The Business Case for the development of a PESC Standard for an XML format for the Student Transcript Functional Acknowledgment

The XML Student Transcript Functional Acknowledgment is intended to be an XML counterpart to the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 Functional Acknowledgment Transaction Set 997. This is identical to the approach used previously to define the XML Student Transcript Acknowledgment standard based on the Transaction Set 131 Student Education Record Acknowledgment.

Unlike the TS 131, no XML equivalent exists for the TS 997 in the domain of student transcript processing. The resulting gap and the need to provide a solution is especially evident in the case where document submission fails. Currently, if a submitted document cannot be processed by the recipient there exists no standards-based mechanism for communicating the issue to the sender in an automated fashion.

Like the TS 131, the current Student Transcript Acknowledgment standard specifies a substantive rather than a functional acknowledgment. Substantive acknowledgments provide a more comprehensive response to the receipt of data and typically contain data from the originating document or content derived from that data. Conversely, the TS 997 is a functional acknowledgment that acts simply as a receipt of the document by the intended recipient and signals whether the recipient is able to process the document -- that is, whether the document is in a valid format and may be parsed -- and does not address the semantic content of the document itself. Both of these acknowledgment types are distinct components of the conversation between the sender and the recipient and serve different although sometimes overlapping purposes.

While both acknowledgments provide the sending institution with the confirmation that the original record was received by the intended recipient and indicate the date it was received, there are two fundamental differences between the two acknowledgment types:

- The existing Student Acknowledgment XML standard based on the EDI 131 transaction set provides the means to verify that the received data was not tampered with or otherwise altered or interpreted incorrectly.
- The proposed XML standard based on EDI 997 transaction set provides no analysis or processing of the academic data itself other than to verify that it is well-formed and valid XML.
The proposed acknowledgment standard based on the EDI 997 transaction set would provide the means to communicate conditions (errors) that prevent the recipient from processing the transcript. This is in contrast to the current acknowledgment standard which only communicates the successful processing of a student transcript and follows from the limited nature of a functional acknowledgment. Since the ability to successfully parse the student transcript in its entirety is not required, the recipient is able to successfully populate the acknowledgment. In the case of a substantive acknowledgment such as the existing acknowledgment standard, the document must be fully parsed because academic data is required within the acknowledgment itself.

As noted above, the current Student Transcript Acknowledgment is not superseded by the proposed functional acknowledgment since the functional acknowledgment does not provide the means to verify the received data. However, the role played by the functional acknowledgment is not fulfilled by a substantive acknowledgment approach such as the current acknowledgment standard since such an acknowledgment cannot be used to communicate issues with the delivery or processing of the student transcript.

The work group is to be primarily composed of the AACRAO SPEEDE committee.