

The Center for Education and Research in Information Assurance and Security

Functionality of Cloud Computing in Secondary Education

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Introduction

• With decreased budgets and higher IT costs, secondary schools look to the cloud for a cost-effective solution.

Office 365

Lafayette School Corporation

Nick: Social Studies

Doug: Science

Grades Taught: 7th and 8th

Student Population: 7,284

Demographics: Urban

Google

Delphi Community
School
Corporation

Rachelle:
Business and
Careers

Grades Taught: 9th – 12th

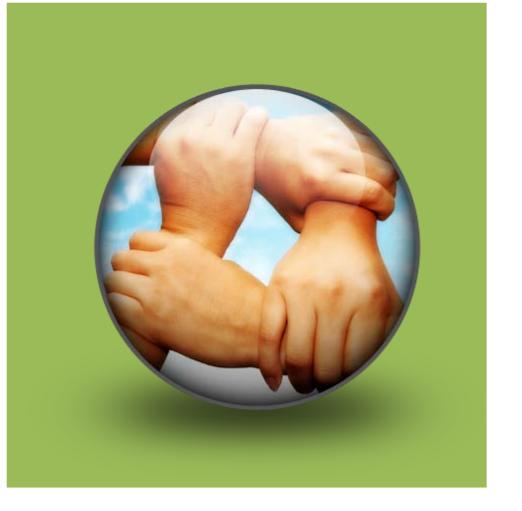
Demographics: Rural

Student Population: 1,504

METHODS

Microsoft
Office 365
(365)

Google
Apps for
Education
(GAE)



Collaboration	365	GAE
Teacher-Student	Comment & Review	Can Comment & Edit
Student-Student	Formal Co- Authorship	Power of the Creator

Problem Statement

- Aim to determine how Microsoft Office 365 and Google Apps for Education impact grades 7-12.
- Comparison of storage and collaboration.
- Use of FedRAMP policies to test availability.

Storage 365 GAE Capacity 50 GB / user 30 GB / user + Accessed Accessed anywhere Uploaded file limitations



Least Functionality

 An organization establishes its own list of prohibited or restricted functions, ports, protocols, and/or service.



pics/about-fedramp

http://cloud.cio.gov/to

Account Management

 The service provider defines the time period for non-user accounts. The time periods are approved and accepted by the authorizing official.

Unsuccessful Login Attempts

 Not more than 3 attempts/fifteen minutes or account/node is locked for thirty minutes.

Recommendations for Collaboration

- In the classroom, shared 365 and GAE documents should only be VIEW ONLY.
- 365 could improve by creating an option to allow each assignment to be individually sent to each student to avoid the likely chance of manipulation.
- The distortion of documents into Google Docs from other software programs.
- Collaboration on school networks increases the liability of cyber-bullying





