Analyzing Pre-Service Teachers' Knowledge and Perceived Needs When Working with Students with Learning Disabilities During Student Teaching

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Purpose and Introduction

- The purpose of this preliminary study was to identify the knowledge, level of self-efficacy and perceived needs of the 2019 student teaching cohort (*N* = 18) concerning students with learning disabilities.
- The data served to asses course and program effectiveness during the student teaching cohort.
- Research within the topic of learning disabilities within the agricultural education classroom is imperative.
- There has been minimal research reported in regard to agricultural education and students with learning disabilities (Richardson, 2006).
- There is an increase in learners with disabilities (U.S. Department of Education, 2018).

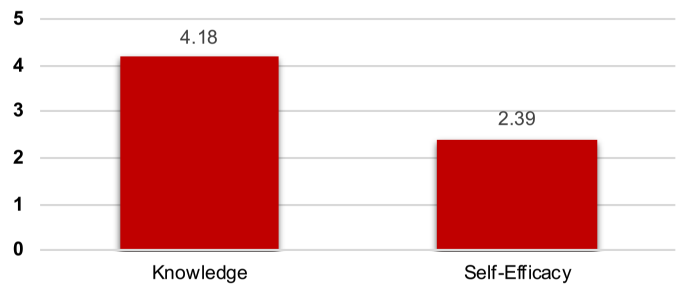
Theoretical Framework

- Learning to teach is a challenging and complex process (Freese, 2006).
- The number of learners with disabilities in secondary education classrooms continues to escalate (Ross, 2006).
- Self-efficacy beliefs govern how individuals feel, think, behave and how they are able to motivate themselves (Bandura, 1994).
- Increased self-efficacy helps create better and more effective teachers (Goddard, Hoy & Woofolk-Hoy, 2000).
- When an individual believes they have the necessary amount of resources and opportunities, confidence in the ability to perform a behavior is higher (Ajzen, 2002).
- Human behavior is guided by attitude, subjective norm, and perceived control (Ajzen, 2006).

Findings

- Pre-service teachers on average (*M = 2.39*) agree they are confident in working with students with learning disabilities.
- Pre-service teachers on average (*M = 4.18*) have 'some knowledge' of learning disabilities. Half of the pre-service teachers reported having prior experience with learning disabilities before entering the student teaching cohort.
- Class preparation, adapted curriculum and time management were reported the most often as perceived needs.

Pre-Service Teachers' Level of Knowledge and Self-Efficacy When Working with Students with Learning Disabilites



Pre-Service Teachers at Texas Tech University (N = 18) Perceived Needs

Need	*f*	%
Class Preparation	15	83.3
Adapted Curriculum	11	61.1
Time Management	10	55.6
Training on Common Learning Disabilities	8	44.4
Self-Confidence	8	44.4
Paraprofessional Support	7	38.9
Other	0	0

Methods

- Instrument was developed after reviewing instruments currently used in education and special education. A panel of experts reviewed the instrument for content and face validity. Due to the small sample reliability was not calculated.
- A pilot cohort of pre-service teachers (*N = 18*) were surveyed during their first month of student teaching.
- Weekly email reminders were sent as recommended by Dillman, Smith and Christian (2014).
- A survey instrument with a 5-point Likert scale was used to measure knowledge and assess self-efficacy.
- Perceived needs were measured using "check all that apply" metrics and free response.
- Data were compiled, reviewed and analyzed in SPSS.

Conclusions and Recommendations

- Needs of pre-service teachers should be evaluated by teacher education programs.
- Replication of the study at the state and national level with the population of current agricultural education teachers.
- Increases in learners with disabilities will require teacher education programs to alter curriculum to suitably meet the needs of the secondary agricultural education student population.

References

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. *In Action Control* (pp. 11–39). Berlin, Heidelberg: Springer Berlin Heidelberg. doi: 10.1007/978-3-642-69746-3_2

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, *32*, 665-683. doi: 10.1111/j.1559-1816.2002.tb00236.x

Ajzen, I. (2006). Behavioral Interventions Based on Theory of Planned Behavior. [PDF file] Retrieved from https://www.researchgate.net/publication/245582784_Behavioral_Interventions_Based_on_the_Theory_of_Planned_Behavior

Bandura, A. (1994). *Self efficacy*. Hoboken, NJ, USA: John Wiley & Sons, Inc.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Hoboken, NJ, USA: John Wiley & Sons Inc.

Freese, A. R. (2006). Reframing one's teaching: Discovering our teacher selves through reflection and inquiry. *Teaching and Teacher Education*, *22*(1), 100–119. doi:10.1016/j.tate.2005.07.003

Goddard, R. D., Hoy, W., & Woolfolk-Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, *37*(2), 479-507.doi: 10.3102/00028312037002479

Richardson, J. (2006). Strategies employed by North Carolina agriculture teacher in serving students with mild to moderate learning disabilities. Paper presented at 2006 *American Association for Agriculture Research Conference*, *Charlotte, NC*.

Ross, A. (2006). *The influence of teacher efficacy on North Carolina agriculture teachers' perceived success in working with students with special needs.* (Unpublished master's thesis). University of Missouri–Columbia.

U.S. Department of Education, National Center for Education Statistics. (2018). *Digest of education statistics: Elementary and secondary education.* (NCES 2017-094). Retrieved from https://nces.ed.gov/programs/digest/d16/ch_2.asp