Adjunct Faculty and Technology in Statistical Education: A Qualitative Study

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Literature Review

- The adjunct faculty phenomenon has grown steadily in contrast tenure track positions have decreased considerably (*Facts about Adjuncts*, n.d.; Wallis, 2018).
- Research on adjunct faculty is varied focusing on the high percentage of adjuncts currently teaching at the university level, job satisfaction, professional development needs and institution integration (Gray, 2017).
- Rahman et al (2020) focused on part-time faculty teaching core courses, such as Pre-Calculus, interviewing part-time faculty to understand their job satisfaction. Rahman et al. (2020) suggested that for universities to improve STEM education adjunct's professional development also needs to be developed.
- GAISE guidelines on utilizing technology and "real" data for introductory statistics courses.

Data Collection & Analysis

- Data was collected after IRB approval. Participants were sought out through three different ways: reddit, the Consortium for the Advancement of Undergraduate Statistics Education listserv and via snowball.
- Transcriptions
- Data analysis was done in NVIVO.
- N = 15

nursing biological statistics sociology biological science common core course grade students geostatistics data science

statistics mathematics

statistics

graduate students

biostatistics business statistics Dhd

master

adjunct instructor graduate adjunct instructor part intro mathematics instructor part time

full time

psychological statistics geography analyst

professor

Findings & Practical Implications

- Paper/Pencil Exams (minority)
 - Blackboard or publisher websites
 - Open book/Open notes assessments
- Variety of software was mentioned
 - Minitab, R (R Studio), Excel
 - STATKEY
 - Free resource
 - Useful way to create different 'datasets'



Selected References

- Franklin, C., Kader, G., Mewborn, D., Moreno, J., Peck, R., Perry, M., & Scheaffer, R. (2007). Guidelines for assessment and instruction in statistics education (GAISE) report.
- Rahman, Z. G., Murray, E., & Golnabi, A. H. (2020). Adjunct mathematics instructor resources and support contributing toward job satisfaction. PRIMUS, 1–17.
- Gray, S. (2017). Organizational integration of part-time faculty teaching developmental mathematics