FOR IMMEDIATE RELEASE
March 26, 2008
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PESC Executive Director
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Sinclair Community College and Wright State University Win Top Award in PESC’s 9th Annual Best Practices Competition
Judith Flink of the University of Illinois Honored with Distinguished Service Award

Washington DC – The Board of Directors of the Postsecondary Electronic Standards Council (PESC) is very pleased to announce Sinclair Community College and Wright State University as Winners of PESC’s 9th Annual Best Practices Competition for 2007. Their submission “Exchange of Electronic Transcripts via Ohio Board of Regents Articulation & Transfer Clearinghouse” received unanimous approval by the PESC Board Review Committee on the Best Practices Competition. Awards will be presented at the opening session of the 5th Annual Conference on Technology and Standards being held April 28 – 30, 2008 in Washington, D.C. The Best Practices Competition is held each year by PESC to promote innovation and ingenuity in the application of standards for business needs.

“Wright State and Sinclair Community College are both exporting and importing the PESC XML College Transcript through the Ohio Board of Regents Articulation and Transfer Clearinghouse as is the University of Cincinnati, while Bowling Green State University receives them,” states Terry Young, Senior Programmer and Analyst in Computing and Telecommunications at Wright State University. “As far as cost savings, with a regular [paper] transcript it takes between 5 to 45 minutes to process in the Registrar's office...now it takes less 2 minutes,” Mr. Young continued.

PESC will also honor Judith Flink with a “Distinguished Service Award.” Ms. Flink is the last founding Director still active on the PESC Board of Directors and has decided not be renominated when her current term on the Board expires this June 30. “It’s been wonderful to see the higher education community working together through PESC,” Ms. Flink reflects on her tenure on the Board. “The standards we work on, from the High School and College Transcript to the Admissions Application, Test Score, and Common Record: CommonLine not only make our processes more efficient and contribute to cost-savings, they help ensure that barriers to accessing higher education are removed. It's very important that organizations use standards and join PESC to help support the growing mission,” Ms. Flink continues.
Ms. Flink currently serves as Chairperson of the Advisory Committee on Student Financial Assistance. She was appointed by the Speaker of the House of Representatives in 1999 to that Committee and reappointed in November 2005 to serve a term that expires in September 2008. Ms. Flink has been with the University of Illinois for over 20 years. She is the Executive Director of University Student Financial Services and Cashier Operations, is a past president of the Coalition of Higher Education Assistance Organizations (COHEAO), and was appointed to the Advisory Council on the Education of Children with Disabilities by Governor Blagojevich of Illinois. Ms. Flink will be awarded at the opening session of the 5th Annual Conference on Technology and Standards.

About PESC
Established in 1997 and located in Washington, D.C., the Postsecondary Electronic Standards Council (PESC) is a non-profit, community-based, umbrella association of colleges and universities; professional and commercial organizations; data, software and service providers; and state and federal government agencies. PESC’s mission is to lead the establishment and adoption of data exchange standards in education. The goals of the mission are to enable the improvement of institutional performance and foster collaboration across educational communities in order to lower costs, improve service, and attain system interoperability. For more information, please visit www.PESC.org.
March 25, 2008

Terry Young
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Sinclair Community College
444 West Third Street
Dayton, Ohio 45402-1460
937.275.7802

Terry and Allison:

On behalf of the Board of Directors of the Postsecondary Electronic Standards Council (PESC), I am very pleased to inform you that Sinclair Community College and Wright State University are being awarded Winner of PESC’s 2007 Best Practices Competition! Our Board Review Committee was very pleased with your submission and unanimously concluded that the “Exchange of Electronic Transcripts via Ohio Board of Regents Articulation and Transfer Clearinghouse” is worthy of this distinction and award.

To ensure you are aware of events and activities, please note the following:

– The official announcement will be made immediately in the form of a press release while the award itself will be made by me to you during the opening general session at the 5th Annual Conference on Technology and Standards on the morning of April 28 in Washington DC immediately following the welcome address. I hope you are able to attend in person. PESC can provide flight and hotel funding.

– As an award winner, you are offered the opportunity to present your submission during a concurrent session at the conference, which is already in place for that purpose and scheduled for 1:15pm on Tuesday April 29, 2008.

– Your presentation will be posted prominently *ad infinitum* on PESC’s website at [http://www.pesc.org/interior.php?page_id=153](http://www.pesc.org/interior.php?page_id=153) along with the previous award winners.

Thank you to you and the entire team for providing valuable information and services to the education community, and congratulations!

Best Regards,

Michael Sessa

Michael D. Sessa
Executive Director

cc: PESC Board of Directors
Exchange of Electronic Transcripts via OBR Articulation and Transfer Clearinghouse – Best Practice Recommendations

A “living” document to record best practices discovered by Sinclair Community College and Wright State University during the pilot phase of implementation, 2007
Articulation & Transfer Clearinghouse Best Practices

**Documentation**

1. Documenting, either in a visual flowchart or a narrative, the current business processes provides an excellent roadmap for creating the new processes. Assume that every step of your current process has to be replicated in an electronic environment – (ex. A person sorts the mail and determines to which office the transcript is to be delivered = a person logs on to the ATC website and determines to which office the electronic transcript is to be delivered.) You will most likely find that many people who are involved in this implementation have no idea of the actual steps that are taken in your current business practices. They must have that knowledge in order to create the electronic system. (see pg. 5-6)

**Communication**

1. Prior to trading, key constituents from both institutions should have a face-to-face meeting whenever possible. The meeting should include the end-users of the systems, the IT personnel responsible for the import/export of the data and the Registrar. This meeting should be used to create a timeline for implementation, define one another’s processes and challenges and brainstorm fixes and improvements. (see pg 7-10)

2. Create a document that contains the contact information of all important parties at trading schools. Optimally list should include the name, phone number, email address, Instant Messenger (IM) name, fax number and title. Critical issues and reasons this person should be contacted should also be included. (see pg 11)

<table>
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<th>IM</th>
<th>FAX NUMBER</th>
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<tr>
<td>Tammy Downs</td>
<td>512 3017</td>
<td><a href="mailto:Tammy.Downs@sinclair.edu">Tammy.Downs@sinclair.edu</a></td>
<td>tdowns10231</td>
<td>512 3456</td>
<td>Records Coordinator</td>
<td>Processing of incoming and outgoing transcripts. Issues of data integrity, whether or not transcript has been sent or received</td>
</tr>
</tbody>
</table>
3. Use of an IM software such as AOL’s AIM (download here: http://www.aim.com/) across the two campuses would be very helpful. Utilizing this method of communication will allow for quick access to key personnel from institution to institution.

4. The actual individual staffers doing the sending and receiving of transcripts (ex. Records Coordinator at Sinclair, Student Services Specialist-Transcript Coordinator at Wright State) should have a good understanding of the IT infrastructure supporting the electronic exchange. This will help the staffer to communicate more effectively with IT when troubleshooting needs to take place. You will fall behind in implementation if the only thing the staffer can tell IT is “it’s not working.” Use this opportunity to build the relationship between your transactional offices and your IT department wherever possible. Diagrams help and you may have to ask the IT guys to write it in regular human person English ☺ (see pg 13-18)

**Validation & Verification**

1. In order to ensure that data is being transmitted accurately, for a period of time a fax of the transcript should be sent simultaneous with the electronic transmittal. The person sending the fax should notify the receiving institution they have sent a fax via phone or IM. The receiving institution should ensure that the data on the faxed transcript matches that which was sent electronically. Be sure to set a cut-off date for this activity.

**Destination**

1. Work with receiving school to determine the best identifier to be placed on transcript. Typically the receiving school will have one office that is receiving all transcripts for the institution. The sending school needs to know what type of identifier will help that office know to whom the transcript should be routed. EX Wright State University – Undergraduate, Wright State University – Graduate.

2. Add a question to the transcript request that will help the sending school know whether or not the transcript should be sent to the Human Resources office of the receiving school. If the student indicates that the transcript is being sent to an institution for purposes of employment that transcript should be sent via paper and mail rather than electronically. EX – Is this transcript being sent for purposes of employment?
Legal & Security

1. The Chief Legal Counsel and Chief Information Security Officer for the institution should be consulted to ensure that all legal and security concerns are identified and satisfied prior to trading electronically. Internal approval should be obtained in writing prior to trading electronic transcripts and be kept on file.

Project Management

1. Keep a list of all issues and concerns as they arise. It is helpful to use an Excel spreadsheet to do this. On this list, include problems or concerns, possible solutions and actual solutions once they are determined. This will be a very helpful record as you progress in your use of the system.

2. Be cognizant of the Return on Investment (ROI) the institution is seeing as the process goes into full swing. Obviously, when first creating and implement business practices as it relates to electronic transcripting the time savings is going to be minimal if not non-existent. However, as the processes starts to run in a smooth fashion savings will be realized. Keep track of that so that you can report to this to the greater community.
**Request to Send Transcript(s) Process**

**Online Requests**

**Current Students, Alumni & Former Students**

Student requests the transcript online – Alumni & Former Students require Signature page

Problem (i.e., Hold)

Automatically send email to the email address given by the student

If no problems, the transcript prints in the RSR Office

**Pick up Transcript**

Transcript to be picked up – fold, seal & put into envelope, stamp & give to student

**Mail Transcript**

Transcript to be mailed – fold & put into envelope for mailing

Sinclair Community College – ATC Best Practices
Receiving Transcripts Process

1. Student requests their transcripts be sent to Sinclair
2. Institution mails transcript directly to the R&SR Office at Sinclair
3. Check to see if the student is in the system
4. The transcript information is entered into the system by R&SR if the student is in the system
   - If student is not in the system, R&SR periodically checks. If they have been added as a student, the transcript is entered into the system.
5. Produce & send letter to student telling them what has been accepted and that they need to meet with an academic advisor for courses to be equated
Implementation Plan for Electronic Trading of Transcripts between Wright State University and Sinclair Community College

On September 10th, 2007 Sinclair Community College (SCC) will begin sending transcripts to Wright State University (WSU) via the Ohio Board of Regents (OBOR) server. What follows is an implementation plan as defined by the two institutions at a meeting that took place at SCC on August 16, 2007.

**Monday September 10th** –
Tammy Downs, Records Coordinator at SCC, will process any transcript request to WSU and will send that transcript electronically. Upon sending it electronically, Tammy will also print out a copy of the transcript and fax that to Lora Booher in the office of Undergraduate Admissions at WSU. Tammy will also contact Lora at WSU via telephone or Instant Messenger, in order to alert Lora that a transcript is being sent.

Lora and Terry Young will process the transcripts electronically. They will compare the faxed transcript to the PDF of the transcript that is downloaded from the OBOR server in order to ensure accuracy of the information being transmitted. Lora and Terry will communicate directly with Tammy on any data integrity issues they are seeing. Marcus Milligan and Sue Wood of SCC’s Information Technology department will also be available for any technical issues that may arise.

This process will be replicated throughout the day. It is understood that in order for this to be a valid test of the system there needs to be adequate volume of transcripts traded in this manner however the system cannot be flooded. Both institutions will work to ensure the optimal number of transcripts are sent.

**Tuesday September 11th**
A conference call will be held to discuss progress and any issues that have arisen. The objective of this call is to determine if trading will continue for the rest of the week. Included in this call will be Tammy Downs, Marcus Milligan, Sue Wood and Jonathan Martindell from SCC and Lora Booher and Terry Young from WSU.

Next Steps are assuming a “Continue” decision as a result of this conference call.

**Tuesday Sept 11th – Friday Sept 14th**
Continue procedure outlined for Monday Sept 10th, with any modifications determined needed.

**Friday Sept 14th**
A conference call will be held to discuss progress and any issues that have arisen. This conference call will have dual purposes of determining whether to continue trading from SCC to WSU at the same volume and to verify that SCC and WSU are ready to begin trading from WSU to SCC on Monday Sept 17. Included in this call will be Tammy
Downs, Marcus Milligan, Sue Wood, Jonathan Martindell and Allison Rhea from SCC and Lora Booher, Terry Young, Ty Lea Brewsaugh, and Marian Hogue from WSU.

Next Steps assume a “Continue” and “Begin” decision as a result of this conference call.

**Monday Sep 17th**
SCC will continue to send to WSU in the manner described above.

WSU will begin to send transcripts electronically to SCC. For this phase of the project Ty Lea Brewsaugh, in the Registrar’s office at WSU, will process any transcript request to SCC and will send that transcript electronically. Upon sending it electronically, Ty will also print out a copy of the transcript and fax that to Tammy Downs at SCC. Ty will contact Tammy at SCC via telephone or Instant Messenger, in order to alert Tammy that a transcript is being sent.

Tammy Downs will process the transcripts electronically. She will compare the faxed transcript to the PDF of the transcript that is downloaded from the OBOR server in order to ensure accuracy of the information being transmitted. Tammy will communicate directly with Ty on any data integrity issues she is seeing. Marcus Milligan and Sue Wood of SCC’s Information Technology department and Terry Young from WSU will also be available for any technical issues that may arise.

Both processes will be replicated throughout the day. It is understood that in order for this to be a valid test of the system there needs to be adequate volume of transcripts traded in this manner however the system cannot be flooded. Both institutions will work to ensure the optimal number of transcripts are sent.

**Tuesday Sept 18th**
A conference call will be held to discuss progress and any issues that have arisen. The objective of this call is to determine if trading will continue for the rest of the week and if so, at what volume. Included in this call will be Tammy Downs, Marcus Milligan, Sue Wood and Jonathan Martindell from SCC and Lora Booher, Ty Lea Brewsaugh and Terry Young from WSU.

Next Steps are assuming a “Continue” decision as a result of this conference call.

**Friday, Sept 21**
A conference call will be held to discuss progress and any issues that have arisen.

The purpose of this call will be to determine next steps, including but not limited to a decision concerning duration of the testing phase and setting a target date for discontinuation of the faxing of transcripts. Included in this call will be Tammy Downs, Marcus Milligan, Sue Wood, Jonathan Martindell and Allison Rhea from SCC and Lora Booher, Terry Young, Ty Lea Brewsaugh, and Marian Hogue from WSU.

**Critical Issues requiring action:**
IT at SCC and WSU must have completed testing with no issues prior to September 10th

OBOR must have made the “production box” available by September 10th

All necessary accounts, logins and passwords must be made available by OBOR and be set up by both WSU and SCC prior to Monday Sept. 10th.

IT must have trained Registration/Admission staff on how to use the ATC website prior to September 10th

All legal and security issues must be addressed by both institutions.

The NEOUCOM Web services send for Banner (used by Wright State) which was working in test is no longer working after OBR ATC Phase II upgrades. All sending and receiving of the XML transcript may require manually uploading and downloading using https and Perl scripts developed by Wright State University.
Critical Issues Requiring Action

1. IT at SCC and WSU must have completed testing with no issues prior to September 10th.
2. Registration staff have obtained username and passwords for OBOR Articulation & Transfer Clearinghouse (ATC) website prior to September 10th.
3. IT have trained Registration staff on how to use the ATC website prior to September 10th.
4. OBOR must have made the “production box” available by September 10th.
5. All legal and security issues must be addressed by both institutions
6. The NEOLCOM Web services send for Banner (used by Wright State) which was working in test is no longer working after OBR ATC Phase II upgrades. All sending and receiving of the XML transcript may require manually uploading and downloading using https and Perl scripts developed by Wright State University.
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<td>Lora Booher</td>
<td>775-5711</td>
<td><a href="mailto:Lora.Booher@wright.edu">Lora.Booher@wright.edu</a></td>
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<td>775-5596</td>
<td><a href="mailto:Melinda.Schneider@wright.edu">Melinda.Schneider@wright.edu</a></td>
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<td>Assistant VP, Articulation and Transfer</td>
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<td>Marian Hogue</td>
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<td>Hideo Tsuchida</td>
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<td><a href="mailto:Hideo.Tsuchida@wright.edu">Hideo.Tsuchida@wright.edu</a></td>
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<td>WSU</td>
<td>Joe Law</td>
<td>775-2155</td>
<td><a href="mailto:Joe.Law@wright.edu">Joe.Law@wright.edu</a></td>
<td></td>
<td>775-3830</td>
<td>Software Developer</td>
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<td>WSU</td>
<td>Terry Young</td>
<td>775-2005</td>
<td><a href="mailto:Terry.Young@wright.edu">Terry.Young@wright.edu</a></td>
<td>scubaaaadew</td>
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<tr>
<td>WSU</td>
<td>Jonathan Martindell</td>
<td>614 392</td>
<td><a href="mailto:jmatindell@premieresys.com">jmatindell@premieresys.com</a></td>
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<tr>
<td>SCC</td>
<td>Allison Rhea</td>
<td>512-4515</td>
<td><a href="mailto:Allison.Rhea@sinclair.edu">Allison.Rhea@sinclair.edu</a></td>
<td>arheasc</td>
<td>512-3456</td>
<td>Management/Registrar</td>
<td>Personnel Issues, OBOR issues, Changes to procedures</td>
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<tr>
<td>SCC</td>
<td>Tina Hummons</td>
<td>512-3120</td>
<td><a href="mailto:Tina.Hummons@sinclair.edu">Tina.Hummons@sinclair.edu</a></td>
<td>thummons10231</td>
<td>512-3456</td>
<td>Associate Registrar</td>
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<tr>
<td>SCC</td>
<td>Sue Wood</td>
<td>512-3071</td>
<td><a href="mailto:Sue.Wood@sinclair.edu">Sue.Wood@sinclair.edu</a></td>
<td>suecarolwood</td>
<td></td>
<td>Senior Programmer Analyst</td>
<td>Technical issues related to push and pulling data from the SIS</td>
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<tr>
<td>SCC</td>
<td>Candace Moody</td>
<td>512-2902</td>
<td><a href="mailto:Candace.Moody@sinclair.edu">Candace.Moody@sinclair.edu</a></td>
<td>cwebb10231</td>
<td>512-3456</td>
<td>Assistant Registrar</td>
<td>Web Services concerns, Credentials information, back up to Tammy Downs</td>
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<tr>
<td>SCC</td>
<td>Jenni Brannon</td>
<td>512-2857</td>
<td><a href="mailto:Jennifer.Brannan@sinclair.edu">Jennifer.Brannan@sinclair.edu</a></td>
<td>jbrannan10231</td>
<td>512-3456</td>
<td>Records Analyst</td>
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<tr>
<td>SCC</td>
<td>Marcus Milligan</td>
<td>512-2599</td>
<td><a href="mailto:Marcus.Milligan@sinclair.edu">Marcus.Milligan@sinclair.edu</a></td>
<td>cleverpete</td>
<td>512-3254</td>
<td>Manager, Administrative Systems (Colleague)</td>
<td>Project issues/questions</td>
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<tr>
<td>SCC</td>
<td>Tammy Downs</td>
<td>512 3017</td>
<td><a href="mailto:Tammy.Downs@sinclair.edu">Tammy.Downs@sinclair.edu</a></td>
<td>tdowns10231</td>
<td>512 3456</td>
<td>Records Coordinator</td>
<td>Processing of incoming and outgoing transcripts. Issues of Data Integrity, whether or not transcript has been sent or received</td>
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<td>Ty Lea Brewsaug</td>
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<td><a href="mailto:Tylea.Brewsaugh@wright.edu">Tylea.Brewsaugh@wright.edu</a></td>
<td>775-5597</td>
<td>Any issues on transcripts</td>
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<td>being sent from WSU to SCC</td>
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<tr>
<td>MU</td>
<td>Becky Sander</td>
<td>1961</td>
<td><a href="mailto:sanderra@muohio.edu">sanderra@muohio.edu</a></td>
<td>513-529-8314</td>
<td>DARS Encoder</td>
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<tr>
<td>MU</td>
<td>Beth Bowden</td>
<td>8718</td>
<td><a href="mailto:bowdenba@muohio.edu">bowdenba@muohio.edu</a></td>
<td>513-529-8314</td>
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<tr>
<td>WSU</td>
<td>Jeff Gardner</td>
<td>775-5552</td>
<td><a href="mailto:jeff.gardner@wright.edu">jeff.gardner@wright.edu</a></td>
<td></td>
<td>Student Services Specialist Transcript Coordinator</td>
<td></td>
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</table>
Sinclair’s e-Transcript Architecture to Articulation & Transfer Clearinghouse

From www.Sinclair.edu website student requests their transcript be sent to Wright State University

Details

1. SFTP over SSH Protocol 2 is used to encrypt all transmissions to and from Credentials WebServer, Robo Register, and ATC.
2. HTTPS on socket 443 is used for ATC’s send or receive e-transcript webservice.
3. The webservice call from Credentials web server to ATC is encrypted with SFTP.
4. The ATC webservice requires a valid username and password to send or receive an e-transcript.
5. Credentials web server will not accept unsecure (non-SFTP) transmission from Sinclair’s Robo Register.
e-Transcript Process Summary at Sinclair Community College

The e-Transcript Project implements the paperless, electronic communication of student transcripts between Sinclair Community College and any other institution which implements the PESC XML data standard over the public internet. The project design was modularized to allow easily measurable developmental milestones and to facilitate any further customization which would enhance or increase portability of the component modules. The four components are 1) Extract Transcript, 2) Transmit Transcript, 3) Receive Transcript, 4) Load Transcript.

The Extract Transcript module depends upon the database structure of the transcript holding institution. The goal of this module is to extract the required (and possibly the elective) PESC data fields from the institutional databases using programs, subroutines, stored procedures, direct calls, etc. The choice of implementation technology depends on the databases involved and the skill sets of the programmers. Transcript data at Sinclair Community College is maintained using the Datatel Colleague paradigm. Requisite fields are mapped and extracted as string data using an integrated group of routines which retrieve demographic information, academic award information, session information, and student standing information from various tables.

The Transmit Transcript module consists of java methods which invoke and capture the Colleague subroutine output, then parse and format it in the PESC XML standard. This code can be adapted for use with any database by customizing the calls to the database; for example, instead of calling Colleague subroutines, it could call stored procedures in a MS SQL database. The data is organized and tagged using the PESC standard; the occasional PESC standard changes can be easily implemented here by re-organizing the tag structure before returning XML to the calling process. The XML document is passed back to the calling web page. Encryption has not yet been implemented; Cold Fusion has encryption filters which can be turned on easily, or java encryption could be implemented before returning the document.
Transcript Extraction

**Cold Fusion webpage**
1) receives transcript request.
2) verifies student status using session login information
3) calls Java extract class to generate Colleague screen transcript (for viewing)
4) calls Java extract class to generate XML file for transmission
5) posts the XML file to the requesting institution

**Java class**
1) parses request data
2) invokes appropriate Colleague subroutines
3) collects, parses, filters, and formats subroutine output
4) returns requested data as XML structure

**Envision subroutines**

**Colleague database**
The Receive Transcript module consists of java methods which are invoked by Sinclair Community College web pages, written in Cold Fusion. The web pages currently require a valid login id, and will, thus, not call the upload program unless the login belongs to a valid student; further security could be implemented on the Cold Fusion page or within the java class. The java methods take an XML document as input, and then parse it into the data fields required for the Colleague upload. The XML schema is defined here according to the PESC standard and can change without affecting the subroutines used to upload the transcript into Colleague.

The Load Transcript module also uses Envision subroutines which load the parsed XML into the appropriate transcript fields required by Colleague. These subroutines verify the validity of the student tartan id; if the check fails the code will pass through without changing the database. The code also verifies distinct transcript data combinations to avoid duplicate records.
Transcript Upload

**Cold Fusion webpage**
1) receives transcript xml.
2) verifies student status using session login information
3) calls java parse and upload class
4) returns completion code to calling institution

**Java class**
1) parses transcript xml into required fields
2) invokes appropriate Colleague subroutines to upload
3) returns completion code

**Envision subroutines**

**Colleague database**
The java classes could be directly called from the institution’s web pages, Cold Fusion in the case of Sinclair. Sinclair has, however, implemented the eTranscript process within an existing RMI server framework to add additional security and to facilitate ease of development; instead of exposing java classes directly to the web, Cold Fusion requests the classes be run by the RMI server, which then takes the incoming request and returns XML.

**Installation and Maintenance**

Sinclair’s code is written using Datatel Colleague / Envision (insert version number) and java 1.4.1 compiled on HP-UX Sheba B.11.11 U 9000/800 (tm). It follows the XML Registry and Repository specification of the Postsecondary Electronic Standards Council (PESC) defined at http://www.fsaxmlregistry.ed.gov/XMLRegistry/pages/welcome.jsp. The PESC XML hierarchy is accomplished and manipulated in java using SAX and DOM4J libraries.

Any institution which follows the same Datatel / Unix infrastructure paradigm as Sinclair could install and run the code ‘as is’ with minimal customization, such as directory creation and property file naming etc. Institutions which use different database or internet technology could modify calls and hooks to generate and communicate the data without changing the XML manipulation classes.

For code installation, troubleshooting, and modification whenever the PESC standard changes, programmers should be familiar with Colleague/Envision and Unix/java to best understand the process. The process was developed at Sinclair over a period of four months using one Envision person, one java person, and one Cold Fusion person, each spending 10 to 15 hours per week on this project.
PESC XML Post Secondary Transcript Exchange with Ohio Board of Regents Adult and Transfer Clearinghouse

Terry Young Senior Programmer Analyst
Banner Exporting XML
SHARQTC and SHRPESE

• Registrar’s office uses these Banner Forms to create xml transcripts and send to UC, Sinclair, and Bowling Green via Ohio Board of Regents (OBR) Adult Transfer Clearinghouse (ATC) at Ohio State Computing Center.

• After SHARQTC and SHRPESE, clerical staff will logon directly to OBR/ATC and will load xml transcripts. OBR will validate XML and create pdf’s for receiving institutions.
SHARQTC and XML
**Routing transcript on Export**

**External Institution Code** our ACT code in STVSBGI.

**Issued** can be changed to identify where to go.

<AttentionLine>**Sinclair Community College**</AttentionLine> in XML
SHRPESE

Oracle Developer Forms Runtime - Web: Open > GJAPCITL

Process Submission Controls: GJAPCITL 7.1 (TEST)

Process: SHRPESE  PESO/XML Export Process  Parameter Set:

Printer Control

Printer: DATABASE  Special Print:  Lines: 55  Submit Time: 

Parameter Values

<table>
<thead>
<tr>
<th>Number</th>
<th>Parameters</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Transcript Population File?</td>
<td>N</td>
</tr>
<tr>
<td>02</td>
<td>ID and Seq No as XXXXXXXXXX</td>
<td>%</td>
</tr>
<tr>
<td>03</td>
<td>Transcript Type</td>
<td>XML</td>
</tr>
<tr>
<td>04</td>
<td>Address Selection Date</td>
<td>22-MAR-2007</td>
</tr>
<tr>
<td>05</td>
<td>Address Priority and Type</td>
<td>SPR</td>
</tr>
<tr>
<td>06</td>
<td>Campus Selection Indicator</td>
<td>N</td>
</tr>
<tr>
<td>07</td>
<td>Campus Selected</td>
<td>T</td>
</tr>
<tr>
<td>08</td>
<td>GPA Format</td>
<td></td>
</tr>
</tbody>
</table>

LENGTH: 6 TYPE: Character O/R: Required M/S: Multiple
Enter email types to use if no preferred email (e.g. ICUAPP)
These files will tell you if there was a problem. Also you can view or print the html file of the student transcript similar to an Advising Transcript on SSB.
Banner Importing XML SHRPESI, SHAEDIS, AND DARS

• Admissions and Registrar uses these Banner Forms and imports xml & pdf transcripts from UC, Sinclair, and Cincinnati via Ohio Board of Regents (OBR) Adult Transfer Clearinghouse (ATC) at Ohio State Computing Center.

• Wright State is using OBR’s webapp, moving files back and forth from a secure network drive to the OBR server using https.
Admissions and Registrar’s Process

• Admissions gets xml and pdf’s places in a nfs directory which is mapped to a network drive and a unix/banner server. Admissions runs SHRPESI, and successful files are then marked *.xml.old.

• Admissions goes to SHAEDIS and matches undergrad student (GOAMTCH) then imports OBR/ATC PDF transcript in Xtender. Then routes XML to DARS (Registrar).

• Registrar’s will then do DARS/TA with routing notification. All is done with SHAEDIS and DARwin.
What is NFS

- NFS, or the Network File System, was originally developed by Sun Microsystems in the 1980's as a way to create a file system on diskless clients. NFS provides remote access to shared file systems across networks. This means that a file system may actually be sitting on machine A, but machine B can mount that file system and it will look to the users on machine B like the file system resides on the local machine. In this way NFS is transparent to the user. NFS was also designed to be machine, operating system, network architecture, and transport protocol independent.

- The primary functions of NFS are to export or mount directories to other machines, either on or off a local network. These directories can then be accessed as though they were local. NFS uses a client/server architecture and consists of a client program, a server program, and a protocol used to communicate between the two.
SHRPESI Import Drive
Windows and Unix Views
Permissions for Clients on Windows
Shared Drive 2 Groups Read or Write
These files will tell you if there was a problem. Also you can view or print the html file of the student transcript similar to an Advising Transcript on SSB.
SHAEDIS

STVDSTS is used to set up these routing codes used in SHAEDIS

Notice * these students have not been verified using GOAMTCH
SHAEDIS

Viewing Transcript

Can use search to find degrees and route transcript to DARS or GRAD

[Image of the SHAEDIS system interface]
STVDSTS

---

<table>
<thead>
<tr>
<th>Status Code</th>
<th>Description</th>
<th>Priority</th>
<th>Transfer Articulation Indicator</th>
<th>Archive Status Indicator</th>
<th>Tests</th>
<th>Immunization Main</th>
<th>Student Record</th>
<th>Academic Record</th>
<th>Course</th>
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<tbody>
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<td>N</td>
<td>Y</td>
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<td>AUDT</td>
<td>Run Audit and Evaluate</td>
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<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>DARS</td>
<td>DARS transfer Articulation</td>
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<td>N</td>
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<tr>
<td>GRAD</td>
<td>Graduate Work</td>
<td>2</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>HOLD</td>
<td>hold</td>
<td>3</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>OTM</td>
<td>Ohio Transfer Module</td>
<td>98</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>N</td>
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<td>TA</td>
<td>Run a DARS TA</td>
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<td>N</td>
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<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<tr>
<td>UCAD</td>
<td>Undergrad AD GPA &lt; 2.0</td>
<td>4</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
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<td>Verification of id</td>
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<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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Package baninst1.sb_pescxml_course_udem_imp is a shell program which WSU added code which will create dars records when a routing code of TA with code of P is created. This package also creates dars student records if needed (SZAAMSSIMPORT).

Package baninst1.sb_pescxml_acrec_udem_imp is a shell program which WSU added code which will run an audit when a routing code of AUDT with code of P is created.

Xml_check is procedure written by WSU which looks at the xml and finds if student has transfer module. Scheduled by appworlx at noon and 6 pm before dars bridge.
Inputting courses into DARS/Banner

- Fed in from file in Student Information System
- OCR (Optical Character Reader)
- Entered into DARwin (with pidm WSU does in stuinst) or SZAAMSS manually from transcript.
- XML transcript – From Banner Temp tables to DARS
- Run an articulation – DARwin or SZAAMSS or SHRPESI
- Bridge to BANNER (SZBDBRG)
Import process is fired off and records created in DARS. This process will only go forward greater than last term will not update older records. AUDT process will run an Degree Audit/Transfer Articulation.
### Transcripts Purged

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Inst Code</th>
<th>Institution Name</th>
<th>Trans Date</th>
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</thead>
<tbody>
<tr>
<td>U00000000</td>
<td>Smit, Angie</td>
<td>3332</td>
<td>Sinclair Community College</td>
<td>31-OCT-2007</td>
</tr>
<tr>
<td>U00000000</td>
<td>Smithye, Robert B</td>
<td>3332</td>
<td>Sinclair Community College</td>
<td>09-NOV-2007</td>
</tr>
</tbody>
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### Transcripts Without Archive Status For Purge Date

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Inst Code</th>
<th>Institution Name</th>
<th>Trans Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>U00000000</td>
<td>Smithhee, Angela K</td>
<td>3332</td>
<td>Sinclair Community College</td>
<td>05-NOV-2007</td>
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### Summary Statistics for Electronic Transcripts Purged:

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<th>Number Purged</th>
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<td>3332</td>
<td>Sinclair Community College</td>
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<tr>
<td>Total Purged:</td>
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### Summary Statistics for Electronic Transcripts Not Eligible for Purge:

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<th>Institution Name</th>
<th>Number Not Eligible</th>
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<td>Total Not Eligible:</td>
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Grand Total for Report: 33

---

This job is scheduled in appworx and ran Sunday night purges all ARCH with complete code = C.
Banner defect in baninst1.sb_pescxml_course_exp (needs modified) WSU made changes.
### Cross-Reference Rules

<table>
<thead>
<tr>
<th>Label</th>
<th>Qualifier</th>
<th>Value</th>
<th>EDI</th>
<th>Web</th>
<th>XML</th>
<th>Banner Value</th>
<th>Description</th>
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<tbody>
<tr>
<td>STVASTDD</td>
<td>001</td>
<td>Good Standing</td>
<td></td>
<td></td>
<td></td>
<td>GS</td>
<td>Student was in good standing</td>
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<td>Probation GPA</td>
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<td></td>
<td></td>
<td>M1</td>
<td>Academic probation, low GPA</td>
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<td>M0</td>
<td>Removed from Probation</td>
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<td></td>
<td></td>
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<td>Acad Standing not met min hrs</td>
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<td>Probation Subject to Dismissal</td>
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<td>Academic probation (deficiency in credit)</td>
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<td>Label</td>
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<td>Value</td>
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<td>Web</td>
<td>XML</td>
<td>Banner Value</td>
<td>Description</td>
</tr>
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<td>-----</td>
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<td></td>
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<td>GR</td>
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<td>UG</td>
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<td></td>
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<td>(Unclassified)</td>
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<tr>
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<td></td>
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<td>G2</td>
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<td>Undergraduate (1)</td>
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<td>G3</td>
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<td>UG</td>
<td>Higher or upperdivision credit (asso</td>
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</table>
Potential Problems and Possible Fixes

• SORXREF STVSBGIC Export if Multiple Banner Values try unchecking SORXREF_PESC_XML_IND in Baninst1.SB_PESCXML_TRANDATA_EXP

• CODES with no known code USIS 6 characters and null out.

• Foreign Students SSN need to strip out

• SHRIIPTD RPE in to increase Docid 35 chars.

• StudentRequest – RequestedRecord maybe able to change code on screen
Questions?
Getting Scripts

If you are wanting the DARS scripts to do this contact Terry Young at 937-775-2008. NEOUCOM is providing the WEBSERVICES Software, WSU is using the WEBAPP.

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