

The D3A2 Discourse

*A Periodic Publication of the Ohio
Data-Driven Decisions for Academic Achievement Project
September 2006*



Introduction

The Data Driven Decisions for Academic Achievement (D3A2) project is a long-term initiative focused on developing the capacity of educators while improving instruction and student achievement. D3A2 will provide pervasive access to timely data and educational resources aligned to Ohio's Academic Content Standards. The primary goals of D3A2 are to:

- Improve educator's comfort and proficiency in analyzing data to inform instruction and practices.
- Contribute to a sustainable infrastructure to promote and enhance information-based education practice and content alignment across the state.
- Leverage technology user groups (i.e., school districts, application vendors and information technology centers) to accelerate the integration of existing educational tools and the development of new data systems.

D3A2 is a cooperative effort that is being developed and governed by stakeholder groups rather than any single entity. Numerous school districts and professional education organizations are supporting this initiative. D3A2 will provide teachers with access to item analysis assessment data, tools to interpret areas needing improvement, and links to aligned educational content resources. The initial release of this multi-year multi-phased project is scheduled to begin deployment in December 2006.

The D3A2 initiative is one of several new statewide collaborative projects that are being enabled by the Ohio K-12 Network with its utilization of the Third Frontier Network (TFN) fiber-based high-speed backbone that provides the Ohio K-12 educational community with the most advanced K-12 statewide network in the nation. The D3A2 and Ohio K-12 Network projects demonstrate a collaborative strategy of using technology to help meet educational needs of students.

Phase 1 Pilot Districts

Four Ohio school districts were chosen to be pilots for the initial phase of the D3A2 statewide data warehouse initiative. These districts include Bryan City Schools, Columbus Public Schools, Greenon Local Schools, and Kettering City Schools. These districts have provided student assessment and demographic information for a three-year period that is being loaded into the initial implementation of the D3A2 statewide data warehouse. These districts are helping with stabilizing and refining the database design. In addition, these sites will be the first to test and provide feedback to developers as they utilize the system to analyze student results and needs. A second round of pilot districts will begin implementation mid to late October. The second round of districts will help with stabilizing and refining the data load routines. Based upon this schedule, we will be providing more detailed information about data loads, personnel and resource requirements at the district and ITC level beginning December 1.

School District Readiness for Release 1.0

School districts that wish to be ready to participate in Release 1.0 of the D3A2 initiative beginning in December 2006 can take several actions now in preparation. These steps include, but are not limited to, the following:

1. Begin providing your instructional staff, administrators, board of education, and public with information about the D3A2 initiative so that each individual has a basic understanding of the project and its potential benefits for your school district.
2. Encourage your district staff to visit the D3A2 web site (www.d3a2.org) regularly to keep updated on the latest information regarding the project. Those districts who are planning to use

The D3A2 Discourse

*A Periodic Publication of the Ohio
Data-Driven Decisions for Academic Achievement Project
September 2006*



the D3A2 should register their district at the D3A2 web site. The registration tool will be available by Friday, October 6th.

3. Identify a small group of volunteers from among your school district's instructional staff and administrators to be "D3A2 Pioneers" (early adopters) that will be among the first in your school district to utilize the D3A2 item analysis tools when they become available in December 2006. These volunteers should ideally be individuals that are comfortable with the use of computers and data, who can share their experiences with others within your school district.
4. Locate your detailed item analysis data and test results from state assessments (OGT and Achievement) for the past three years (2003-2004, 2004-2005, and 2005-2006) and be prepared to work with your ITC to load the data into the D3A2 secure data warehouse. Many school districts have already loaded this data into DSL, DASL, or eSIS, but it may be more efficient to transfer the data to the D3A2 secure data warehouse by reloading the data from the CDROM provided by the assessment vendor.

All vendor test result files, within the testing year ranges, being submitted for the initial phase of the D3A2 project are being requested to be named (or separated in folders) by test type and year (i.e. ach_fall_2004.txt, ogt_spring_2005.txt, item_ach_fall_2004.txt, item_ogt_fall_2004.txt). Special attention should be given that the OGT Item Analysis test results are specifically named by test year. This is because there is no test year within the vendor test results to indicate which year the test was given.

Also required will be crosswalk spreadsheet(s) which need to contain the teacher name (as it appears in the assessment vendor test results files) and the state teacher identifier.

5. The initial loads of student demographic data will be made from EMIS data structures. This is to allow this data to be loaded and utilized prior to any student information software providers (e.g. – DASL, eSIS, Pentamation, etc.) developing load routines for this data. The specific EMIS files that will be required from each district will be the following files from reporting period "N" for 2003-2004, 2004-2005, and 2005-2006:
 - a. EMIS Configuration file - EMSCFG.REL
 - b. Student Demographic/Attendance file - EMSSTU.IDX
 - c. Staff Demographic file - EMSDEM.IDX
 - d. Staff Employment file - EMSEMP.IDX
 - e. Course Master file - EMSCLS.IDX
 - f. Student Subject file - EMSCLA.IDX

Information Technology Center (ITC) Readiness for Release 1.0

As with school districts there are a number of actions that an ITC can begin taking in preparation for Release 1.0 of the D3A2 initiative. These steps include, but are not limited to, the following:

1. Begin providing your internal staff and your participating school districts with information about the D3A2 initiative as it becomes available.
2. Have members of your staff participate in one or more of the various committees of the D3A2 initiative as staff time permits.

The D3A2 Discourse

*A Periodic Publication of the Ohio
Data-Driven Decisions for Academic Achievement Project
September 2006*



3. Identify a small group of volunteers from among your participating school districts' instructional staff and administrators to be "D3A2 Pioneers" (early adopters) that will be among the first of your school districts to utilize the D3A2 item analysis tools when they become initially available in December 2006. These volunteers should ideally be individuals that are comfortable with the use of computers and data, who can share their experiences with others.
4. It is believed that the initial deployment will utilize the following technologies that should be researched by your technical staff: Apache web server, Fedora digital content manager, Tomcat application server, LDAP (Lightweight Directory Access Protocol), Pubcookie, and Shibboleth web-based single sign-on middleware. Training is planned for these software technologies on October 19th, 2006, but starting to learn about these tools and how they work will be beneficial to your ITC. Research on these topics can be done by technical personnel at the following URL's:
 - <http://www.apache.org/>
 - <http://www.fedora.info/>
 - <http://tomcat.apache.org/>
 - <http://process.com/techsupport/pmdf/rfc/rfc1777.html>
 - <http://www.pubcookie.org>
 - <http://shibboleth.internet2.edu/>
 - <http://d3a2wiki.nwoca.org/>

Setting Expectations

With a project of the scope and depth of the D3A2 initiative it is necessary to set expectations for all involved within the project. While the initial releases of various components of Phase 1 of the D3A2 initiative will be generally available in December 2006, this will still not be a fully-functional release. Further, there will be time needed for training for ITC personnel, district-level administrative personnel, as well as classroom personnel. Both districts and ITC's will need to be able to dedicate personnel time to working with the D3A2 system, and the speed with which districts can be implemented will be dictated by the personnel resources made available by both the district and the ITC in order to support these efforts.

The skill set of the individuals needed to help school districts implement the use of the D3A2 statewide data warehouse will be those of EMIS coordinators and/or district technology coordinators. At the ITC level the skill set needed will be similar to those personnel which currently support student information services and EMIS services offerings. The time commitment that will be required of these types of individuals is not yet fully understood. As the current pilot phase progresses additional information will be provided as these time commitments become refined.

It is known that not all districts will be ready, or want, to begin utilizing the D3A2 statewide data warehouse immediately. There will be some districts that will want to be early adopters, others that will want to defer an implementation until summer months, etc. These types of decisions will need to be made collaboratively by school districts and ITC's statewide.

Additional D3A2 Information

Additional information regarding the D3A2 initiative can be found at the D3A2 web site (www.d3a2.org). Queries regarding the project can also be made to Eric James (eric.james@ode.state.oh.us).