Apps4VA

Using student data to improve education

Effecting Change Through Creative Data Use

➢ Overview of Apps4VA

➢ Overview of VLDS

➢ Introduction to Apps4VA JMU

➢ Demo of Cool School App

➢ Overview of Apps4VA HS Competition I

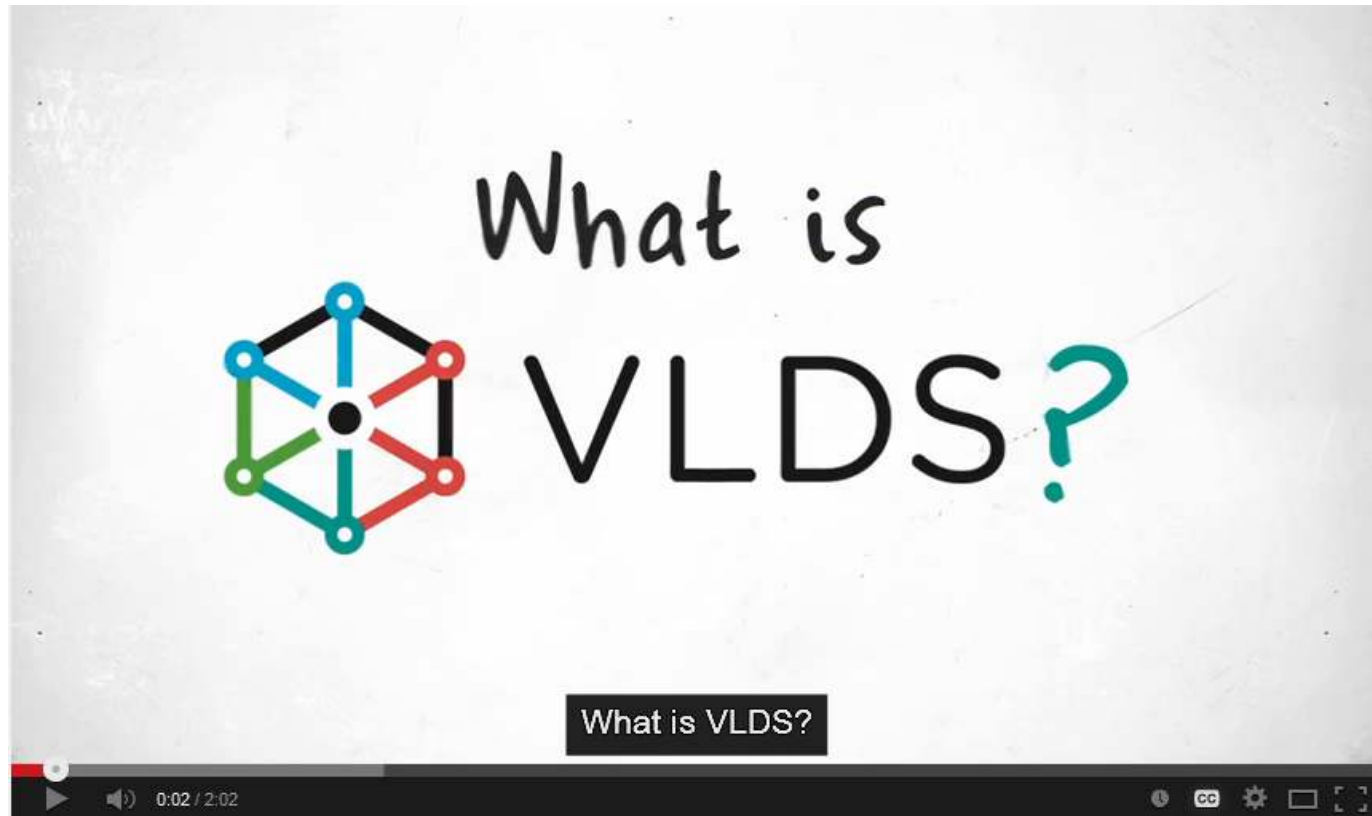➢ Feedback on Apps4VA HS Competition II

2009
Federal funding to build a longitudinal data system

2009-2013
Four founding agencies collaborated on a pioneering effort to launch a system that can be expanded to include other agencies
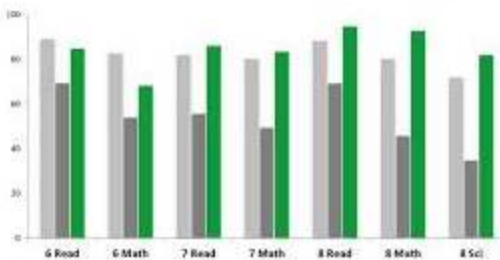
➢ How can we reach beyond accountability requirements?

➢ What types of applications would users want and need?

➢ **How can we spread the word?**

➢ How can we improve student outcomes?

➢ What if we could track students not only during K-12, but beyond – even into the workplace?

Sample SOL Scaled Scores
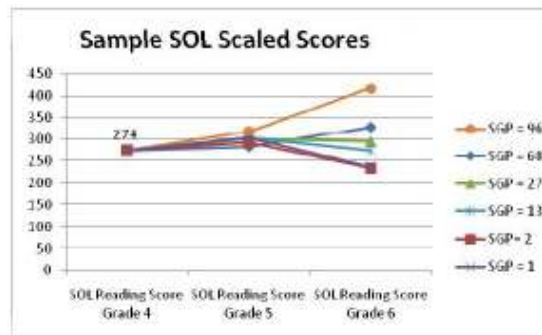
The possibilities are endless!

➢ Launch a software application (apps) development program

➢ Challenge the public to
  ◦ review the data and design new and different ways to interpret it

  ◦ create new tools to achieve the goal of better data-driven decisions

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VLDS

BEST PRACTICES
RESEARCH

EVENTS

COMPETITIONS

NoVA EDU
Startup Weekend
powered by the Kauffman Foundation

CODEATHON

hackathon

Permission: Kin Lane

JAMES MADISON UNIVERSITY.

Open Competition

High School Competition

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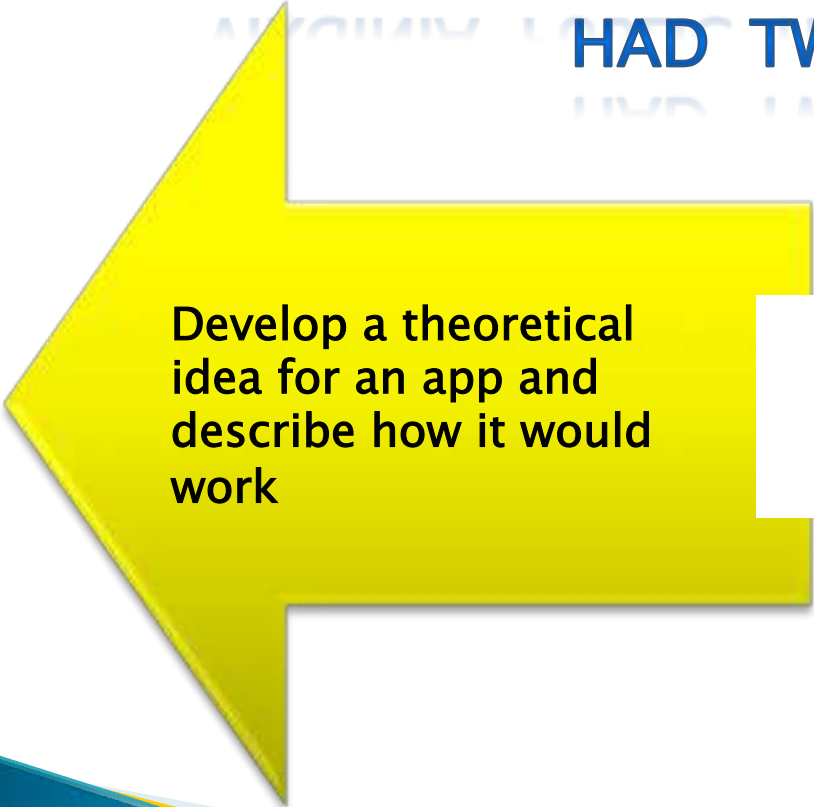
VIRGINIA PUBLIC HIGH SCHOOL STUDENTS HAD TWO OPTIONS:

Develop a theoretical idea for an app and describe how it would work

Create an actual working prototype

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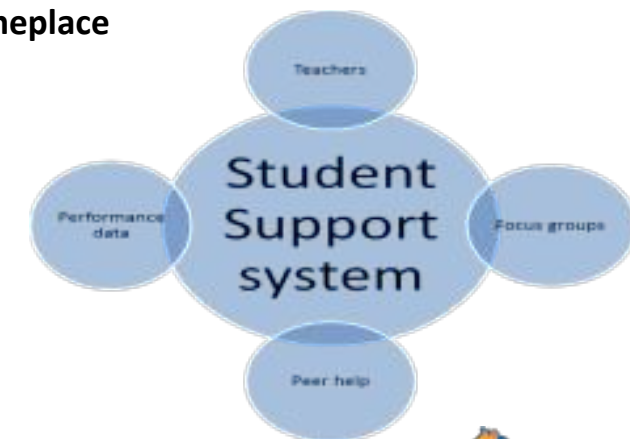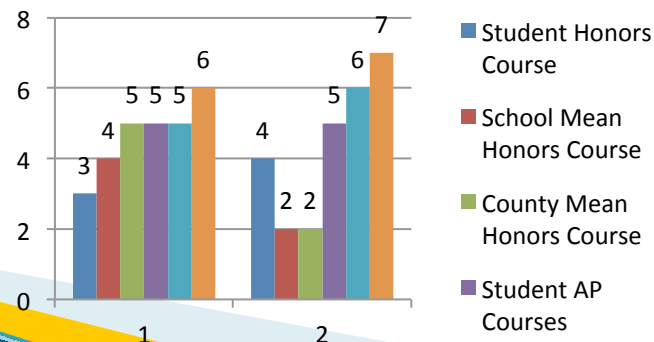
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FIRST PRIZE WINNER:
CONCEPT APP

Student Dashboard

Real-time info on a dashboard allows students to monitor perfor-mance and compare it to peers. Includes a peer support system and guidelines for data interpretation.

"…it may be possible to understand trends in study habits and better them by providing timely help to students who are most in need. The idea is to create a student dashboard on blackboard or someplace where the student constantly gets information

Dynamic Dashboard that keeps getting populated every time a grade is posted

Student AP Courses : 2
Student Honors courses: 3
School mean: 5
School mean: 3
Student GPA: 3.8
County mean: 4
County mean: 4
School mean GPA: 3.6
County mean GPA: 3.97

Legend:
- Student Honors Course
- School Mean Honors Course
- County Mean Honors Course
- Student AP Courses

Student Support system
- Teachers
- Performance data
- Focus groups
- Peer help

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FIRST PRIZE WINNER: PROTOTYPE

https://dps.gc.k12.va.us:8443/Apps4VA_GCPS/

P2S
Path to Success

A tool to help parents and school administrators analyze indicators of college & career readiness

Zoom in on the map to see post-secondary school markers.

Workforce Pipeline

College Ready using SOLs

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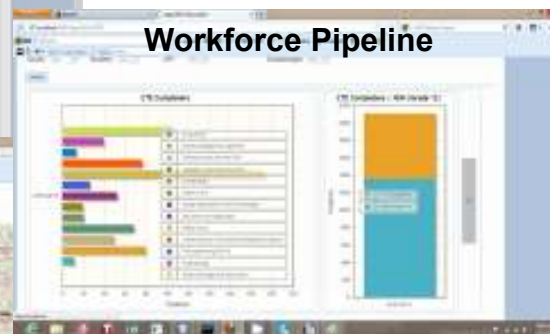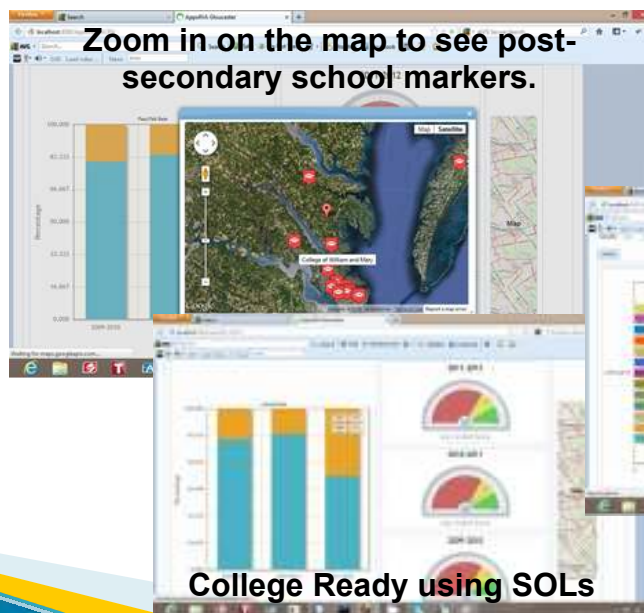
Spring 2013 and 2014 Semesters

"Start with an education question you think is important. Then pick at least one dataset from VLDS and create a new way to use the data. Mashups are encouraged"

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2014 Winners – 1st Place

Cool School: Enables families to compare nearby schools and divisions which are ranked based on test scores, enrollment rates, and graduation rates. Useful for considering home purchases/moves.

Digiapps: Allows parents and educators of special needs students to identify and rank schools that match students' needs using t-tests.

NULL: Reveals how school schedules impact student learning capabilities by comparing school schedules and student performance across the state.

"It was [a] challenging and intriguing mission that prepared us to work with real data for the real web application."
–2014 CS474 Student

"I had a lot of fun working on the Apps4VA project!"
– 2014 CS474 Student

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2014 Winners – 2nd Place

Database 2: The SQL   Helps parents, teachers, administrators, and policy makers to help identify students who are most at risk of dropping out of high school.

Victorious Secret: Allows users to compare SOL scores and Career and Technical Education (CTE) completers by region or school to labor market projections in the area.

SOL-ution: Provides teachers with easy access to their students' SOL test scores and tools to compare current classrooms with previous cohorts.

"…it transformed a mere school project into an exciting opportunity."
- 2014 CS474 Student

"I'm excited to continue working on the project."
- 2014 CS474 Student

"The apps4va was an incredible and rewarding learning experience that I will never forget."
- 2014 CS474 Student

WHAT TYPES OF APPS DID THE STUDENTS CREATE?

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2014 Apps4VA JMU Winner

U.S.S. Pintos

Home   About   Apps4VA   VLDS

COOL SCHOOL:
Find your perfect school system.

Select a Division

Search

Select a school division and get a list of the five best school systems from the surrounding area.

Our VLDS powered rating algorithm takes into account various factors including **test scores, graduation rates,** and **college enrollment rates.**

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Click on a Data Set below, for details

○ **Fall Membership**

○ **December 1 Special Education Child Count**

○ **Test Data**

○ **Career & Technical Education (CTE) Program Graduates and Completers**

○ **Annual High School Graduates and Completers**

○ **Annual Dropouts**

○ **On-Time Graduation Rate and Cohort Dropout Rate**

○ **Postsecondary Enrollment**

○ **Postsecondary Achievement**

- ➤ Real data on real students, not "dummy data"

- ➤ Data is about them – Virginia Students

- ➤ Apps could benefit Virginia Students

- ➤ Experience in helping to solve real world problems

Scaling Apps4VA JMU (CS474)
to a high school program

➢ What are reasonable expectations of high school students?

➢ How would the program look?

➢ Requirements

➢ Incentives:
  o Option to fulfill the "Performance Task" requirement for the new AP curriculum
  o Guidance,
  o Opportunity,
  o Prizes,
  o Recognition
  o Others?

➢ Recruitment

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