



The Influence of COVID-19 and Virtual Learning on the PCK Development of Arizona Preservice SBAE Teachers
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The purpose of this study is to explore the influence of COVID-19, and the shift to virtual learning, on the preparation of SBAE preservice teachers at UArizona with a focus on their PCK development. This research was conducted using a single case study design, employing semi-structured interviews of one preservice teacher cohort, two university instructors, one teaching assistant, and five supervising practitioners throughout the student teaching experience over the spring 2021 semester.

Key Findings:

1) Students teachers had a loss of total SBAE teaching experience:

Due to COVID-19 restrictions, student teachers received primarily a classroom teaching experience rather than a complete SBAE teaching experience encompassing aspects of SAE and FFA as a part of their student teaching internship. Regardless of the modality they were teaching in, this cohort missed out on all typical national, state, and local FFA/CDE events.

2) Student teachers were prepared well in curriculum development:

All participants collectively agreed the student teachers were well prepared in curriculum development, lesson planning, and technology use. Student teachers did not feel like they missed anything from a content standpoint in their teacher preparation courses. UArizona instructors confirmed the content of each course had remained the same despite COVID-19 restrictions at the University level.

3) Lack of experimentation and problem solving in teaching:

All were challenged to some degree due to unavoidable COVID-19 restrictions that permeated the educational environment. Student teachers were unable to have early field experiences, along with opportunities to facilitate a full functioning high school classroom including classroom management and experimentation of methods when disseminating lessons, labs, and activities.

4) Lack of relationship building with students and professionals:

COVID-19 restrictions took away the cohort's ability to have early field experiences prior to student teaching. While the student teachers were able to have positive relationships with the students that came in-person and virtually during their internship, COVID-19 restrictions still impacted the number of organic interactions they could have with students during classroom instruction.

5) Student teachers being more protected from failure due to the COVID-19 environment:

Mental health checks were put in place throughout the semesters in each teacher preparation course. While student teaching, it was apparent supervising practitioners were less critical of their student teachers than previous years. Analysis also revealed most supervising practitioners stayed in closer proximity to the student teacher on a daily basis than they would in a typical year.

6) Overall student teachers are prepared to teach

Despite the modifications made in the spring and fall semesters, the online delivery of teacher preparation courses, and the lack of early field experiences, all student teachers felt prepared to student teach. Each student teacher, along with their supervising practitioners, University instructors, and teaching assistant, stated in their final interview that they're prepared to be teachers in agricultural programs in Arizona.

Recommendations for Practice and Future Research:

- Future research on PCK development through online and hybrid modalities while still incorporating early field experiences (EFE)'s and student teaching in-person
- Further exploration on this cohort while in their first job post student teaching can provide information on the development and application of their PCK outside of the context of COVID-19.
- Implementation of multiple early field experiences.
- Deep reflection of early field experiences by preservice student teachers.
- The creation of one semesters worth of curriculum prior to student teaching during teacher preparation.
- Supervising practitioners and university instructors maintain a balance of constructive criticism and positive feedback throughout the student teaching process regardless of current circumstances.