Time Devoted to Teaching: An Analysis of an Extended Student Teaching Semester

Jorge Gonzalez
Oklahoma State University
448 Agricultural Hall
Stillwater, OK 74078
jorge.e.gonzalez@okstate.edu
405-744-8036

Marshall A. Baker
Oklahoma State University
448 Agricultural Hall
Stillwater, OK 74078
bakerma@okstate.edu
405-744-8036

Jon W. Ramsey
Oklahoma State University
448 Agricultural Hall
Stillwater, OK 74078
jon.ramsey@okstate.edu
405-744-8036

Time Devoted to Teaching: An Analysis of an Extended Student Teaching Semester

Introduction

The student teaching experience has been touted as the seminal experience for prospective teachers of agricultural education for decades (Edgar, Roberts, & Murphy, 2009; Edwards & Briars, 2001; Schuman, 1969). Oklahoma State University implements Retallick & Miller's (2010) model outlining teacher development in which theory is melded into the real world through early field experiences (Retallick & Miller, 2010). "Clinical field experiences allow pre-service teachers to identify linkages between theory and practice" (Retallick & Miller, 2010, p. 62). To create this stronger connection and help pre-service teachers acquire and practice effective teaching behaviors in real world settings, Oklahoma State University increased the student teaching experience from 12-weeks to 15-weeks.

Theoretical Framework

This study is theoretically grounded in Knowles and Cole's (1994) experiential learning cycle/spiral for teacher preparation that is based in the work of Kolb (2015) and Dewey (1938). The student teaching experience is a cyclical learning experience where student teachers are exposed to teaching in authentic settings, gather information and documentation, reflect and develop personal theories, and then move into the next teaching experience with informed action (Knowles & Cole, 1994). Additionally, the Retallick and Miller (2010) model conceptually delineated the various EFE experiences, of which this specific study would focus on the stand-alone experience that is student-centered and driven by the cooperating teaching center (Retallick & Miller, 2010).

Purpose and Objectives

The purpose of this study was to describe the Oklahoma Agriculture, Food, and Natural Resource career pathway content being delivered, the levels of classroom involvement by student teachers in the experience, and identify the differences that result in both the 12 and 15-week student teaching format approaches. The objectives were to 1) Describe the frequency of Oklahoma AFNR career pathway topics taught by Fall and Spring student teachers in the 12-week and 15-week formats, and 2) Describe the amount of time student teachers in the Fall and Spring semesters were involved in observing, team teaching, and teaching in the 12-week and 15-week formats.

Methodology

This descriptive survey study focused on the census of preservice teachers completing their student teaching internship during the 2015 and 2016 fall and spring student teaching semesters ($N = 53$). The spring 2015 cohort ($n = 12$) and fall 2015 cohort ($n = 9$) completed 12-weeks of student teaching while the fall 2016 cohort ($n = 10$) spring 2016 cohort ($n = 22$) completed 15-weeks. Data were retrieved from archived, weekly journal reflection reports submitted electronically each week by the student teachers. Students self-reported the days that were spent observing, team teaching, and teaching along with the lesson topics taught. Program coordinators reviewed each report for accuracy; SPSS Version 20 was used for data analysis. The Spring and Fall data was analyzed separately due to the uniqueness of each semester experience to focus analysis on the extension of the student teaching experience. A census study permitted

conclusions to be drawn about the entire population. Therefore, random sampling, hypothesis testing, and the use of inferential statistics are not necessary (Creswell, 2005).

Results/Findings

Regarding the first research question, the implementation of a 15-week student teaching format led to an increase of total instructional hours devoted to AFNR pathways in the fall (Δ +27.2) and spring (Δ +117.5) semesters. The 15-week format led to additional time devoted to each of the AFNR pathways, excluding Plant and Soil Science (Δ -4.4) and Natural Resources & Environmental Science (Δ -2.9) in Fall 2016 and Agricultural Communications (Δ -5.2) in the Spring 2016 semester. The largest amount of instructional time was spent on Animal Science, Agricultural Power, Structures & Technology, and Plant and Soil Science pathway lessons regardless of format. Of all the semesters, the spring 2016 student teachers spent the most time in the animal science pathway (89.9 hours). As for the second research question, it was found that the frequency of teaching per week spiked higher in the 15-week format (F16 = 19.5, S16 = 12.7) than in the 12-week format (F15 = 16, S15 = 10.4). The 15-week format also led to extended periods of teaching compared to the 12-week format. The 12-week format utilized team teaching at the beginning of the student teacher experience more than the 15-week format.

Conclusions/Implications/Recommendations

The majority of instructional time was spent on animal science, power and technical systems, plant science, and soil science regardless of the format. Oklahoma ranks eleventh in all livestock and poultry production, as well as fourth in wheat production nationally (United States Department of Agriculture, 2012). Additionally, manufacturing and production are one of the largest percentages of private employment in the state (Evans, 2017). Census data and trends are driving agriculture, food and natural resource career pathway topics taught in the classroom towards preparing students to enter careers in three of the largest state economic sectors. Teacher preparation programs should collaborate with agriculture departments to ensure teacher aspirants are exposed to the technical content needed to deliver instruction in the AFNR pathways.

Classroom assistance such as team teaching is seen as one of the purposes of early field experiences (Retallick & Miller, 2007). The bridge between observation and teaching through classroom assistance occurred more frequently in the 12-week format. Yet, the 15-week format led to increased independent instruction that began earlier in the experience. Student teachers in the 15-week format were able to immerse themselves in the individual teaching aspect of the experience. This allowed more time for the Knowles and Cole (1994) experiential learning spiral to refine the pedagogical theories developed as student teachers fully manage the classroom.

As suggested by Retallick and Miller (2010), the implementation of the early field experience included early scaffolding of teaching followed by increasing independence. Both the 12-week and 15-week student teaching blocks witnessed skills and developed techniques during their time observing and team teaching at the learning centers. As the experience progressed, the Retallick and Miller (2010) model was visible as the student teacher transitioned from observing their cooperating teacher as a student, to independently conducting lessons as a teacher without the guidance of the cooperating teacher. Teacher educators should provide professional development to cooperating teachers so that they better understand the value and approach to preparing teacher aspirants for the independent phase of the student teaching experience.

References

Creswell, J. W. (2005). Educational Research: Planning, conducting, and evaluating quantitative and qualitative research. (2nd ed.). Upper-Saddle River, NJ: Pearson Education.

Dewey, J. (1938). *Experience and Education*. New York: Macmillan.

Edgar, D. W., Roberts, T. G., & Murphy, T. H. (2009). Structured communication: Effects on teaching efficacy of student teachers. *Journal of Agricultural Education*, *50*(1), 33-44. doi:10.5032/jae.2009.01033

Edwards, M. C. & Briers, G. E. (2001). Cooperating teachers' perceptions of important elements of the student teaching experience: A focus group approach with quantitative follow-up. *Journal of Agricultural Education*, *42*(3), 30-41. doi:10.5032/jae.2001.03030

Evans, M. (2017) *Oklahoma Economic Indicators, April 2017.* Retrieved from Oklahoma Employment Security Commission website: https://www.ok.gov/oesc_web/documents/lmiEconIndPub.pdf

Knowles, J. G., & Cole, A. L. (1994). Through preservice teachers' eyes: Exploring field experience through narrative and inquiry. New York: Macmillan College.

Kolb, D. A. (2015). Experiential learning: Experience as the source of learning and development (2nd ed.). Upper Saddle River, NJ: Pearson Education Inc.

Retallick, S. M., & Miller, G. (2007). Early field experience documents in agricultural education. *Journal of Agricultural Education, 48*(4), 20-31. doi: 10.5032/jae.2007.04020

Retallick, M. S., & Miller, G. (2010). Teacher preparation in career and technical education: A model for developing and researching early field experiences. *Journal of Career and Technical Education*, *25*(1). Retrieved from schlar.lib.vt.edu/ojs/ejournals/JCTE/v25n1/retallick.html

Schumann, H. (1969). The cooperating teacher's role in student teaching. *The Agricultural Education Magazine*, *41*, 156.

United States Department of Agriculture, National Agricultural Statistics Service, Quick Stats. (2012). *Census State Profile: Oklahoma.* Retrieved from https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=OKLHOMA