

USING GOOGLE APPLICATIONS IN HIGHER EDUCATION

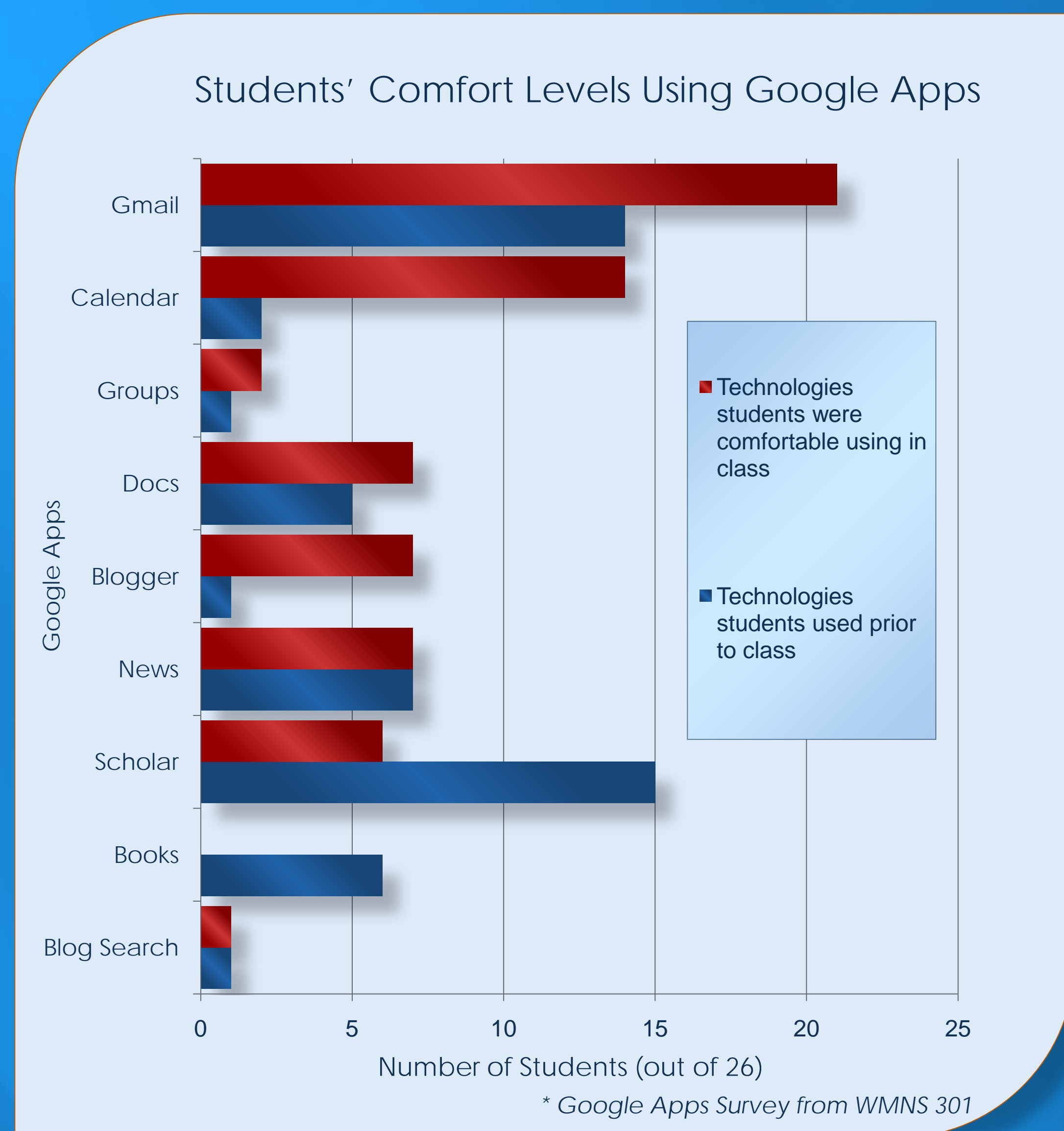
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Background

This research explores the integration and effectiveness of technology in higher education with a special focus on Google Applications (Google Apps). The research examines the use of Google Apps in face-to-face classes, hybrid courses, and online instruction at the university level.

What is Google Apps?

Although many people initially associate Google with a search engine, Google Apps is a bundle of online tools available to web users. These online tools are free to anyone with internet access, and they provide ways for consumers to create, store, share, and access files. Google Apps is completely online, allowing any users to see and edit items in real time from anywhere with an internet connection. The tools Google Apps offer range from collaboration and search functions to documentation and presentation builders.



Application to Higher Education

This education research examined students' comfort levels and productivity with Google Apps. Students participated in a technology-enhanced lesson in an upper level Women's Studies class (WMNS 301). The students used specific Google Apps (listed to the right) to collaborate, conduct research, organize and write essays, and reflect on gender bias in technology.



WMNS 301 – Examining Women's Studies

Gmail allows users to easily create, send, and receive emails. Students used Gmail to establish an initial connection with their group members.

Google Calendar is an online scheduling tool. Students created personal calendars, added class schedules, subscribed to pre-existing calendars, and shared their calendars with group members online.

Google Groups provides users with a central place for closed discussions between invited members. Students used Groups to conduct online discussions about gender bias in technology.

Google Docs allows users to create and share documents, presentations, spreadsheets, and surveys in real time with other users. Students collaborated with group members in a shared Doc to organize and write an essay on gender bias in technology.

Google Blogger allows users to post their thoughts for the world to see. Students created their own blogs and reflected on gender bias in technology.

In addition to the above Google Apps activities, students also conducted research on gender bias in technology using Google search applications. Each group used a different App from the list below.

Google News allows users to search and browse news articles and updates.

Google Scholar allows users to access and search scholarly papers.

Google Books is a database containing complete and partial online books. Users can search for a variety of information, including authors, chapters, and keywords in the texts.

Google Blog Search is an extension of Blogger that helps users find and follow Google blogs by topic or interest.

Students were not required to use Google Search and Google Talk, however many students found these tools useful during the lesson.

Google Talk provides users with instant messaging communication as well as voice and video conferencing.

Google Search is the most commonly used Google App. It allows users to search the entire Web for information.

Why Google Apps?

Many universities across the globe are using Google Apps as their major online collaboration system. There is a plethora of reasons why higher education institutions are changing their technology programs from Blackboard, Desire2Learn, and Moodle to Google Apps.

- Accessibility**
Easily access all Apps with any internet connection.
- Diversity**
Tools are offered for many disciplines and pedagogies.
- Real Time Communication**
Communicate without delays.
- Collaboration**
Files are easily shared and modified between users.
- Excellent Support & Security**
Google has top-notch protection and around the clock assistance.
- Storage**
There is ample space to create and store.
- Creativity**
Google allows for individuality.
- Growth**
Google continues to produce new tools.
- Unified Organization**
Manage everything online under one account.

Discussion and Future Research

It is evident that Google Apps was a useful tool in the higher education class WMNS 301. Through qualitative and quantitative data, students expressed high comfort levels with using Google Apps. Students were able to quickly communicate and effectively collaborate to complete activities assessing gender bias in technology. Although students were required to use specific Google Apps, they explored alternative Google Apps and were able to incorporate these new technologies without assistance.

As an expansive education tool, Google Apps can be applied to face-to-face classes, hybrid learning, and online courses. The diversity and flexibility of the many tools Google Apps offers allows educators the flexibility to conduct classroom activities with or without being in the same physical setting as their students. This flexibility allows students to maximize their learning through a virtual classroom experience. As one student noted, Google Apps allows people to "connect instantly and from virtually anywhere!"

"Google Docs will certainly be something that I will use in the future for group projects."

"I would love to see technology get used more here at Eau Claire."

What do students in WMNS 301 have to say?



"Google Apps is convenient and all I need is internet access to communicate with a mass of people at one time"

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