Public Comment Requested on COD

The Board of Directors of the Postsecondary Electronic Standards Council (PESC) is pleased to announce that Federal Student Aid (FSA) of the U.S. Department of Education has proposed the Common Origination and Disbursement (COD) specification as a PESC approved, education community standard.

“I am pleased to submit this letter to notify PESC that Federal Student Aid intends to work collaboratively with the higher education community to develop the...XML Common Origination and Disbursement Schema for Federal Student Aid Title IV programs,” states the Letter of Intent submitted by Lisa Elliott, Data Governance and Metadata Manager of Federal Student Aid. “We look forward to continuing collaboration in pursuit of higher education standards,” Ms. Elliott’s letter continues.

Common Origination & Disbursement (COD) is a streamlined method for processing, storing, and reconciling Academic Competitiveness Grant (ACG), National Science and Mathematics Access To Retain Talent Grant (National SMART Grant), Federal Pell Grant (Pell Grant), and William D. Ford Federal Direct Loan (Direct Loan) financial aid data with the U.S. Department of Education. Schools, third party servicers, and software developers can obtain information about current production issues, news, and COD System functionality through various channels such as the COD Website (http://cod.ed.gov) and the IFAP Website (http://ifap.ed.gov). Please note that this comment period and the process required to elevate COD as a PESC approved standard does not in any way change or conflict with the upcoming implementation of COD Common Record XML Schema Version 3.0a. FSA posted schema version 3.0a guidance on March 11, 2008. This guidance is available on the Information for Financial Aid Professionals (IFAP) Web site at http://www.ifap.ed.gov/cod/CODSchema3pt0a031108.html.

With the development work completed and submitted on May 22, 2008, the COD specification is now immediately ready for public comment period. The complete submission can be accessed at www.PESC.org. The public comment period begins today Thursday May 22, 2008 and will be thirty (30) calendar days. Public comment period expires at the close of business on Friday June 20, 2008.

All comments, from the PESC Membership and the public, shall be made in the form of an e-mail to the PESC Executive Director at: Michael.Sessa@PESC.org.
Standardization Efforts in Alberta, Canada

PESC Transcript and DTS Standards Implemented

A 21-postsecondary institution consortium in the Canadian Province of Alberta is about to put into operation an application service and transcript transfer service. The province has mandated the institutions to join forces to develop a complete application and transcript service to all 21 public postsecondary institutions. There is a possibility that 7 additional private institutions will be added to the initiative sometime in the future but this is only in the very earliest stages of discussion.

Today the transcript service is limited to the 21 and Alberta Education, the government department responsible for all high school transcripts in the province.

Currently there are 6 institutions participating in high school EDI transcript feeds. There are 2 schools that have been pursuing postsecondary EDI exchanges and have been doing so through the University of Texas Austin server.

The new transcript service is based completely on the PESC XML standards for both high school and postsecondary transcripts. It also uses the PESC Data Transport Specification (DTS) standard as the envelope for moving transcripts around the system. The first schools expect to

See Canada, Page 3

COD, from Page 1

The comment e-mail should clearly identify the:

1) Responder name and appropriate contact information;
2) Source of the comments, i.e., whether the comments are individual or represent those of a group the responder represents;
3) Nature of the responder’s interest in the standard (what is the issue and why is it important?);
4) Element(s) of the proposed standard with which issue is taken;
5) Changes suggested to resolve the issue(s).

The Process

Within 30 calendar days after the close of the public comment period, the Change Control Board (CCB) of the Standards Forum for Education will address and consider all public comments and make, in consultation with Federal Student Aid any necessary revisions. All public comments will be posted to the PESC website during the review process. The CCB’s consideration/revision period expires on Monday July 21, 2008 unless extenuating circumstances exist which require further deliberation.

Once any changes resulting from the public comment period have been incorporated, the CCB will recommend to the Standards Forum’s Steering Committee and the PESC Board of Directors that the COD Specification be submitted to a vote by the PESC Members. The Board will have seven (7) calendar days to approve the submission or refer it back to the CCB with specific instructions for further work. The PESC office will issue electronic ballots to the official contacts of voting Member organizations.

Completed ballots, including the reason(s) for any rejection, must be returned to the PESC office via e-mail attachment, fax, overnight delivery, or U.S. Postal Service within ten (10) business days. PESC staff is responsible for the tabulation of the ballots; acceptance of the specification as a standard requires an affirmative vote of at least 80% of all votes cast. Once the Members accept and approve the specification, the PESC Board of Directors will within seven (7) calendar days ratify the vote. PESC staff will publish/post all necessary documents and communications and implement version control on all documents. Approved standards are freely accessible on the PESC website (www.PESC.org).
Technology Tidbits and Standards Snippets

- The U.S. National Institute of Standards and Technology has announced a new release of the XML Schema Quality of Design Tool (QOD) from the Manufacturing Engineering Lab. This release includes improvements to the user interface, performance, and display of results, support for ISO Schematron for writing tests, and the addition of an import and export capability to facilitate offline development of tests. The QOD site also contains a number of sample sets of tests for XML Schema Naming and Design Rule specifications. For more information, visit http://xml.coverpages.org/NIST-QOD-20080522.html

- As more social networking sites are popping up, the questions around the data they keep are rising. Data portability has become the watch phrase across the Web 2.0 world. The DataPortability Project has been bringing together partners, technology, principles, and practices to make data portability and ownership a priority and an achievable goal... Among the main technologies that the Project focused on were OpenID, OAuth, RSS, OPML, microformats, RDF, apml, and XMPP. Additional information can be accessed via http://www.dataportability.org/

EDI Data Exchange Statistics
May 2008 - UT Austin Server

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Transcript</td>
<td>95,248</td>
</tr>
<tr>
<td>Total Admission Application</td>
<td>55,423</td>
</tr>
<tr>
<td>Total Test Score</td>
<td>14,021</td>
</tr>
<tr>
<td>Total Transcript Request</td>
<td>29,747</td>
</tr>
<tr>
<td>Total Acknowledgement</td>
<td>76,010</td>
</tr>
<tr>
<td>Total Functional Acknowledgment</td>
<td>13,813</td>
</tr>
<tr>
<td>Total transaction sets</td>
<td>289,270</td>
</tr>
</tbody>
</table>

Canada, from Page 2

be live by the end of the December 2008 with the rest joining by October 2009.

The system currently supports about 150,000 applications per year. Approximately 70% of those students are within the province of Alberta, 20% within the balance of Canada and 10% internationally. Only the Alberta students representing about 105,000 applications will be serviced at first by the service. When all 21 institutions are connected we are expecting a transcript volume of about 175,000 based on all Alberta students having a high school transcript and the other 50 percent having an average of 1.5 postsecondary transcripts.

— Calvin Barnes, Director, Technical Services
Alberta Postsecondary Application System
cbarnes@applyalberta.ca
RS3G Briefs PESC on Bologna Process Administration


Author Clifford Adelman wrote:

What has transpired since 1999 cannot be but lightly acknowledged in the United States. While still a work in progress, parts of the Bologna Process have already been imitated in Latin America, North Africa, and Australia. The core features of the Bologna Process have sufficient momentum to become the dominant global higher education model [emphasis added] within the next two decades. We had better listen up.

Hosted by the Postsecondary Electronic Standards Council, the unisolution GmbH executives described the work of the Rome Student Systems and Standards Group (RS3G). Ten U.S. software and service suppliers, a university representative, and PESC and HR-XML officials participated.

Dietz and Velay were attending the NAFSA Conference—the National Association of Foreign Student Advisors, or as NAFSA labels it, “Association of International Educators”—at the Washington Convention Center. More than 9,000 from 100 countries attended.

RS3G is cooperatively developing specifications for a data-exchange network. The business transactions include the Learning Agreements (LA) assuring credit for work done in another university, Transcript of Records (ToR) and Exchange Studies Supplement (ESS) issued by the home university, and, at the end of studies, Transcript of Records (ToR) and Diploma Supplement (DS) issued by home institution. These electronic documents would be signed electronically and legally binding.

The First Workshop of the Rome Student Systems and Standards Group was held in Rome—hence the name—on 9 November 2007.
The Bologna process was described:

“In order to establish a European Higher Education Area by 2010 the involved 46 European states (Jan. 2007) agreed within the Bologna Process on common aims concerning the restructuring of study programs and academic degrees at universities. Different measurements are about to be implemented to reach more comparability and compatibility for these study programs and academic degrees:

- Bachelor Degree and Master Degree study programs
- Modularization of study programs
- Increased international acceptance of exam certificates and study programs workloads – by use of
- Diploma Supplements and European Credit Transfer System (ECTS)
- Increased support for the mobility of students and lecturers between universities.
- Student and Exam data exchange within the Bologna Process nowadays – TOR

“Nowadays, study and exam results, achieved by students during their ‘studies abroad’ at guest/host universities, are given to the student in paper based form as a so called ‘transcript of records’ (TOR) according to the Bologna Requirements, including the ECTS credit points and grades. Therefore a lack of security, standardization and efficiency concerning the TOR exchange is obvious.”

Velay said the Workshop established a “permanent observatory on standards” to ensure their work was consistent with existing and likely standards. The Group sent a delegation of experts to CEN (European Committee for Standardization) to ensure their experience was available as standards were considered for tertiary [higher] education.

At the Workshop Hermann Strack, Hochschule Harz, Wernigerode, Germany, described the OSCI (Open Service Computer Interface) messaging specification and recommended the forthcoming version 2.0 for all data exchanges among universities and between the universities, government agencies, and employers. In Washington, Velay confirmed the Group’s intent to influence and use this specification. The XML and SOAP-based specification is almost identical to the Meteor project in the U.S that assembles and exchanges student loan information. Meteor has been operating since 2002 now processing 200,300,000 transactions per year.

The RS3G participations include “national” software suppliers such as Kion (Italy), HIS (Germany), OCU (Spain), and LADOK (Sweden). Three national standards consortia were represented: JISC-XCRI from the UK and CDM—course description metadata—from Norway, Sweden, and France with PESC representative Dave Moldoff, CEO of Academy One.

At the Rome conference, Lígia Maria Ribeiro, Universidade do Porto, speaking for EUNIS, the European UNiversity Information Systems Association, encouraged the
collaborative efforts and suggested presentations and pre-conference sessions in the EUNIS 2008 being held in June. Velay confirmed there several RS3G have scheduled several presentations and pre-conference workshops.

The Rome workshop was organized by Simone Ravaiol of Kion and Dietz and Velay. Kion provides student management systems to 70% of the universities in Italy; unisolution’s moveonnet serves 300 institutions in 15 countries—including the U.S.—with more than 1,100 institutions as registered users of the moveonnet portal.

The Second Workshop was held in Dublin, Ireland on 25 April 2008 hosted by Digitary—a security firm focusing on the exchange of validated transcripts. 37 representatives from 11 countries attended, likely encouraged by the warm hospitality and nearby Guinness brewery.

“The perspective of the industry, presented by RS3G representatives, shared a set of previously-collected business cases eligible for standardization – while the perspective of the standardization community, presented by Erlend Øverby (CEN’s expert and facilitator of the MLO [Metadata for Learning Opportunities] project), filled in the audience on the work of the standardization authorities and the “life-cycle” of standards.” These included student mobility—typically referring to study at a second university within the program of the home university, [credit] transfer mobility, graduation documents, and employment.”

Examples of these cases were shown and discussed in Velay’s Washington presentation.

One of the recommendations from the Rome Workshop was to use current standards. Because many European employers have HR-XML compliant human resource systems, students and alumni benefit if their education records are presented in HR-XML electronic format. For example, the HR-XML résumé or CV has been supported for about five years. Monster Worldwide Inc. has supported this format since 2003 and Microsoft has provided a Word add-on for those preparing resumes.
At the Dublin workshop Sven Gutow, Hochschul Information System GmbH, commented the Bologna process itself will encourage changed business practices. New information technology provides additional capabilities. The combination, he said, suggests a new generation of administrative systems will replace current systems.

Chuck Allen, Director, HR-XML Consortium, participated in the Washington briefing. He identified the areas where academic information was used in employment processes and listed a number of activities in Europe where this information is passed to employers electronically in HR-XML compliant formats. Extending comments by Mark Stubbs, Manchester Metropolitan University at the Workshops, Allen said implementing HR-XML documents in a student’s ePortfolio would ensure accurate and complete information for potential employers and current competencies and diploma supplements for current employees engaging in additional education.

Based on recent briefings, Sigma Systems Inc. CEO Randy Timmons commented the Kuali open source student systems software products will be using Service Oriented Architecture. Although current implementation uses Java interfaces, Web services will be supported when needed. Timmons said it may be possible to coordinate Kuali and RS3G specifications to minimize network maintenance costs.

After Dietz and Velay returned to the NAFSA Conference, the discussion turned to the U.S. perspective.

Jeff Alderson, ConnectEdu, said the company would like to achieve electronic exchange among servicers and hoped to connect to colleges and universities later using standards. [PESC has an EA2 Electronic Authentication and Authorization Task Force focused on achieving this capability]. Currently servicers are providing many different formats for the exchange of colleges and university data with servicers. Jeff said it would not be possible to get colleges and universities to change data exchange methods before the next academic year.

Oracle’s Joe Burkhart observed Oracle depends upon user expression of needs to prioritize development. So far there has not been interest in real-time data exchanges as proposed by RS3G, but that could change as the Bologna processes become better defined. SunGard’s Bill Hollowsky and Datatel’s Pete Nalli agreed.
RS3G will hold working sessions at the June EUNIS (European University Information Systems) Conference. David Moldoff will represent the PESC Board at the October Workshop in Stuttgart, Germany.

According to Dietz, more than 200,000 European Community students attend another university during their studies. Institute of International Education reports a similar number—223,534—of U.S. students studied abroad in 2005/06. This suggests an immediate need for participation in Bologna process. This may drive adoption of the services offered by the RS3G suppliers. Their customers may include U.S. colleges and universities with foreign students or students attending universities in the 46-country European Higher Education Area.
Putting the ‘L’ in Longitudinal Data System

So what is a longitudinal data system (LDS)? What makes it longitudinal? Many states and districts think that they have a longitudinal data system because they have a data warehouse that has multiple years of data. Others do not have a data warehouse but do report many years worth of annual graduation rates, so they say that they have an LDS. Some believe that they have a longitudinal data system because they have a student identifier on the statewide exam.

Longitudinal means that data on a given student can be connected across years. In photography parlance, it is more like watching a video of a student as they go from grade to grade. If you put all those videos of individual students together into a montage, you can usually spot some trends about what happens to students with different types of experiences in the early grades. Usually, though, school districts and state education agencies (SEAs) review ‘snapshot’ data – pictures taken of a given 3rd grade class one year, the 4th grade class the next year, and the 5th grade class the third year. Some of the same students might be in all three pictures, but it is more likely that some students leave and others join the cohort over the three-year period.

In years past it was more common for school districts to send summary statistics to the SEA — for example, the count of students receiving special education services or free- or reduced-price lunch, the percent of students passing that statewide exam in the spring, the number of students in each racial/ethnic category. The SEA could then aggregate or add up all of the school or district numbers to get statewide totals. Aggregated snapshot data is very valuable to educators and policymakers, especially when they need to quickly summarize how schools are performing and see which districts serve which types of students.

However, snapshot data alone do not provide enough information to truly evaluate the impact of student mobility or dropout intervention programs on student achievement, the relationship between course-taking patterns and college-readiness, or the ability to calculate a graduation rate while taking into account students who transfer to another school, are retained in a grade, or leave for private school or dropout. Only a set of robust longitudinal data on each student — the ability to track the student across school years and across campuses within a state and connect that enrollment data with other outcome data (course completion, college readiness, assessment and exit data) — provides the ability to thoroughly investigate the patterns of success and struggles that students experience.

Student-level longitudinal data can be aggregated to look at school, district and state trends, but they can also be analyzed at a much finer level of detail than snapshot data to fully understand the relationships between the many factors affecting student achievement.

With the snapshot data that is reported per No Child Left Behind requirements, it is possible to say, for example, that 51 percent of African-American students were proficient on the 10th grade mathematics exam, while 83 percent of White students were proficient. With student-level longitudinal data, it is possible to say that of the 51 percent of African-American students who were proficient the 10th grade mathematics exam, 65 percent of them were also proficient the 8th grade mathematics exam, and of those students 78 percent took Algebra I in the 8th grade. With that information, educators and policymakers can understand the importance of preparing students to take Algebra I in 8th grade. This type of longitudinal data shows that students who do not take Algebra I in the 8th grade are less likely to show proficiency on future exams. With this information,
Data Quality Campaign

Putting the “L” in Longitudinal Data System (continued)

administrators can tailor their curricular activities in earlier grades to prepare more students for Algebra I in the 8th grade. Of course, with longitudinal data the same administrators will have the data necessary to determine which elementary and middle school students are on track to take Algebra I in the 8th grade and provide the necessary intervention to those who are not ready but could get there.

Data warehouses and easily accessible reporting and analysis software are critical to improving the use of data in education. They are very useful and important tools, even when they are full of snapshot data and statistics. Having these tools, however, does not automatically imply that the state collects student-level longitudinal data or is using longitudinal statistics to inform their decision-making.

Longitudinal data implies the ability to collect many key pieces of data on individual students (examples include: campus of enrollment each year, programs in which the student receives services, ethnicity, age, statewide and end-of-course exam scores every year, reasons for not taking statewide exams, college-readiness test scores, and exit status (graduate, dropout, transfer, home school)), connect all those pieces and then aggregate across students according to a set of key variables in order to analyze the impact of and relationship between variables. This ability to analyze and predict performance at the student level is what will ultimately help educators and policymakers at the local and state levels improve the policies that will eventually lead to improved student achievement for all students.

The following materials provide more information on how longitudinal data can be used by educators and administrators:


http://www.dataqualitycampaign.org/files/Publications-Every_Student_Counted-073107.pdf

The 10 Essential Elements: You’ve Checked Them off Your List. Now What?

With all the energy being spent on implementing student identifiers, building longitudinal data systems and implementing the 10 essential elements, it is easy to forget why we’re doing these things. It’s not enough to be able to say that we have the 10 elements; we need to remember why they are important, how they best fit in our system and what we’re going to do with all this new data. The 10 essential elements are designed to allow you to ask and answer key policy questions that cannot be answered with the old data systems.

We shouldn’t use the new data systems to keep producing the same old reports — with annual statistics of student performance by subgroup and without regard to individual student histories. Besides changing the data that we’re collecting, we need to change the questions we’re asking.

For example, instead of asking what percentage of students, by ethnicity, reach proficiency on the 10th grade exam, we need to ask what percentage of students who passed the 8th grade exam reached proficiency in 10th grade. If few ever move from passing to proficiency over time, what policies and practices can be changed to change that result?

Some other questions to consider asking:

Are proficient and advanced students achieving at least a year’s growth every year?

Are there trends over time in the number and percentage of untested students from each student group?

Which teacher preparation program produces graduates whose students have the strongest academic growth?

Do students in more rigorous courses in high school have more success in college?

What percentage of students who met the proficiency standard on the state high school test still needed remediation in college?

Asking and answering these types of questions will provide much better information about how to changes policies and practices in given schools and districts and improve student achievement.
Data quality activities should not begin with the data audit system at the state education agency (SEA); that should be the last in a chain of actions to ensure data quality.

Data quality begins with the data entry clerk at the school building — often the person with three or four other job responsibilities that vie for time and attention. It is not uncommon for a clerk in the school’s office to be responsible for tracking attendance, answering phones, admitting students to the nurses or principal’s office, and entering the key student and staff data that eventually makes their way to the SEA and eventually to the U.S. Department of Education. These clerks often have little training, support and dedicated time on data entry activities. Seldom are classes provided by the district or state for data entry activities, and job turnover in these positions also pose issues for data quality. Somehow many education leaders have not made the connection between the importance of the data entered by the office clerk and the funding received or the accountability ratings determined from that data. While it is standard practice to have the superintendent or another authority figure ‘sign off’ on the data submitted to the SEA, that is often a perfunctory activity without any real data quality checks occurring in the meantime. Fortunately, as more attention is given to statewide longitudinal data systems and the use of student- and staff-level data for state and local decision making, education stakeholders are also realizing the importance of ensuring data quality at the point of entry, not just by running edit checks at the district or state level. The U.S. Department of Education’s National Forum on Education Statistics commissioned a Data Quality Curriculum Task Force comprised of local and state education data directors to address this issue. The task force, in cooperation with the Schools Interoperability Framework Association, the Council of Chief State School Officers and the Central Susquehanna Intermediate Unit, developed two online courses for staff in local education agencies to use to improve education data. The first of the two courses, Improving Education Data, Part I — Creating a Foundation, can be found at www.sifinfo.org/sifau.asp and is free of charge to all users. The second course will be available in summer 2008.

Another example of efforts being undertaken to improve the quality of data at the point of entry comes from the Kansas State Department of Education (KSDE). KSDE hopes that by spending the time and resources on developing the data quality curriculum, local educators and administrators will better understand the importance of the data entry positions and ensuring the accuracy of the data from the beginning. High data quality in the school office can save schools, districts and the state both time and money down the line.

In a proactive measure to improve data quality at the point of entry and not just monitor and correct it at the state level, KSDE has developed a Data Quality Curriculum (DQC) and certification program for school-level staff. The curriculum has training modules designed specifically for data entry clerks and for data coordinators (staff who are responsible for the coordination and submission of data to the state system). The curriculum focuses on the student information system, the Kansas Individual Data on Students system (KIDS) data and report issues, data quality training, KSDE & KIDS resource navigation activities and using the data certification tools. Staff who receive certification upon completion of the training modules are recognized statewide and can serve as a resource for others in their field.

KSDE is also in the process of developing training modules for administrators (principals and superintendents who are accountable for the accuracy and sign-off of the data submitted to the SEA) and program staff who primarily work with assessment, enrollment and transportation data.

Contact Kathy Gosa at kgosa@ksde.org for more information about KSDE DQC.
The Data Quality Campaign is a national, collaborative effort to encourage and support state policymakers to improve the collection, availability, and use of high-quality education data, and to implement state longitudinal data systems to improve student achievement. The campaign aims to provide tools and resources that will assist state development of quality longitudinal data systems, while also providing a national forum for reducing duplication of effort and promoting greater coordination and consensus among the organizations focusing on improving data quality, access and use. The DQC is an enthusiastic supporter of the State Education Data Center and SchoolDataDirect.org. The DQC is supported by the Bill & Melinda Gates Foundation, the Casey Foundation, the Michael & Susan Dell Foundation, and the Lumina Foundation.