Virginia Longitudinal Data System

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The Virginia Longitudinal Data System (VLDS)

In 2009, the Virginia Department of Education (VDOE), with collaborating state agencies, received a federal grant to develop a software system with the capacity to merge data across agencies for reporting and research

- Uses data collected by the VDOE K-12 Educational Information Management System (EIMS) and other state agencies
- Overseen by state agency staff
- Meets or exceeds state and federal privacy laws and regulations

The Virginia Longitudinal Data System Addresses Key Policy Questions

- What are the participant outcomes of student and workforce opportunities and programs?

- How do education and workforce programs align to known and projected employer needs?

- What is the return on the investment from specific types of education and workforce opportunities and programs?

- What factors or conditions lead to high-quality education and workforce outcomes?

The VLDS Helps Increase Understanding of How We are Preparing Students for the Future

- Understand the characteristics of students who leave school ready for college or a career and design programs to support student success after school

- Understand which higher education programs produce the most marketable graduates

- Understand which preschool programs produce students who are kindergarten ready (later)

- Determine the best strategies for improving STEM education in K-12 and Higher Ed

The VLDS— A "Virginia Grown" Longitudinal Data System

- A pioneering collaboration among state agencies that facilitates data sharing in a manner that protects individuals' privacy

- Unique in the nation, VLDS is "Virginia Grown" – built by state agencies and universities

- Dramatically enhances the capacity for stakeholders to make more informed decisions using data that were previously unavailable

The VLDS Goals and Objectives

- Meet State Fiscal Stabilization Fund reporting requirements that continued beyond the federal stimulus funding

- Provide policy makers, authorized researchers, and citizens with access to education and workforce data from multiple sources

- Support critical reporting and analysis on the quality of public education while providing policy makers with information that can improve education and workforce programs and influence spending priorities

Progression of the K-12 Educational Information Management System (EIMS)
2004-Present

Educational Information Management System (EIMS)

In 2004, EIMS development began with General Assembly funding to

- Meet K-12 state and federal reporting requirements through improved data collection and reporting

- Create administrative efficiencies for school divisions in accessing and using data for decision making, especially in the areas of assessment and accountability

EIMS Meets K-12 State and Federal Reporting Requirements

- Virginia Standards of Quality and Standards of Accreditation
- Elementary and Secondary Education Act (NCLB)
- Individuals with Disabilities Education Act (IDEA)
- Carl D. Perkins Vocational and Technical Education Act
- McKinney-Vento Act (homeless) Support
- Migrant Education Support
- State Fiscal Stabilization Fund (SFSF) Indicators

Major EIMS Accomplishments

- Individual student record collection including Average Daily Membership (2004)

- All students receive unique identifiers (2005)

- Data warehouse accessible to authorized school division personnel (2005-present)

- 60% of data collections consolidated or eliminated since 2009 and reducing burdens on school divisions

Major EIMS Accomplishments

Data Warehouse Reports

- State Assessment Results
- PSAT, SAT, AP, and ACT results
- Literacy Screening Results
- English Language Learner Assessment Results
- Career and Technical Education Credential Reports
- Graduation and Dropout Cohort Reports
- Postsecondary Enrollment Reports

Major EIMS Accomplishments

Calculation of Accountability Ratings

- Federal Adequate Yearly Progress (AYP) and Annual Measurable Objectives (AMOs)

- State Accreditation

Electronic Transcripts in high schools

- 65 School divisions participating (funded by 2006 federal grant)

- Three universities and all 23 Community Colleges participating (2009 Stimulus Grant)

Major EIMS Accomplishments

- Calculation of True Cohort Graduation and Dropout Rates (Class of 2008 – Present)
- Publication of Postsecondary Enrollment and Achievement Reports
  - State Fiscal Stabilization Fund (SFSF) Indicators
  - Using Merged Data (VDOE and SCHEV)

Virginia Longitudinal Data System, Funded by 2009 AARA (Stimulus Grant)

VLDS Meets State Fiscal Stabilization Fund Requirements

- Link Students to Teachers
- Collect Student Course Enrollment and Outcomes
- Create Student Growth Percentiles
- Provide Teachers with Information on Student Growth
- Report on Students' Postsecondary Enrollment and Achievement by Linking with Higher Education Data

VLDS Reports and Studies

- Postsecondary Enrollment Reports
- Postsecondary Achievement Reports
- College and Career Readiness Studies
- Post-Completion Wages of Graduates (required by HB639-2012)

Current Research Projects Using VLDS

- Studying the Class of 2008 as they progress through college to identify college and career readiness indicators (VDOE/SCHEV)

- Studying the impact of Dual Enrollment on college success (VDOE/SCHEV/VCCS)

- Studying the impact of Virginia Advanced Studies Strategies Program on Advanced Placement test results (VDOE)

Current Research Projects Using VLDS

- Studying the return on investment of workforce programs (VCCS)

- Studying the impact of online coursework for students with disabilities (VDOE)

- Evaluating the Virginia Initiative for Science Teaching and Achievement on student performance (VDOE)

VLDS Future Growth

- Bringing additional workforce agencies online for Workforce Data Quality Initiative (VCCS Department of Labor Grant, ending fall 2013)

- Incorporating preschool data (Child Care Subsidy and Literacy Screening)

- Continued collaboration among participating agencies with quarterly participating agency meetings

- Pursuit of additional interagency projects

Agencies Other Than VDOE and Their Roles

- The State Council of Higher Education for Virginia
  - Providing postsecondary data
- The Virginia Community College System
  - Providing workforce program data (future)
- The Virginia Employment Commission
  - Providing wage data
- The Virginia Information Technologies Agency and Virginia Tech
  - Providing software development
- The Center for Innovative Technology
  - Providing Data Governance support

Specific Data Collected by the Agencies

Data Collection

- All data collected are used to meet state and federal reporting requirements

- Data can then be repurposed for research and decision support in areas such as policy, programs, and budgeting

- Required to account for individual students in cohort groups for longitudinal tracking

K-12 Data

- PSAT, SAT, AP, and ACT Test Results
- K-12 Student Schedule
- K-12 State Assessment Results
- K-12 Student Demographics

Specific K-12 Demographic Data

- Gender

- Race/Ethnicity

- Disability Status

- Disadvantaged Status

- Limited English Proficiency Status

Other K-12 Status Data

- Completion Status
- Diploma Type
- Dropout Status
- Attendance
- Unexcused Absence

K-12 Program Participation Data

- Special Education

- Gifted

- International Baccalaureate

- Title I

- GED

- Advanced Placement

- Dual Enrollment

K-12 Program Participation Data

- Career and Technical Education

- Early College Scholar Program

- Virtual Program Participation

- Multi-Division Online Provider Program

- English as a Second Language Program

- Cambridge Programme Participation

Postsecondary Data

- Postsecondary Course Enrollment
- Postsecondary Degrees Conferred
- Postsecondary Financial Aid
- Postsecondary Headcount

Virginia Employment Commission

- Wage Data

The Virginia Department of Education does not collect and has no plans to collect

- Social Security Number
- Biometric information, including student pictures
- Bus Stop GIS coordinates
- Religious or political affiliation
- Any information not required by state or federal law

Description of the Merge Process

The Data Merge Process

- Data are given one-time random identifiers at each agency

- Agency data are merged by the VLDS system

- The original random identifiers are removed and replaced by another one-time random identifier

- Data are returned in groups of students; no individual data requests

- No agency or researcher can match the data back to an identifiable student

Extent the Data Are Available to Research Institutions and the Public

Data Availability for Research and the Public

- Research must support the agencies' agreed-upon research agenda

- Vetted researchers complete an application process

- All agencies involved must approve the research

- Researchers must sign a legal document before obtaining data

Data Availability for Research and the Public

- Agencies continue to guide and oversee the process

- Only data on groups of students are provided, and individuals cannot be queried or identified

- Only aggregate data is provided to the public

- For public reporting, when there are fewer than 10 students in an aggregate group, counts and percents are suppressed (not provided)

Data Security and Confidentiality

Data Security and Confidentiality

- VLDS complies with or exceeds state and federal privacy laws and guidelines

- VLDS does not provide individual student data to the federal government

- The merge process was approved by the Attorney General's Office in 2009

Funding History

Funding History for the EIMS (General Funds)

Fiscal Year	GF Budget	FTE Positions
2005	$798,948	0.00
2006	$3,632,245	4.00
2007	$4,294,775	4.00
2008	$4,302,901	4.00
2009	$4,007,413	4.00
2010	$4,102,901	4.00
2011	$4,102,901	4.00
2012	$4,102,901	4.00
2013	$4,002,901	4.00
2014	$4,102,901	4.00

General funds cover the VDOE infrastructure and personnel needed to support the ongoing operation, data collection, and reporting requirements for multiple data collections and calculations that support the agency, such as Average Daily Membership, Fall Membership, and the Virginia School Report Cards.

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FY14 General Funds Provided for the VLDS by the 2013 General Assembly (Chp. 806)

Agency	*FY14 GFs	Positions Supported
VDOE	$276,060	1.00
SCHEV	$160,295	1.00
Totals	$436,355	2.00

*These funds will cover hosting of the VLDS system and agency databases, and positions to support the ongoing operation of the VLDS. Looking forward, $400,000 in additional costs identified for full system implementation, such as dedicated research staffing, project management, service subscriptions, and training.

Federal Grant Funding for the EIMS and the VLDS (Ends June 30, 2013)

Fiscal Year	Grant Amount
2007	$6,000,000
2010	$17,500,000

The FY 2007 Federal Grant funded development of additional reports in the EIMS data warehouse and the development of electronic transcript capability in Virginia high schools.

The FY 2010 Federal Grant funded a number of activities, including the development of the VLDS, for an estimated $6,000,000.

Agency Contacts

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