



Entomologists in the K-12 Classroom

A scoping review of efforts by Entomologists in K-12 classrooms

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Intro:

- Historically minoritized groups continue to be underrepresented in STEM workforce (Kaggwa et al. 2023).
- Studies have shown that aspirations toward STEM fields are lower in females, minority populations, and those of low socioeconomic status (Saw et al. 2018).
- Entomology as a field does not escape this inequity (Orfinger 2020)
- Combating this systematic inequity will require that entomologists engage future generations of potential scientists

Methods:

RQ1: Who is contributing to entomological efforts in K-12 classrooms?

RQ2: What data is collected and analyzed in this body of literature?

- Common search string used to search 4 databases, top 100 Google Scholar results
- Yielded papers (n=961) were deduplicated, screened, and excluded according to exclusion criteria
- Resulting body of literature (n=42) coded and analyzed

Gaps & Limitations:

- 17 potential publications had to be excluded due to lack of participating scientific researcher (proportional to 41% of final selection).
 - Untapped opportunities for Entomological researchers
- Demographic data related to participating students and their schools lacking
- Entomology used in educational settings lacks common terminology to be used in keyword queries

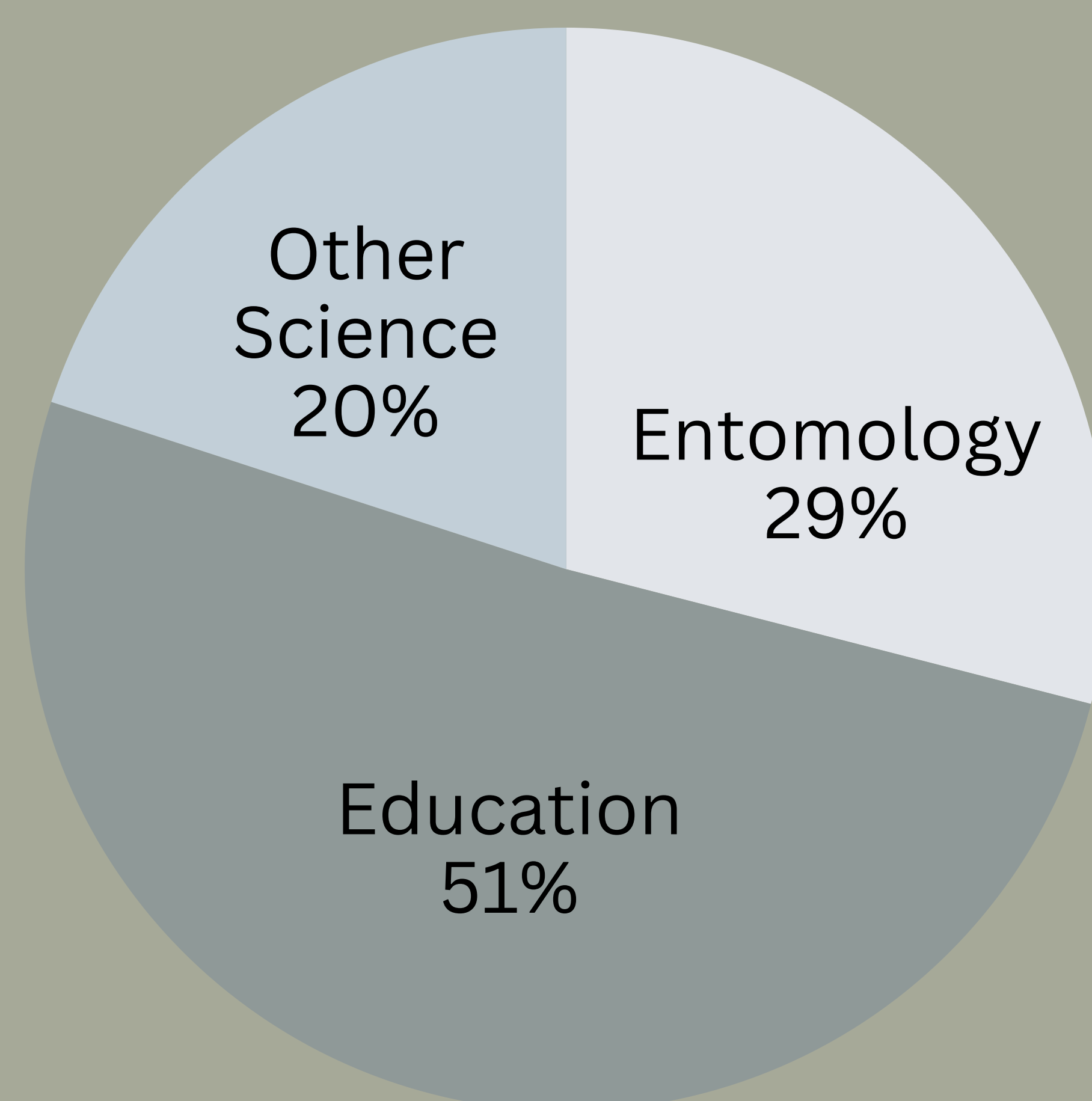
Discussion:

- The identified articles highlight collaborative relationships between entomological researchers and public educators to provide science education.
- K-12 Educators provide unarguable support in these efforts, they should be recognized for their contributions
- Implementation of interventions require evaluation to justify to administrators, families, and stakeholders
- Recognizing student demographics is vital in making Entomology more inclusive and accessible.

Results:

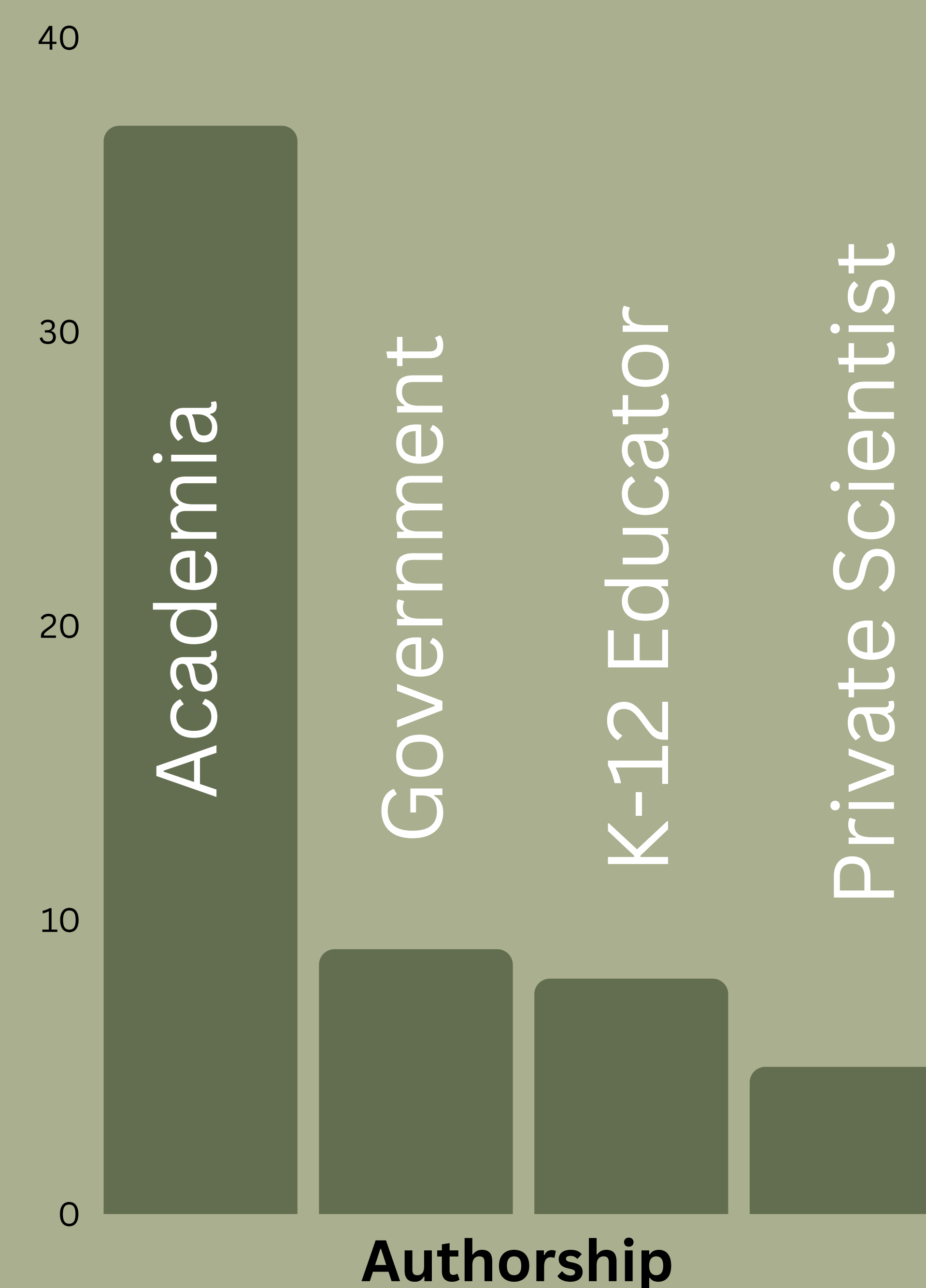
Entomological scholarship taking place in K-12 Classrooms...

... is often published in educational journals



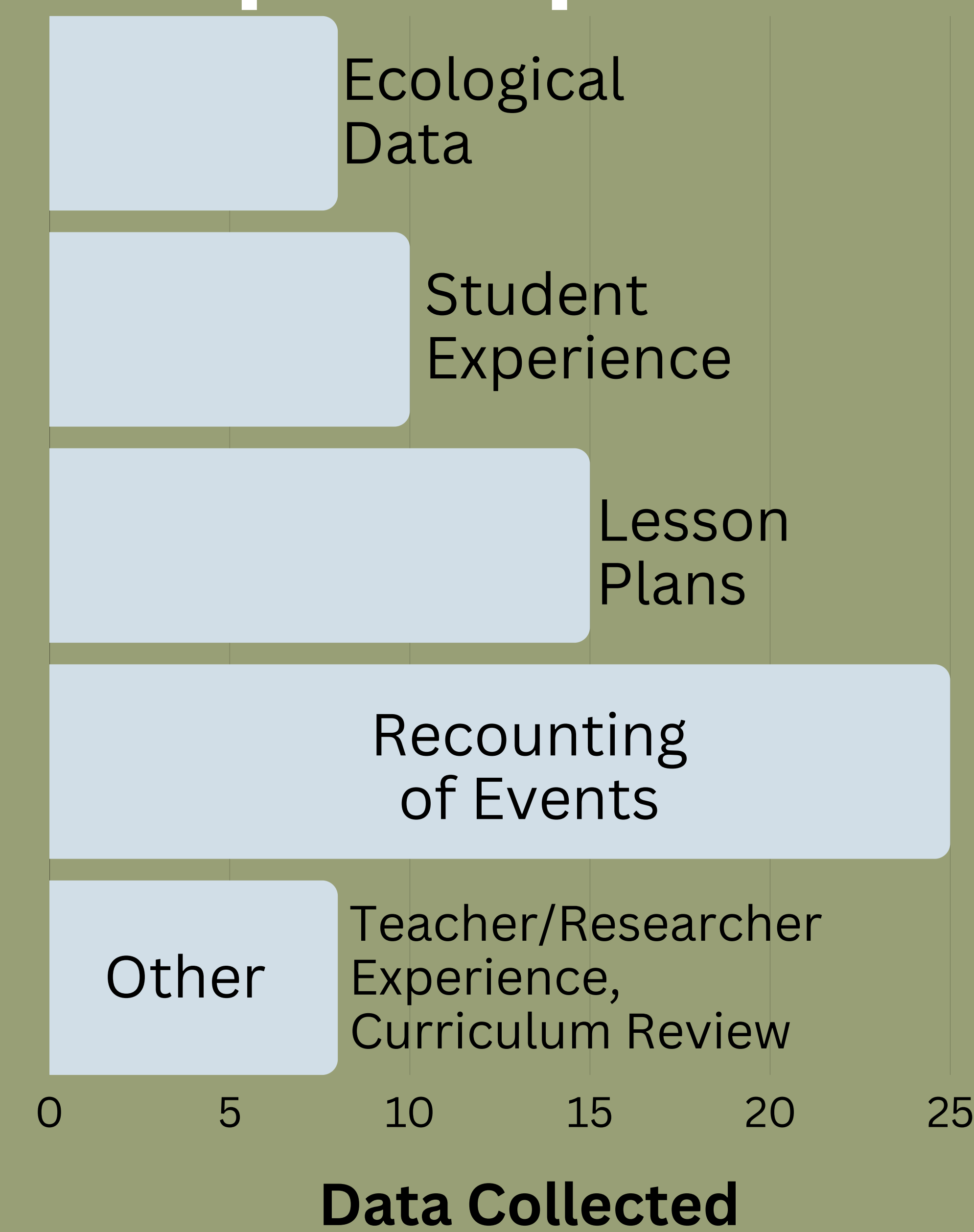
Field of Publication

... authorship does not include K-12 educators



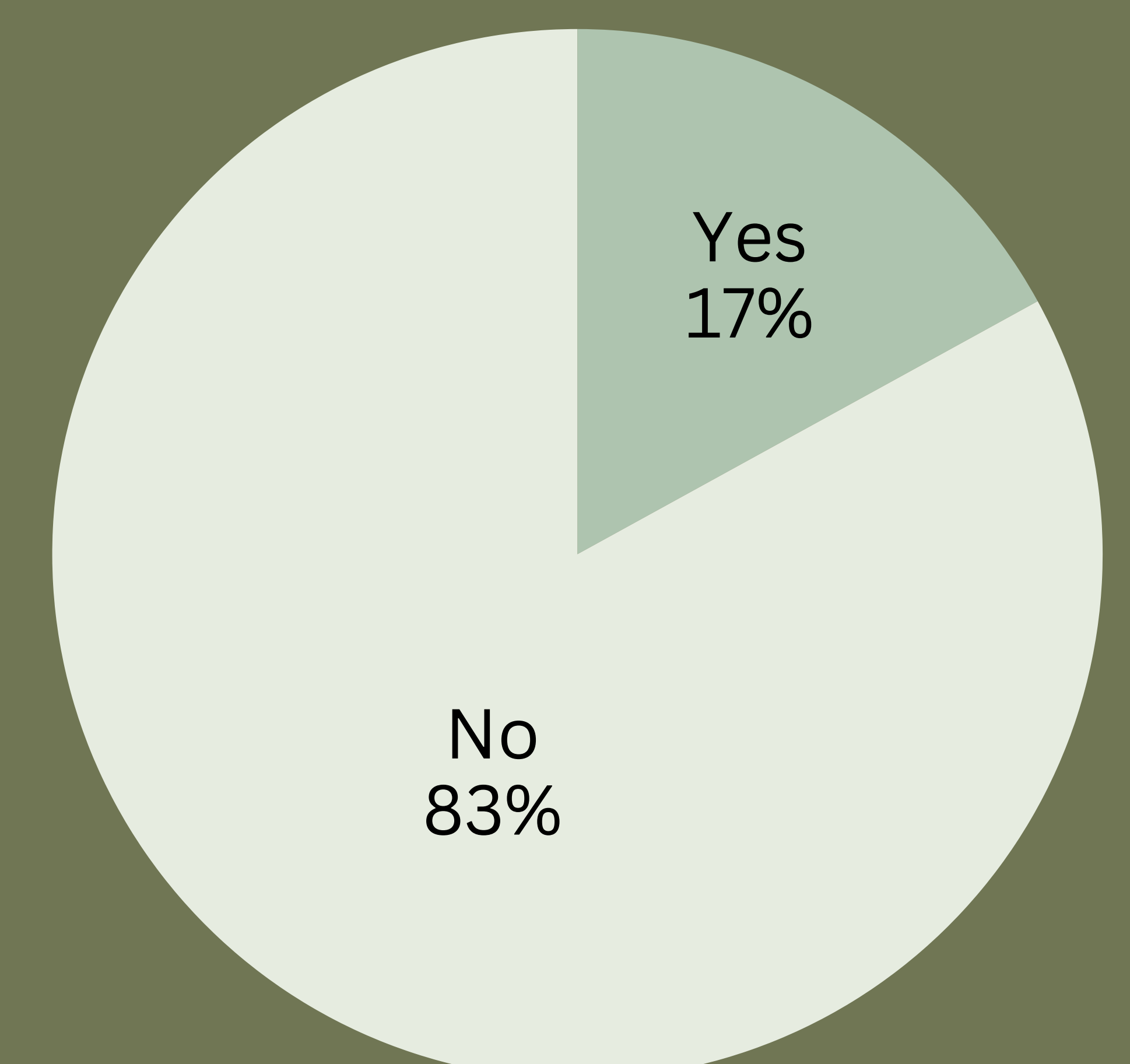
Authorship

... often doesn't capture student growth or perception



Data Collected

... does not report student generated data



Was student generated data represented?