

Digital Tools, Real Classrooms:

A Descriptive Analysis of Preservice Teachers' Usage of Learning Management Systems in School-Based Agricultural Education Field Experiences



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INTRODUCTION

- > LMSs (Learning Management Systems) are widely used in K-12 (Google Classroom, Canvas, Schoology).
- > SBAE teachers face **challenges using LMSs**:
 - Limited training
 - Usability issues
 - Contextual barriers
- > Preservice SBAE teachers are expected to be ready, but **gaps in preparation and confidence remain**.

THEORETICAL FRAMEWORK

Unified Theory of Acceptance and Use of Technology (UTAUT), (Venkatesh et al., 2003).



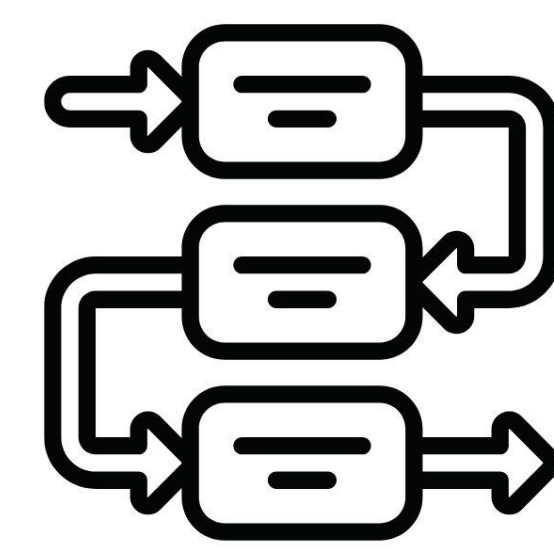
Performance & Effort
Expectancy



Social Influence



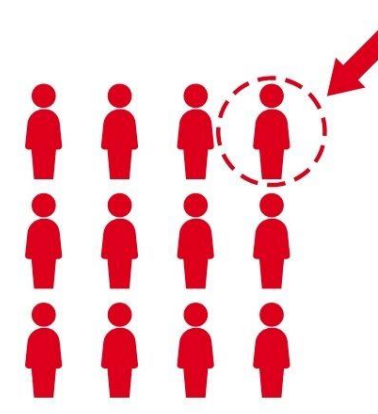
Facilitating
Conditions



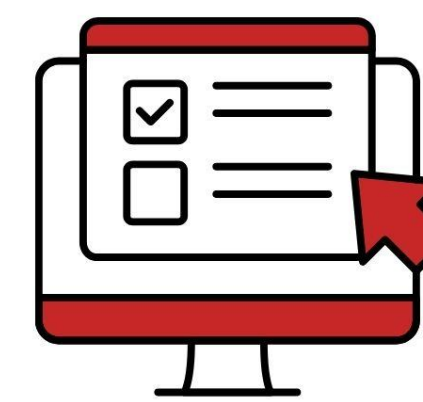
METHODOLOGY



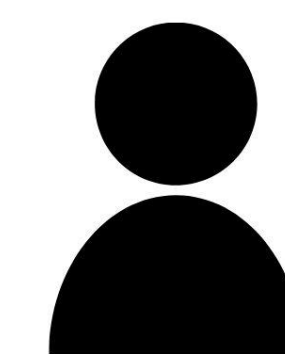
Descriptive, cross-sectional
survey design



Convenience Sampling (Krejcie & Morgan, 1970).

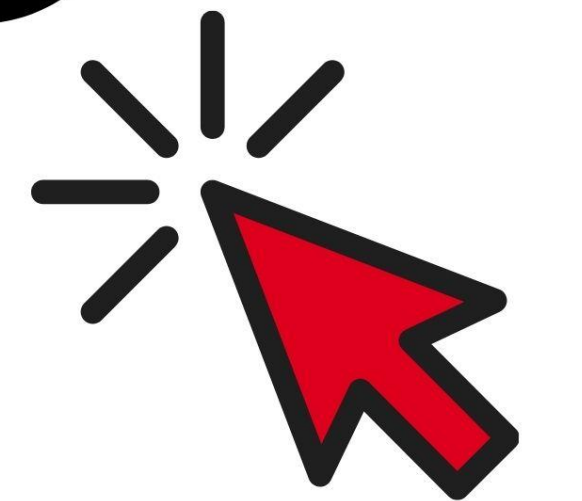


Researcher developed questionnaire



30 Texas preservice agricultural
educators in field placements

RESULTS/ FINDINGS



LMS Usage:

- 1 Google Classroom = **63.3%** (dominant platform)
- 2 Canvas = **20%** (distant second)

Barriers:

- LMS misaligned with hands-on ag instruction (**Top barrier**)
- Tech & internet access issues
- Limited training/professional development
- Administrative/district restrictions

Relationships:

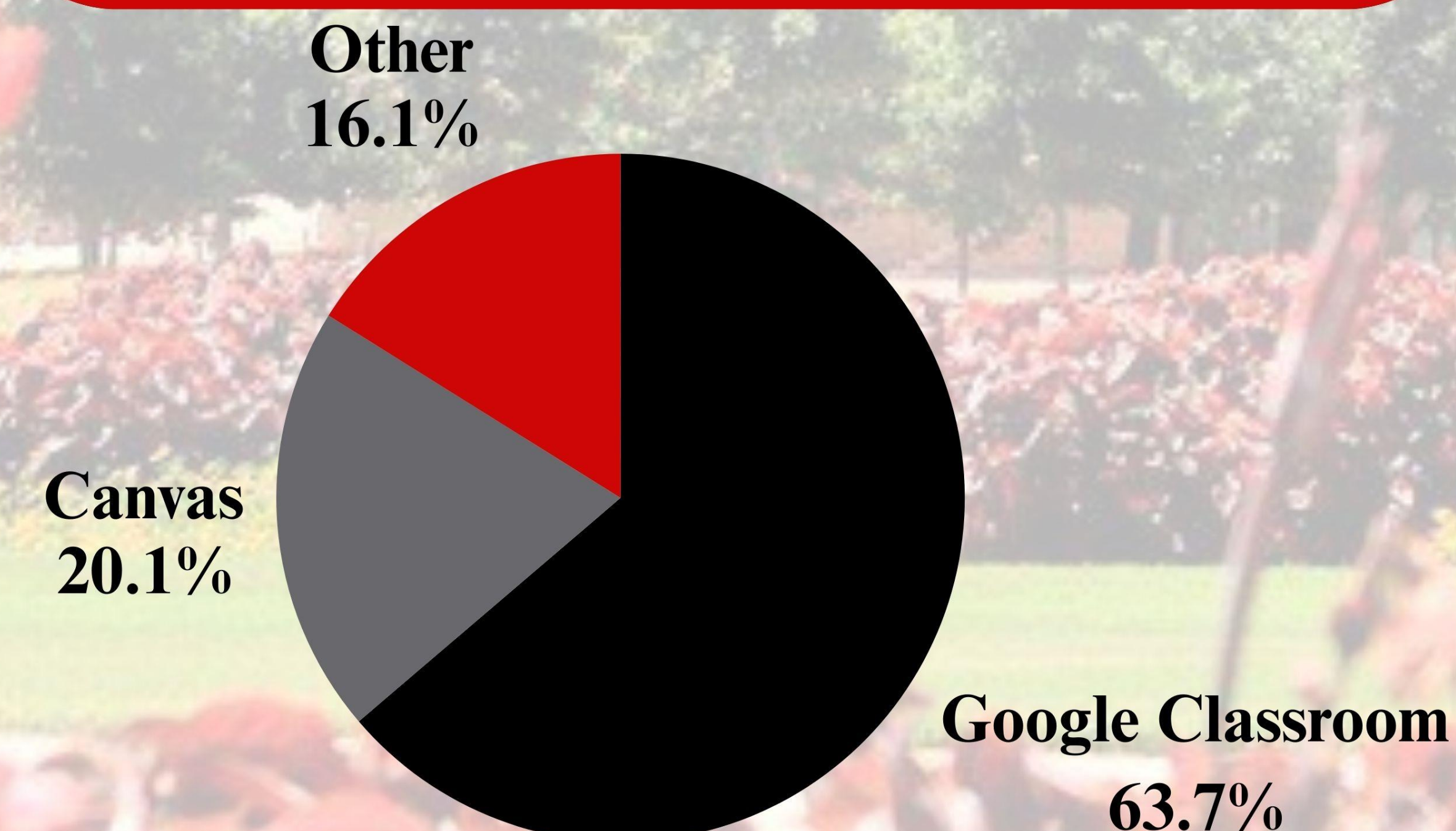


Colleague's frequent LMS usage
increases students' ease of
comfort and effectiveness ($p <$
.05)



Inconsistent LMS use across
courses has a **substantial negative
impact** on LMS comfort and
instructional value ($p <$.01)

LMS Usage Among Preservice Agricultural Educators



SCAN ME



CONCLUSIONS & IMPLICATIONS

Findings:

- Google Classroom = **most used LMS**

Barriers:

- Hands-on Misalignment • Tech Access • Limited Training • Admin Constraints

Peer use **INCREASES** adoption & effectiveness (UTAUT)

Implications:

- 1.) SBAE-specific LMS training
- 2.) Improve tech access
- 3.) Promote peer modeling