cooperation and communication through global digital student data depositories

Pilot Projects
-KEY ELEMENTS TO CONSIDER-

Experiences from the NSC Pilot with Mexico

Mtro. Guillermo P. López Andrade
1. Legal Status

Both agencies are:

- Non for profit.

1. Dirección General de Acreditación, Incorporación y Revalidación
2. Dirección General de Profesiones
3. Dirección General de Sistemas Registrales

1 Non Governmental Organization
(business decisions)
-Autonomy to operate-

Central Government
-3 administrative units-
(political decisions)
-limited Autonomy to operate-
### 2. Information available

**2.5 BILLION RECORDS**

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Available?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Education</td>
<td>N/A</td>
</tr>
<tr>
<td>Professional Licensing</td>
<td>YES</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>YES</td>
</tr>
<tr>
<td>Vocational Qualifications</td>
<td>YES</td>
</tr>
<tr>
<td>Tertiary Education</td>
<td>YES</td>
</tr>
<tr>
<td>Examinations Result</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Since 1993**

21 years

**73 MILLION RECORDS**

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Education</td>
<td>80%</td>
</tr>
<tr>
<td>Professional Licensing</td>
<td>16%</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>3%</td>
</tr>
<tr>
<td>Vocational Qualifications</td>
<td>.4%</td>
</tr>
<tr>
<td>Tertiary Education</td>
<td>.6%</td>
</tr>
<tr>
<td>Examinations Result</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Since 2011**

3 years

**Since 2011-3 years**

Since 2011-3 years
3. Response capacity

750 million verification services per year

58,900 verification services in 4 years 2009-2014
### 4. Services provided

<table>
<thead>
<tr>
<th>EDUCATIONAL LEVEL</th>
<th>NSC-SERVICES</th>
<th>SEP-SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELEMENTARY EDUCATION</strong></td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td><strong>SECONDARY EDUCATION</strong></td>
<td></td>
<td>• Enrollment-Verify</td>
</tr>
<tr>
<td></td>
<td>• Student tracker</td>
<td>• Certificate-Verify</td>
</tr>
<tr>
<td></td>
<td>• Electronic Transcript Exchange</td>
<td>• Certificate-Verify</td>
</tr>
<tr>
<td><strong>VOCATIONAL QUALIFICATIONS</strong></td>
<td>• Professional Verification Certifications</td>
<td>• Certificate-Verify</td>
</tr>
<tr>
<td><strong>TERTIARY EDUCATION</strong></td>
<td>• Degree-Verify</td>
<td>• Degree-Verify</td>
</tr>
<tr>
<td></td>
<td>• Electronic transcript exchange registry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enrollment reporting for Student Aid Compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enrollment-Verify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Student tracker</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Other services</td>
<td></td>
</tr>
<tr>
<td><strong>EXAMINATIONS RESULT</strong></td>
<td>• Student tracker for outreach</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>PROFESSIONAL LICENSING</strong></td>
<td>• Professional Verification Certifications</td>
<td>• Professional Verification Licensing</td>
</tr>
</tbody>
</table>
5. Principles & Legislation

- **g.r.e.e.n. principles** (global registrar edurecord exchange network)
- **Ferpa**
  - Family education rights and privacy act
- **General law on education** (art. 12, f. X)
- **General law on professions**
  - Public disclosure of professional licenses
- **Laws on transparency, privacy and data protection**
6. Systems (SOFTWARE)

- DATABASE MANAGEMENT SYSTEMS USED BY REPORTING INSTITUTIONS

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptron Corporation</td>
<td>AIMS, Campus</td>
</tr>
<tr>
<td>Campus Management Corporation</td>
<td>CLASS, CampusVue</td>
</tr>
<tr>
<td>Champlain Software</td>
<td>AS 400 Version</td>
</tr>
<tr>
<td></td>
<td>PC Version</td>
</tr>
<tr>
<td>Complete Business Solutions, Inc.</td>
<td>APECS</td>
</tr>
<tr>
<td>Computing Options Company</td>
<td>REGENT/COLLEGE</td>
</tr>
<tr>
<td>ComSpec International</td>
<td>EMPOWER</td>
</tr>
<tr>
<td>EDC, Inc.</td>
<td>CampusAnywhere</td>
</tr>
<tr>
<td>Ellucian</td>
<td>Banner®</td>
</tr>
<tr>
<td></td>
<td>Bi-Tech IFAS</td>
</tr>
<tr>
<td></td>
<td>Colleague® 12.8+</td>
</tr>
<tr>
<td></td>
<td>Matrix</td>
</tr>
<tr>
<td></td>
<td>Plus PowerCAMPUS®</td>
</tr>
<tr>
<td>Jenzabar</td>
<td>CX, EX, PX, QX, QE, TE</td>
</tr>
<tr>
<td>Oracle</td>
<td>PeopleSoft</td>
</tr>
<tr>
<td>RJM Enterprises</td>
<td>SONIS</td>
</tr>
<tr>
<td>RobinSoft Corporation</td>
<td>GradPro</td>
</tr>
<tr>
<td>Scan Business Systems, Inc.</td>
<td>Scanware</td>
</tr>
<tr>
<td>Three Rivers Systems, Inc.</td>
<td>CAMS®</td>
</tr>
</tbody>
</table>
Programming languages and software development tools are:

Visual Studio Net 2010 (development tool).
C#, HTML, CSS y AJAX (Program writing)
Microsoft .Net Framework 4.0
Internet Explorer 8.0 y Firefox 3.6 o superior (web browsers).

The Application Server is **Internet Information Services** (IIS ver. 6.0 or superior) that contains a set of services for the Microsoft Windows (NTP y HTTP/HTTPS).

The Manager Database Engine is **SQL Server Enterprise 2008 R2** (In 2015 might change into Oracle)
<table>
<thead>
<tr>
<th>EDUCATIONAL LEVEL</th>
<th>NSC-SERVICES</th>
<th>SEP-SERVICES</th>
</tr>
</thead>
</table>
| **7. SECURITY**   | • File Transfer Protocol  
                   • Secure Shell |               |
|                   | ![FTP](ftp.png) ![SSH](ssh.png) | ![HTTPS](https.png) |
| **8. LAYOUTS**    | **Examples:**  
                   • SSN (Social Security Number)  
                   • Date of birth.  
                   • Academic term  
                   • Certification date  
                   • Reporting level | **Examples:**  
                   • CURP (Unique National Code of Population)  
                   • Date of birth. |
| **9. STANDARDS**  | ![PDF](pdf.png) ![EDI](edi.png) ![XML](xml.png) | ![PDF](pdf.png) |
10. Political priorities

In general stability in its mission and vision

2011-2012
- The creation of a national registry of students, teachers & schools (basic education)
- The creation of rodac (all levels of education)

2013-2018
- The creation of a national system of educational information and management
OTHER ISSUES

① Major goals and objectives (mission and vision)
② Financial resources.
③ Technological Infrastructure.
④ Human talent (quality, quantity and retention).
⑤ Legitimacy (trusted agency “perception”).
⑥ Incidentals: Audit processes.
⑦ Mapping.
DEGREE VERIFY
Transit of a student from Mexico to USA

**IMPORTANT**
*This is just a non official idea, under analysis, on how cooperation could work.*

FREE OF CHARGE in 2013, but in the future this situation might change in the case of companies or commercial entities.

**OPTION A**

**STUDENT / PROFESSOR**
Interested in enrollment

**USA UNIVERSITY**
In need of confirmation an authenticity

**NSC**
Validation & RODAC contact in USA

**RODAC**
Verify Services

**NATIONAL NETWORK**

**MEXICAN UNIVERSITIES AFFILIATED TO RODAC SERVICES:**
Universities that transfer information massively to RODAC

**DEGREE VERIFY.**

**REQUEST**

**ANSWER**

**OPTION B**

**PROSPECTIVE EMPLOYEE**
Interested in a job

**USA COMPANY**
In need of confirmation an authenticity

**RODAC**
Transfer Services

**RODAC**
Research Services

**MEXICAN UNIVERSITY**
Institutional Files and Databases

**DEGREE ISSUANCE**
DEGREE VERIFY
Transit of a student from USA to Mexico

Option A
NSC
In need of confirmation of authenticity
Receives the list and assigns login and password per university or authority.

DEGREE VERIFY
NSC. Validation

Option B
RODAC
Another option for the Mexican University (NSC-RODAC Agreement)

IMPORTANT
*This is just a non official idea, under analysis, on how cooperation could work.
Request an analytic certificate to the USA University

NSC's Affiliation
Login & Password

NSC's Affiliation
Login & Password

Option A

FTP MAILBOX
(Security system)

Option B

Notify the University & download the certificate

Option B

IMPORTANT
*This is just a non official idea, under analysis, on how cooperation could work.

Another option for the Mexican University.
The Mexican Ministry of Public Education inform to NSC the request from the Mexican University.
When the certificate it's valid, notify