

EXAMINING THE TEACHER PIPELINE

This study aims to descriptively compare the demographic "PIPELINE" across California's three major agricultural teacher preparation institutions.

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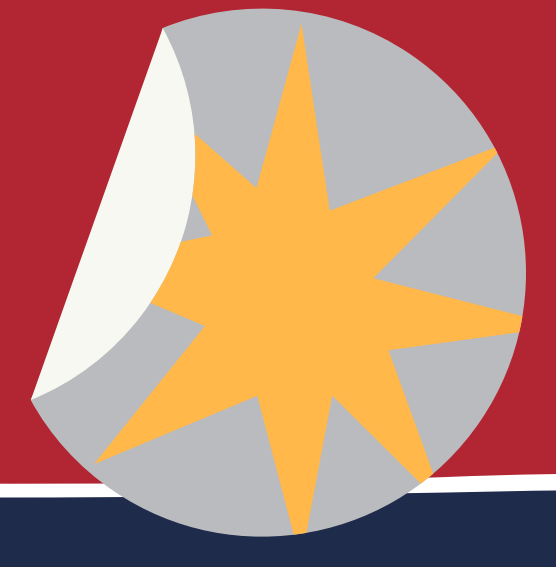


California State University Chico
 College of Agriculture



INTRODUCTION

This study compares California's three major agricultural teacher preparation institutions' demographic "pipeline" descriptively. These institutions graduate over 85% of the state's Agriculture Education/Teacher Preparation students. Secondary agriculture programs in California are 49% Male, 44% Female, 26% White, and 46% Hispanic (AET, 2023). The present agricultural teacher population is 64% female, 78% white, and 18% Hispanic (Foster et al., 2023). The majority of program completers are 75% female and 81% white, filling 85% of new teaching posts.



FRAMEWORK

The lack of demographic disparity study in the secondary agricultural teacher pipeline is based on relevant literature. Cherng and Halpin (2016) found that pupils of all groups favored minority teachers, emphasizing the need for teacher diversity. Egalite, Kisida, and Winters (2015) found that race-congruent teachers assist low-performing pupils. Underrepresented students still face challenges. Bullock, Morgan, and Warner (2021) noted challenges like financial burden and feelings of isolation. Creighton (2007) emphasized non-academic factors influencing student attrition, such as community integration and financial support. Walpole (2003) outlined the uphill battle for students from low socioeconomic status (SES) backgrounds in achieving a comparable social or economic standing to high SES peers. These studies offer a lens to scrutinize the lack of diversity within the secondary agriculture teacher pipeline.

METHODOLOGY

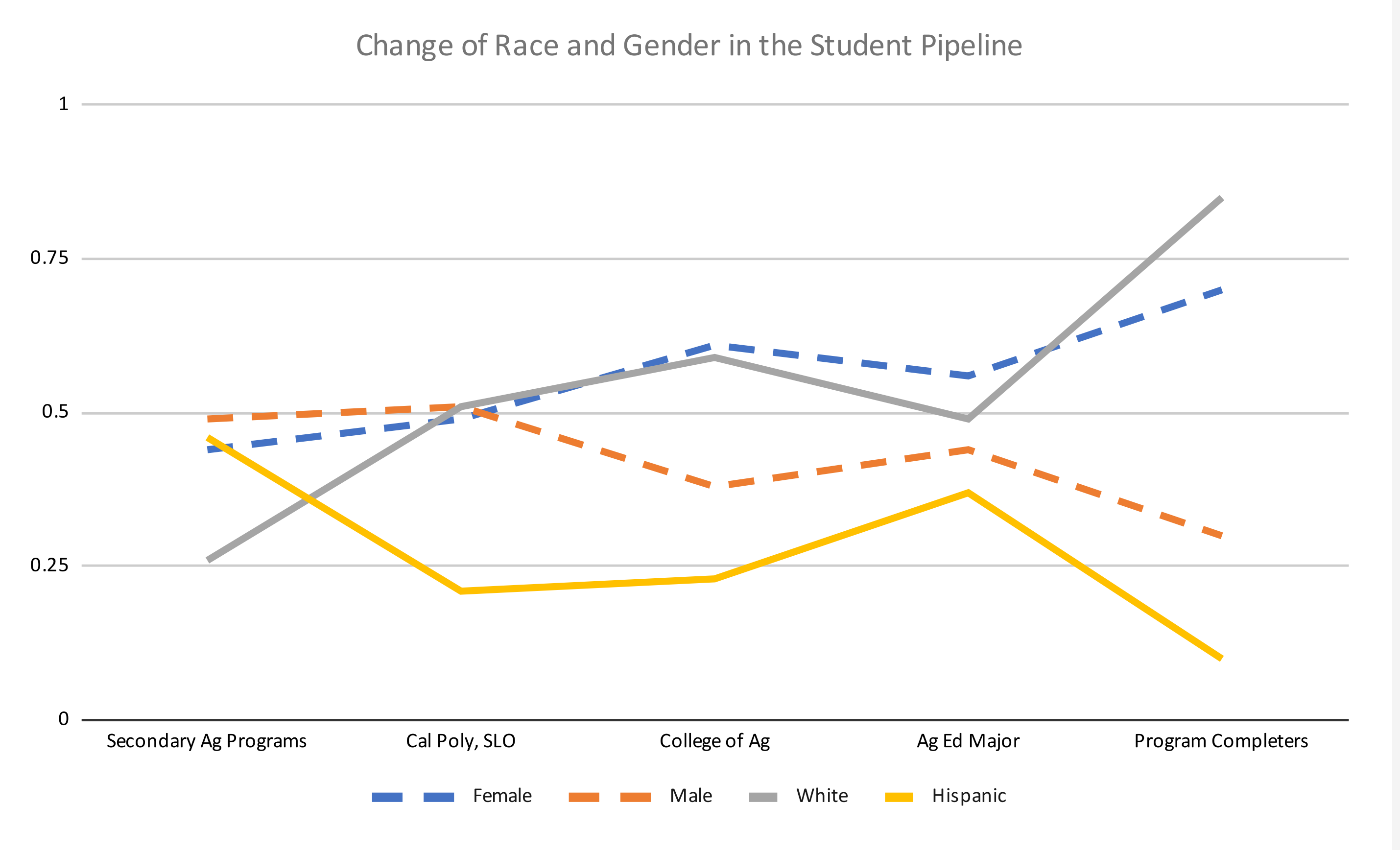
This study employs a descriptive comparative approach to examine the demographics of agricultural education majors, program completers, and secondary agriculture education students at three major California public universities.

- Institutional data was extracted from a system-wide dashboard (CSU, 2023).
- Program completer data was extracted from the AAAE National Supply and Demand Study (Foster et al., 2023).
- Secondary student data was extracted from the Agricultural Experience Tracker (2023).
- Statewide data was extracted from the National Center for Educational Statistics (NCES) for grades 9-12 (NCES, 2023).

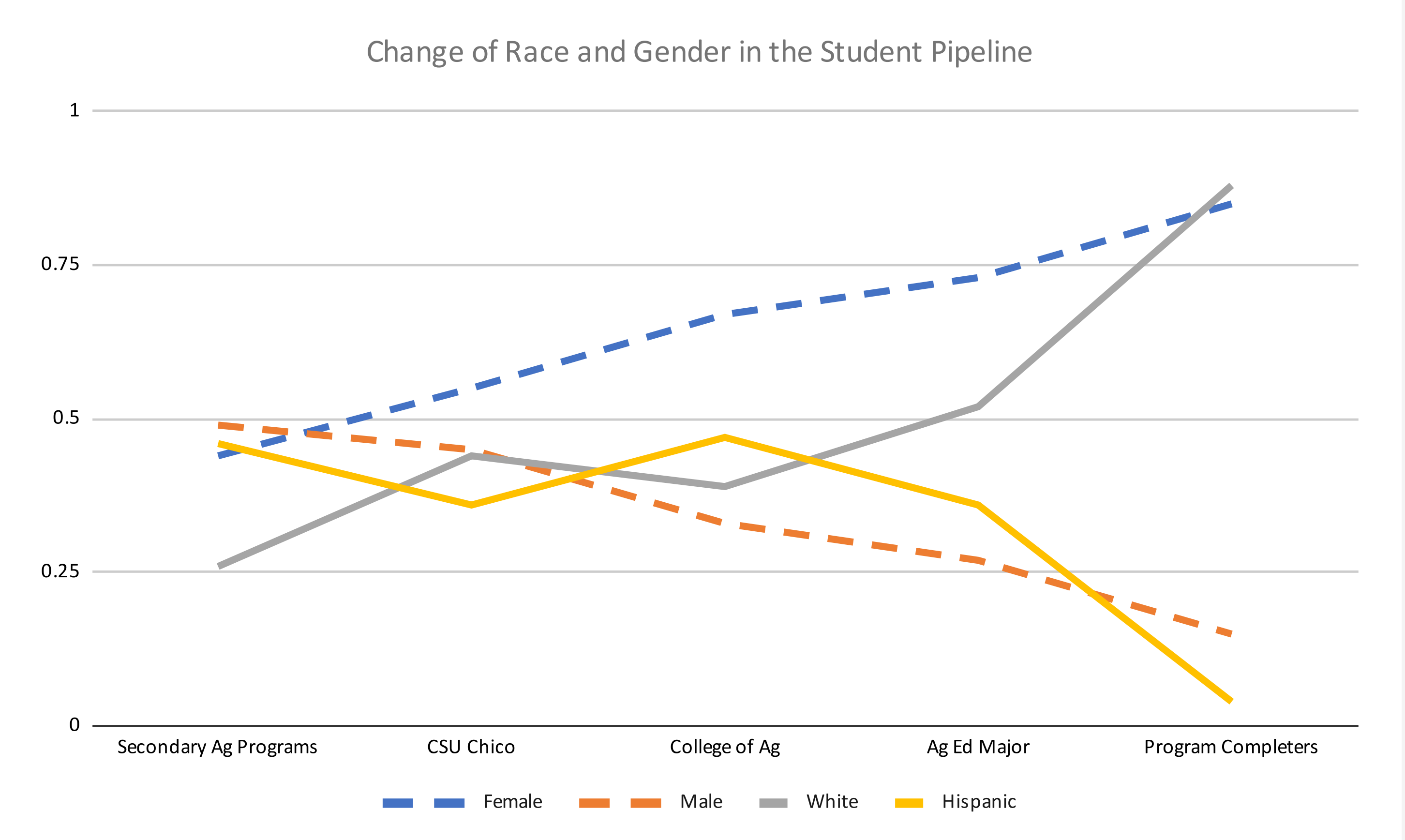
Microsoft Excel was used for descriptive statistics and demographic frequency distributions.



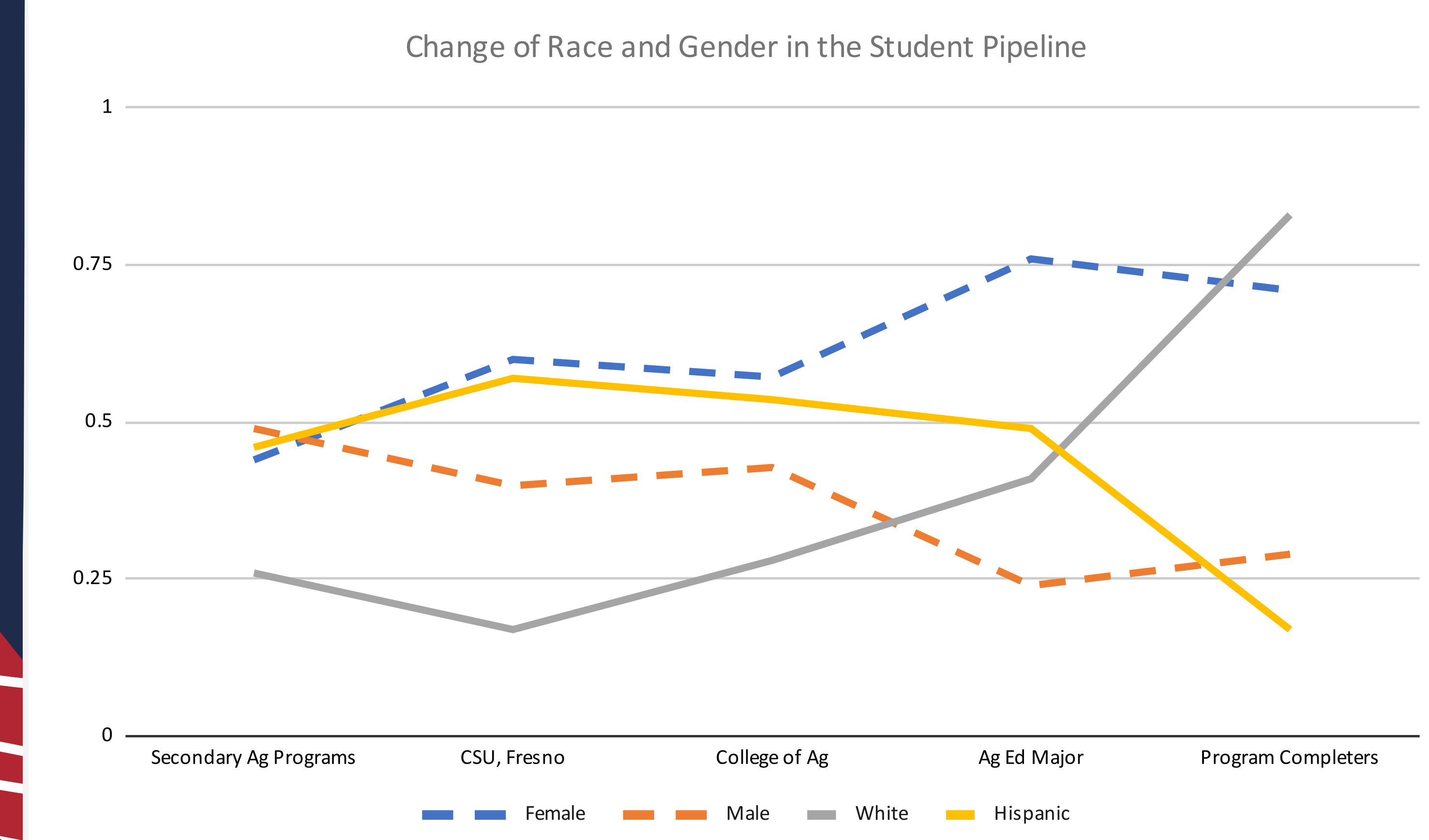
INSTITUTION #1: CAL POLY SAN LUIS OBISPO



INSTITUTION #2: CSU CHICO



INSTITUTION #3: CSU FRESNO



RESULTS/FINDINGS

Secondary programs continue to become more diverse, and agriculture programs follow this trend but lag in numbers. In broad terms, women are overrepresented in all the colleges and preparatory majors. The pipeline becomes more female, moving toward program completers. At two of the three universities and colleges, Hispanic students exceed White students. White students in the majors exceed the number of Hispanic students in two of the three institutions. In all cases, program completers are overwhelmingly White.

Significant differences exist between the institutions at all levels along the pipeline until the program completer group.

CONCLUSION

This study illuminates demographic disparities in the secondary agricultural teacher pipeline across three major public universities in California. While secondary agriculture programs and teacher preparation are slowly diversifying, race and gender equity is far from optimal. Program completers are predominantly White and female. Concurrently, Hispanic students show strong enrollments, yet their presence markedly declines among program completers. The data underscore the necessity for a more diversified secondary agricultural teacher pipeline, particularly as current figures indicate disparities in accessibility and representation.

IMPLICATIONS

Enhancing Equity: The prominent representation of female and White program completers contrasted against the underrepresentation of Hispanic and male students indicates potential barriers in their academic journey. These institutional, financial, or socio-cultural barriers need identification and mitigation. Effective interventions may encompass financial aid, community integration, and more academic support. Recruitment and Role Models: As suggested by Cherng and Halpin (2016), a diverse educator cohort can foster positive learning environments by providing varied perspectives, serving as inclusive role models, and enriching the learning environment. Addressing these challenges ensures that agricultural education becomes more inclusive, representative, and equitable, fostering a richer learning environment for all students.

REFERENCES



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