Notes from a Meeting with the
University of Texas, Austin EDI Server Team
January 16, 2003

In conjunction with the Common Solutions Group Meeting, I met with Shelby Stanfield, Bruce Marton, and Jean McArthur at the University of Texas. They are responsible for the EDI server that routes transcript files or any other academic record in ANSI X12 format between institutions.

As reported in the December 2002 issue of Postsecondary Electronic Standards Council's "The Standard," Ted Pfeifer, Registrar of the University of Texas at Austin, issued the following statement to PESC regarding the University's plans for continued support of EDI and expected XML data exchanges: "The University of Texas at Austin is a member of and active participant in the Postsecondary Electronic Standards Council and XML Forum. As with other operational and technical issues relating to the UT Austin Internet Server, it is our intention to keep current with electronic data exchange formats endorsed by PESC and approved by ANSI. Barring unforeseen circumstances, we will continue to offer the level of service currently provided while keeping pace with advancements in applicable technologies and delivery mechanisms."

Shelby Stanfield said this remains the University's intent and, because this is a service to Texas colleges and universities, it is recognized and supported as a core and critical service. He also said an XML transcript server would be implemented "when there is demand for it." He believed that ANS approval of the PESC specification would lead many institutions to use the XML standard.

> COMMENT: PESC Executive Director Mike Sessa commented the August 2002 version of the PESC transcript standard would be submitted to ANS at their meeting a few days before the XML Forum in San Francisco February 10-11, 2003.

Bruce Marton observed that they exchange transcripts both by FTP and by e-mail. He added that while they do not promote email as an exchange method, the server would continue to support that method for the schools that depend on it.

> COMMENT: The eTranscript specification for the California Community Colleges is based on the typical SOAP-based systems using HTTP. SSL follow-on IETF's TLS/1 would be used to encrypt the real-time transmission (privacy) and, with appropriate server certificates, would be used for authentication. SMTP e-mail is not encrypted during transmission. The SOAP protocol supports both on-line real-time HTTP and e-mail SMTP protocols. If e-mail is to be supported, then the content of the SOAP message needs to be encrypted; the XML The World Wide Web (W3C) XML Encryption standard would apply. This could either be applied to the body of the SOAP message or to the message as a whole.

The IETF has a Direct Internet Encapsulation (DIME) standard mentioned with WS-Attachment as another method of encrypting a payload.

Bruce also thought colleges and universities would want to continue to route their electronic transcripts through the University of Texas' EDI Server. The University currently maintains a routing database and can forward either by batch FTP or by e-mail.

COMMENT: The Meteor Project for exchanging student financial aid information was developed assuming a UDDI server would be established for higher education and communications would be direct between the two parties using HTTP. There have been several organizations suggested for establishing a UDDI server—EDUCAUSE and the National Student Clearinghouse are two. The National Council of Higher Education Loan Programs (NCELP) was also asked to develop a UDDI server on the basis of the weekly updates to the U.S. Department of Education's PEPS database. Because of the technology Sun Microsystem suggested that JA-SIG establish such a directory; JA-SIG does not have the resources nor is it consistent with it long-term strategy to *maintain* a UDDI server. HEKATE has similar considerations. It would be appropriate for JA-SIG to have a test UDDI server for developers to test compliance and interoperability. The National Student Clearinghouse does maintain a database of postsecondary institutions that already covers more than 80% of the colleges, universities, and school. NSC appears to be the best qualified to maintain the server for postsecondary education.

The ebXML community has a Registry specification that appears to have similar functionality to UDDI. PESC has been supporting ebXML.

If the University of Texas were to do routing for the XML transcripts, then WS-Routing—a standard proposed by Microsoft Inc. and IBM Corporation—is a candidate. Routing information is carried in the SOAP header; open source software is available to implement routing.

Shelby confirmed that they are aware of the Florida FACTS initiative (Tom Stewart at Miami-Dade). Shelby sees overnight processing (although the server has a 20 minute routing/forwarding cycle) as typical for most colleges and universities.

Bruce Marton sees the need for a transition strategy for current EDI users. He cautioned, however, the University of Texas would be hesitant to develop the software to change formats between XML and EDI until there is strong community consensus on data mapping and defined need. Sees EDI and XML being handled separately.

COMMENT: PESC could give some consideration to how the format conversions could be done without any liability on the part of the University. Also, open source software could be made available to the using colleges and universities so conversion could be done locally. Some research could be directed on the compatibility issues that may arise.

Colleges and universities are already implementing Web services-based financial services (e.g. credit card transactions, ACH transactions, and electronic bill presentment and payment) and the Meteor Project—due for release to colleges and universities this spring—are XML/SOAP based.

The University of Texas Student Information Systems team was unaware of the HR-XML education standards. HR-XML standards are implemented in PeopleSoft and SAP systems as part of the maintenance support. The National Student Clearinghouse and EdVerify are supporting the HR-XML standards. These XML/SOAP-based standards include degree and enrollment verification and education history. One of the goals is automated real-time verification of resume data on education.