumental movement as of the thirteen categories identified by the Federal Law under the Individuals with Disabilities Education Act (IDEA) specific learning disabilities account for 34% of students receiving services, making it the largest category that students receive services for (National Center for Education Statistics, 2018). Furthermore, the National Center for Learning Disabilities (2019) report that 1 out of 5 of all students have a learning disability. Of the disabilities encompassed under specific learning disabilities, dyslexia is the most common form of all learning disabilities (Learning Disabilities Association of Manitoba, 2019). Dyslexia is statistically one of the most significant disabilities impacting students' ability to appropriately access course content, which urges the importance of the implementation of bills such as Bill 1052.

Section one, part two of Legislate Bill 1052 has redefined requirements for a diagnosis of dyslexia in order to receive accommodations. This amendment aims to make receiving a diagnosis of dyslexia more attainable which implicates the likelihood of a significant increase in the already significant amount of students eligible to receive an Individualized Education Program (IEP) for dyslexia. The amount of students requiring services due to dyslexia already requires a need for educators to be informed on dyslexia and equipped to offer assessment and intervention services, however, passing legislation such as Bill 1052 has the ability to demand the level of competence from educators that these students are in need of. Adversely, there is a surplus of research suggesting that teachers are in desperate need of education on dyslexia, in terms of diagnosing and intervention. However, there is little to no research speaking to the course content teacher candidates receive specific to knowledge of dyslexia during their undergraduate education.

Although 80% of students with a learning disability receive services in the general education classroom, dyslexia is a language-based learning disability, deeming speech-language pathologist (SLPs) the case manager of these students' IEP teams (National Center for Education Statistics, 2018). SLPs are the language and literacy experts of the IEP team, setting the expectation of SLPs being fully competent on best, evidence based practices when serving a student with dyslexia. However, Legislative Bill 1052 does not include the mention SLPs nor SLP candidates. Currently there are mandates in place for SLP students to receive education on dyslexia in order for a University to attain accredited status, however, this mandate only requires minimal education, often offered as a brief section of a single course. Due to this, there is not sufficient evidence supporting that SLP students are receiving course content to equip them for identifying and serving this population with evidence based practices.

Legislate Bill 1052, section three mandates instruction on dyslexia as an initial program course requirement for all State Board of Education accredited teacher education programs. This will require universities to revise their current education program plan of study and curriculum objectives in order to offer future educators this imperative instruction on dyslexia, however it will not include an adjustment to the course content taught to SLP students. This requirement will not be in effect until July 2019, which presents a unique opportunity to evaluate SLP and teacher candidates' current knowledge of dyslexia regarding the three core concepts that Legislate Bill 1052 requires candidates to be educated on:

> "(1) Knowledge and best practice standards for teaching reading; (2) Characteristics of dyslexia and the science of dyslexia; and (3) Evidence-based structured literacy interventions, classroom accommodations, and assistive technology for individuals with dyslexia" (LB1052, 2018).

The current knowledge possessed prior to Bill 1052 being put into affect may then be compared to next year's candidates, after the teacher education course(s) have been altered to comply with the mandatory requirements stated in the bill, in order to evaluate:

(A.) The effectiveness of Bill 1052 in promoting knowledge of dyslexia in each of the three contexts identified in the bill.

(B.) If teacher program students' knowledge improved, was it improved enough for these future professionals to effectively serve students with dyslexia?

(C.) Is it valid to integrate speech-language pathology candidates into this mandate?

(D.) Identify possible themes which may implicate ways this bill may be improved in order to derive explicit instruction to better prepare future educators when serving this population.

1.1   *Participants*

General education and special education candidates will be recruited from the teacher education course(s) that will be altered effective of the 2019-2020 academic year in order to comply with Bill 1052. Speech-language pathology candidates will be recruited from the special education course that currently complies with the mandate of offering course content on dyslexia. As an incentive, participants will be entered into a drawing in order to receive a $25 gift card to the location of their choice.

1.2   *Methodology*

A nineteen question survey will be derived. The survey will contain identifying information of the course they are enrolled in and candidates' future profession (i.e., general education, special education, or speech-language pathology), a Likert scale to identify the candidate's level of confidence in their knowledge of dyslexia, an open-ended question to identify possible areas the candidate determines they are missing knowledge in order to effectively serve students with dyslexia, and five multiple choice questions for each of the three core concepts identified in Bill 1052 in order to assess the candidates' competency of dyslexia. Each of the three concepts, (1.) Knowledge and best practices, (2.) Characteristics and science, (3.) Intervention and accommodations, will guide the development of four factual-based questions and one application-based question (e.g., case study). This survey will be administered electronically, via Qualtrics, two weeks prior to the final week of the semester, as course instruction will have been completed. There will be no time requirements for completion, but using external sources for information to answer questions will be forbidden.

1.3   *Data analysis*

Data will be compared on four levels: (A.) Pre-implementation to post-implementation of Bill 1052 level of competency among candidates, (B.) factual understanding verse application of knowledge, (C.) themes of knowledge students feel they are missing in order to adequately serve students with dyslexia, and (D.) knowledge gained on dyslexia for speech-language pathology candidates compared to teacher candidates. Data will be collected at three separate time points. The first data collection will occur at the end of the spring 2019 semester to collect baseline of the participants' knowledge of dyslexia after a semester in the course designed to instruct on dyslexia, prior to implementation of Bill 1052. The second round of data will occur at the beginning of the fall 2019 semester, collecting baseline of candidates' knowledge of dyslexia prior to receiving course content. The final data collection will occur at the end of the fall 2019 semester to evaluate potential growth from the beginning of the semester as well as to conduct a comparison to students who received course content in spring 2019, prior to implementation of mandated dyslexia instruction.

The overall performance on the pre-implementation compared to post-implementation of Bill 1052 will be analyzed to derive implications of the effectiveness of the competencies instructed on. Teacher and speech-language pathologist candidates' performance will be analyzed separately in order to derive detailed findings of the validity of the implementation of this instruction, as well as evaluate the necessity of including speech-language pathology candidates in Bill 1052. The Likert scale will be utilized to compare candidates' confidence in their level of competence in comparison to their corresponding quantitative score of knowledge on dyslexia content. Overall performance on application-based questions will be further analyzed to examine the effectiveness of the the bill, in regard to a simulation of real-life application. Finally, an open ended question probing for knowledge candidates'

feel they are in need of in order to educate students with dyslexia will be analyzed to derive common themes of content the course, and possibly Bill 1052, should consider including in the curriculum.

2.   Purpose of Research

        While dyslexia is one of the most well-recognized learning disabilities, it is also one of the least understood disabilities. Prior to the last five years there has been limited research nor concrete, published knowledge regarding dyslexia. This has resulted in a surplus of misconceptions of dyslexia. Due to this, there is currently a widespread trend of research and legislation uprising to promote resources for professionals and the general public to better understanding dyslexia. However, this trend has just begun and our education system is still far from competently supporting students with dyslexia. My motivation to carry-out this research is a result of the lack of education I personally received during my undergraduate experience. As a speech-language pathologist candidate, I am aware of my future responsibility to manage students' with dyslexia IEP plans, yet my knowledge of this learning disability has largely resulted from independent study, separate from academic requirements. Bills such as Legislative Bill 1052 is a step in a positive direction towards identifying and supporting these students, but this Bill needs to be strengthened in order to make a larger impact. The purpose of my research is to provide evidence to highlight the areas that current legislation needs to incorporate in order to derive bills that empower students with dyslexia who are currently struggling as they are being supported by teachers and educators who have not been appropriately educated on how to serve this population. This research has the potential to add to the recently growing body of evidence on dyslexia in order to strengthen the argument that more needs to be legally required of our education system for students with dyslexia.

3. Project Timeline

Semester	Description
Spring 2019	IRB approval Finalize 19 survey questions and create survey platform (Qualtrics) Administer pre-survey 04/08 – 08/26
Summer 2019	Analyze data collected from pre-survey
Fall 2019	Administer pre-survey 08/26 – 09/06 Analyze data collected from pre-survey Administer post-survey 11/25 – 12/06
Spring 2020	Analyze data collected from post-survey Present at the UNO Student Research and Creative Activity Fair

4. Student/Faculty Roles

Student Role	Faculty Role
• Contact professors and students to participate • Derive survey questions • Create electronic survey platform • Collect and analyze data • Present findings at fair	• Identify proper course(s) to survey • Oversee and review survey questions • Oversee and review research design and data collection • Provide feedback throughout process

5. Budget Justification:

Expense	Cost	Description
Participation Incentive	$150	2 gift cards will be entered into a drawing during each of the 3 data collection periods
Material and Supplies	$100	Materials and supplies will include all office supplies such as poster preparation costs, printing, handouts, etc.
Stipend	$4,750	I will be receiving compensation for my position as a UNO graduate assistant from 01/2019 – 05/2019. This compensation will assist with my ability to purchase the first round of participation incentives. Starting the summer of 2019, (6/19 – 3/20) I will receive no other forms of compensation and will enter my externship experience, so I will be unable to pursue any position to receive compensation with this additional responsibility of research. This stipend will allow me to dedicate my time outside of course requirements to complete this project. I anticipate approximately 80 hours per data collection period strictly on analyzing data (240-hour approximation). Approximately 45 hours will be devoted to creating my survey. I will be meeting with numerous professors and presenting to numerous courses in order to present on my research in order to recruit participants. (Approximately 5 hours) I've allocated approximately three/four months to devote to finalizing my findings and producing my final presentation for the UNO fair.
Total	**$5,000**	

References

Learning Disabilities Association of Manitoba. (2019). *Types of learning disabilities*. Retrieved

       from: http://ldamanitoba.org/about-learning-disabilities/types-of-lds/

Legislative Bill 1052. (2018). *Legislature of nebraska: One hundred firth legislature second*

       session. Committee of Education. Retrieved from

       https://www.nebraskalegislature.gov/FloorDocs/105/PDF/Intro/LB1052.pdf

National Center for Education Statistics. (2018). *Children and youth with disabilities*. Retrieved

       from https://nces.ed.gov/programs/coe/indicator_cgg.asp

National Center for Learning Disabilities. (2019). *The state of LD: Understanding the 1 in 5*.

       Retrieved from https://www.ncld.org/archives/blog/the-state-of-ld-understanding-the-1-

       in-5

January 30, 2019

Dear GRACA Selection Committee,

We are excited to write this letter of support for Brittany Brown, in her application for GRACA funding for her research project entitled: "University Instruction on Dyslexia: Implication of Legislative Bill 1052." As professors of Special Education in the College of Education, we are thrilled to have the opportunity to work with Ms. Brown. Her proposed GRACA proposal is well developed, and we have worked together to refine the details of her methodology and timelines. The topic of dyslexia is currently garnering lots of attention at the school and legislative levels. Here in Nebraska, new legislation seeks to impact the educational progress of students in classrooms, as well as the professionals in charge of delivering that instruction. Ms. Brown's knowledge of the new legislation and her interest in how it will be measured shows her dedication to accountability and data driven practice, two critical aspects of success in the education field. This GRACA project will not only provide her with key research experience, but her results are of high-interest to stakeholders at the university, community, and state levels.

A GRACA scholarship would be well deserved. Ms. Brown's project has clear objectives and connections to what is currently one of the most pertinent topics in education (i.e., Dyslexia). Her proposed project is organized, thoughtful, and very well written. In her initial proposal meeting she clearly articulated her background interest, her plans for project completion, and a variety of avenues for dissemination of the work. Her written proposal is an example of her exceptional writing and research skills that have been honed in her graduate coursework and training.

In addition to her graduate coursework, Ms. Brown has thoughtfully participated in a variety of service opportunities during her time at UNO. Her participation in a diverse set of experiences demonstrates her time management, organization, and dedication to her professional development. Ms. Brown has been an active member of the National Student Speech Language Hearing Association and even served a class representative in 2017. In addition, she has completed a diverse set of several service learning projects throughout her time at UNO, spanning from working with community libraries to organize early literacy initiatives, to helping high schools incorporate language and literacy elements into their art classes. The scope of her experiences demonstrates her tenacity and enthusiasm for improving her field.

It is clear to us that Ms. Brown is an outstanding candidate for GRACA funding. We have no doubts in her skills in planning and execution of her project. Our confidence is bolstered by our continued interaction with her as she considers ways to move forward. We are looking forward to working with Ms. Brown on this project. Please contact us at any time regarding our recommendation or the project.

Sincerely,

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