How Do I Know You Are Who You Say – Identity Management in Practice

AACRAO Annual Conference
Denver, CO

Session ID: 1892
Wednesday, April 2, 2014
9:15 am – 10:15 am
Session Rules of Etiquette

- Please silence your cell phone/pager
- Please complete the session evaluation using the AACRAO mobile app or the paper form in your registration packet, drop boxes are available throughout the convention center.
- If you must leave the session early, please do so as discreetly as possible
- Please avoid side conversation during the session
Who are WE?

Mark McConahay
Associate Vice Provost & Registrar
Indiana University
Bloomington

Mary Beth Myers
Registrar
Indiana U Purdue U
Indianapolis (IUPUI)
What to Expect

- Some “philosophical” conversation
- Various IDM needs in Registrar space
- Variety of methods to address those needs
- Three specific scenarios and how IU has chosen an innovative way to couple IDM with transcript service
  - What could be next?
Tidbits about Indiana University

- **Multi-Campus System**
  - One residential
  - One urban
  - Seven regional
  - Picture of state with campus locations

- **Active vs Inactive Student Populations**
  - ~350,000 “Active” Students
  - ~1,500,000 “Inactive” Students

- Central, shared PeopleSoft SIS and IT resources
- Common transcript with differing fees per campus
Tidbits about IU Student Service Systems

- ERP Student Information System (PeopleSoft)
- Homegrown Portal (Onestart)
- Sakai Learning Management System (Oncourse)
The “DISCUSSION”

- Attendance each day in brick and mortar classrooms
- Enter distance education/online courses and now need to prove allowing the right students into their remote delivery classes.
- Beyond the classroom, how do we assure correct student being granted access to the correct record?
IDM and Student Life Cycle
Why do We Care?

- **FERPA** (Family Educational Rights and Privacy Act)/Security Compliance
- **HEOA** (Higher Education Opportunity Act) Compliance
- Accreditation and HEOA
- Record Guardianship and Identity Theft
IdM Basics

Identity Proofing and Credential Binding

(A) Identity Proofing

(B) Credential Binding

(C) Credential Binding

Physical Person

Identity Dossier

Credential

McConahay/West – C & U 2011
IDM and Student Life Cycle

- Suspects and Prospects in Admissions
- Applicants/Admits students
- Enrolled/Current students
- Inactive students/Alumni
  - A few years
  - Many years
- Stop outs who return
Admissions Registration Process

Identity Assured?

Financial Aid Info Received

Third-party Info Received

FIRST CONTACT MADE

APPLICATION RECEIVED

ACCEPTED

DEPOSIT PAID

REGISTERED/ ORIENTATION

Online - Identity Proofing

Your Certainty

Identity Management On-boarding

Identity Vetting

Identity Proofing

Tight Id Mapping

Admissions
Registration
Process

On-boarding

Identity
Management

West - 2011
Online Identity Proofing

- Remote Site Visit (Branch Campus)
- Notary and Electronic Notary
- Skype (Person>ID)
  - Record ID event
- Trusted Identity Provider
  - Federated ID
  - CommIT
- Test Proctors
- Others?
Brick and Mortar Attendance

- Instructor Takes Attendance?
- Check at Door?
- Picture ID at exam time?
- Card swipe/Proximity card at the door?
- Login to desktop/laptops/phone devices?
- OTHERS?
Online Attendance

- **Authentication**
  - Two Factor - Login + (token, texts, apps (google authenticator), keystroke dynamics, finger prints (apple), facial recognition, others)

- **Knowledge Based**
- **Proctors**
- **Skype/tele-presence**
- **Others?**

OR

OR
• IdM typically administered via combination of username, password, security questions, etc.
• Identity vetted/proofed
• Worth the expense to the institution as high volume activity and heightened need for the various services.
• AT IU........
#3: Inactive/Alumni

- Option to maintain username/passwords
  - Expensive for University
  - Overhead as users more and more likely to forget credentials the longer out of touch
  - If not returning to institution is this best use of resources?
  - Since only real need would be official transcripts, is there another way?
Online Transcript Authentication

What We Did NOT Do

- Have student request logon credential from IU (e.g., username/password)
  - Would cause processing delay
  - No other service for this population
  - Much overhead for only one service

- Use outside vendor for authentication services
  - Expensive
  - Uneasy with use of credit-card history to authenticate
  - Sometimes lengthy interview process to authenticate
Decided to create temporary credentials
These credentials are valid only for the length of the transaction
Based on detailed information about the student available on the academic record
  - Much information is likely known/shared on Facebook, Twitter, etc. (birth date, address, parents,...)
  - Wealth of other information likely ONLY the student would know
How to authenticate an inactive student?

- Entry of basic identity data, such as
  - First and Last Name
  - Birth Date
  - Last 4 digits of National ID (or IU University ID)
- Plus a series of multiple-choice questions using “Knowledge-Based Authentication” technique.
How to create authentication questions from a student’s data where:

- Student will remember the correct answer
- Difficult to guess the correct answer
- Answer is not in the public domain (e.g., not in Facebook)

This is difficult!!
KNOWLEDGE-BASED AUTHENTICATION

- Four questions in addition to basic identification data.
- Inactive students must identify:
  - An address they had while attending IU
  - An IU campus attended
  - A transfer credit institution (if any)
  - A course taken at IU
- IU decided to present a multiple choice answer list; one correct answer and four other plausible incorrect answers
**ADDRESS**: For the address question, if correct address was in Bloomington, IN we present four other addresses in Bloomington, IN. If Outside of Indiana, we present addresses in the same state.

**COURSE selection**: Do not choose “common” courses as correct selection; present four “like” courses
**SECURITY FEATURES**

- **Security Features of Inactive Authentication:**
  - Inactive student must answer all questions correctly to be successfully authenticated
  - Student is locked-out of eTranscript Request after two consecutive failed authentication attempts
  - Lockouts last a certain period of time
  - May be administratively unlocked (or locked)
Transcript Authentication?

- Thought of this makes some people “nervous” but cleared by University Counsel
- Saves institutional resources to be re-directed to current/enrolled student service
- Provides exceptional service to the constituents who have left but still need official transcripts
- Likely one of our best IDM processes
IU Transcript Authentication in Practice

- IU Transcript Authentication Screen shots at end of this presentation, available on AACRAO site
- Not going through those in this session by provided for those who might be interested
THOUGHTS? QUESTIONS?

Brad Pitt

Sandra Bullock
Questions/Discussion?

Mark McConahay  
Associate Vice Provost & Registrar  
Indiana University  
Bloomington

Mary Beth Myers  
Registrar  
Indiana U Purdue U  
Indianapolis (IUPUI)
Welcome page

eTranscript Request Service

This service allows former Indiana University students to order an official transcript and pay with a credit card. If you have had Indiana University enrollment within the past year, please logon to OneStart (http://onestart.iu.edu) using your IU network-id and password. Click Services & Information, then the Official Transcript Request (Online) link.

Agreement

I verify that I am the individual whose record is being requested.

I also understand that attempts to obtain official transcripts through fraudulent means are a violation of federal and state laws and University policy and will be referred to appropriate authorities.

☑️ I agree to the terms above.

To find out how to contact the Registrar’s Office directly, click here.
Welcome Page detail

- Click here
  - Takes student to a knowledge base pop up page with all Registrar locations, phone, email address
- I agree to the terms above.
  - In the box above makes continue button available
eTranscript Request Service

To verify your identity, you will be asked a series of questions regarding the information we have on file for you at Indiana University. To identify yourself, enter your information below as it appears on your Indiana University transcript.

Enter your information and click Continue.

* First Name: 

* Last Name: 

* Birth Date (MM/DD/YYYY): 

* Last 4 digits of National ID (e.g., Social Security Number): OR... University ID (10 digits): 

To find out how to contact the Registrar’s Office directly, click here.

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Errors were detected on this form. Please correct the errors and click 'Continue'.

Enter your information and click Continue.

*First Name: Ina
*Last Name: Student

*Birth Date (MM/DD/YYYY): 10281080
Birth Date (MM/DD/YYYY) does not have date format MM/DD/YYYY.

*Last 4 digits of National ID (e.g., Social Security Number): 0338

To find out how to contact the Registrar’s Office directly, click here.
The field where the error occurs is highlighted

- **Continue**
  - Student corrects error and hits continue to move on

- **Cancel**
  - Returns student to welcome page
Address authentication

eTranscript Request Service

One of the addresses listed below is an address listed for you in Indiana University records. Select the correct address.

Select the correct answer from the list below and click Continue:

- 4601 N ABINGTON DR, INDIANAPOLIS, IN, USA, 46254
- 615 N PENN APT 11, INDIANAPOLIS, IN, USA, 46204
- 1307 CLEMLAKE WAY APT B, INDIANAPOLIS, IN, USA, 46227
- 5416 CARROLLTON AVE, INDIANAPOLIS, IN, USA, 46203
- 1235 JAGUAR AVE, INDIANAPOLIS, IN, USA, 46202

To find out how to contact the Registrar's Office directly, click here.

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Which Address?

IU transcript

Address choices
Transfer institution?

**eTranscript Request Service**

You may have transfer credit recorded at Indiana University from one of the institutions listed below. If so, select the correct institution. If not, select “None”.

Select the correct answer from the list below and click Continue:

- NONE
- IOWA STATE UNIVERSITY
- IONA & MENDEN UNIVERSITY SYSTEM
- EVANGELIST UNIVERSITY
- DAVY UNIVERSITY CENTERS

To find out how to contact the Registrar’s Office directly, click **here**.
transfer institution?

**eTranscript Request Service**

You may have transfer credit recorded at Indiana University from one of the institutions listed below. If so, select the correct institution. If not, select "None".

Select the correct answer from the list below and click Continue:

- None
- Iowa State University
- Ana G. Mendez University System
- Everglades University
- Davry University Centers

To find out how to contact the Registrar’s Office directly, click [here](#).

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Which Campus?

IU transcript

Report Results

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hrs Grd</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON</td>
<td>ECON FOR PRE-COLLEGE EDUCATORS</td>
<td>3.00 A+</td>
</tr>
<tr>
<td>ECON-E</td>
<td>READINGS IN ECONOMICS</td>
<td>3.00 A-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fall 2006 Indianapolis

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hrs Grd</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST-H</td>
<td>GRADUATE READINGS IN HISTORY</td>
<td>3.00 B</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Campus choice

eTranscript Request Service

You had enrollment at one of the Indiana University campuses listed below. Select the correct campus.

Select the correct answer from the list below and click Continue:

- Bloomington
- East
- IUPUC
- Kokomo
- South Bend

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Which course?

IU Transcript

Course choices

Fall 2006 Indianapolis
Program: Education Grad Nondeg
Course: HIST-H 575 GRADUATE READINGS IN HISTORY 3.00 B
Semester: IU GPA Hours: 3.00 GPA Points: 9.000
Hours Earned: 3.00 GPA: 3.000
Cumulative: IU GPA Hours: 9.00 GPA Points: 32.100
Hours Earned: 9.00 GPA: 3.567

Spring 2007 Northwest
Program: Education Grad Nondeg
Course: EDUC-F 500 WORKSHOP IN ENGLISH EDUCATION 3.00 A
Course Topic(s): MENTORING THE BEGINNING TEACHER
Semester: IU GPA Hours: 3.00 GPA Points: 12.000
Hours Earned: 3.00 GPA: 4.000
Cumulative: IU GPA Hours: 12.00 GPA Points: 44.100
Hours Earned: 12.00 GPA: 3.675

Student Graduate Program Summary
IU GPA Hours: 12.00 Transfer/Test Hours Passed: 0.00
Hours Earned: 12.00 Points: 44.100 GPA: 3.675

Indiana University Graduate Summary
IU GPA Hours: 12.00 Transfer/Test Hours Passed: 0.00
Hours Earned: 12.00 Points: 44.100 GPA: 3.675

Academic Objective as of Last Enrollment
Education Grad Nondeg
Nondegree Graduate
eTranscript Request Service

Welcome! This service allows former Indiana University students to order an official transcript ($8.00 per transcript) and pay with a credit card.

eTranscript Request is not yet available in situations where an additional form must accompany your transcript. Review your in person, mail or fax, options or contact the Registrar's Office at 317-274-1514.

Terms and Agreement

I understand my transcript reflects my academic record as of the date and time this request is submitted.

I authorize Indiana University to release my transcript(s) as requested.

I agree to the terms above.

Enter your information and click Continue.

*First Name:

*Last Name:

*Birth Date (MM/DD/YYYY):

*Last 4 digits of Social Security Number:

University ID (10 digits):

Authentication has failed. You may attempt to authenticate again.
E Transcript request features

- Check for holds
- Allow link to name change
- Number of transcripts, sent to multiple addresses, etc.
- Payment by credit card – PayPal
- Options for grade, degree, grade change hold
- Express delivery options
Administrative summary page

- Allows searching by:
  - Request Date
  - Admin Status: Needs Validation, Held, Refunded, etc.
  - Hold Status: None, Grades, Degree, Grade Change
  - University ID
  - Name
  - Institution
- Print Status (On/Off)
- Printer location
Some IdM References

- Establishing Remote Student Identity: Results of an AACRAO/InCommon Federation Study, College and University, Vol.87, Winter 2012
  - http://www.aacrao.org/resources/resources-detail-view/volume-87--number-1--pdf-
- More about CommIT (Common Identity and Trust Collaborative)
  - https://spaces.internet2.edu/display/InCAdmissions/Home
- Google Authenticator
  - http://www.google.com/landing/2step/?utm_campaign=en&utm_source=en-ha-na-us-sk&utm_medium=ha#tab=how-it-protects
- Identity Authentication Best Practices (DOE – Privacy Technical Assistance Center)
  - http://ptac.ed.gov/