NC SchoolWorks

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NCDPI Enterprise Data Manager

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History
July 1, 2012 NC DPI received a $3.6 million grant from the USED to facilitate the automated exchange of data between the various educational entities and workforce.

Grant Completion
The Grant was successfully completed June 30, 2017 per the requirements in the Grant Proposal submitted December 2011.
North Carolina SchoolWorks System

What it is
- a federated data system
- both automated and manual
- longitudinal
- designed to produce information on cohorts of students, schools and program data over time
- designed to add additional partners
- designed to use the PK-13 UID as the identifier

It is not
- a real-time system
- a data warehouse
- designed to follow an individual. No names, home addresses, phone numbers will be provided
North Carolina SchoolWorks System

NC SchoolWorks Grant Partners $3.6 Million
- NC Department of Public Instruction (NCDPI)
- University of North Carolina General Administration (UNCGA)
- NC Community College System (NCCCS)
- NC Independent Colleges and Universities (NCICU)
- Labor and Economic Analysis Division (LEAD) of NC Department of Commerce

NC SchoolWorks Contributing Partners
- Government Data Analytics Center (GDAC)
- Division of Health and Human Services (DHHS)
  - Early Childhood Advisory Council (ECAC)
- NC Governor’s Office
- SAS
Unique Identifier

• The cornerstone of the system is the Unique Identifier. It allows for data to be joined across various otherwise stand alone data systems
  • Under the grant, the licenses to the DPI UID system were purchased for the IHE partners.
  • Recurring state appropriation for ongoing maintenance of UID for the IHEs has been provided through DIT/GDAC since July 2016
  • Allow the merging of data sets without Names, addresses, phone numbers or SSNs
North Carolina SchoolWorks System Overview

Broker System
- Workflow (including MOU)
- Data Dictionary (CEDS)
- Data Request Approval
- Query (including determining Cohort)
- Returns Result

Participants:
- UNC 17 Univ
- NCICU 36 Coll and Univ
- NCCCS 58 Colleges
- DOC LEAD (Labor)
- ECIDS Early Childhood Agencies
- PK-13
- Requestor
Privacy vs Security

The distinction between Privacy and Security.

Privacy applies to the handling, sharing and reporting (Master Data Management) of Personally Identifiable Data.

Security applies to the safe storage, access, transfer and maintenance of data.
North Carolina SchoolWorks System

Data Security
- Broker resides at DIT/GDAC – Compliant with DIT Security Guidelines

Data Privacy
- Data are maintained by each participating partner, and the broker queries the requested data upon proper approval
- No individual names, home addresses or phone numbers are available
- Initial approval by partners - Manual
  - Individual – Identified (by UID only)
  - Individual – De-Identified (randomized masked identifiers assigned)
  - Aggregate – With Small Cell Suppression
- Broker then sends and receives the MOU, Confidentiality Statement documents – Receipt is verified by System Administrator - Manual
- Broker extracts data per approved requirements
- Before any data are released from the NC SchoolWorks system, the results must be approved by all partners supplying the requested data - Manual
- Data is stored for 14 days or delivery then deleted.
NC SchoolWorks Key Takeaways

• All initial data requests must be unanimously approved by all partners involved
• Oversight by NC DPI System Administrator
• UID are used to match records across partners for extract and delivery
  • Note: Statutory technical correction has been requested to remove UID from the definition of personally identifying information.
• All data sets are approved prior to release by represented sectors
• Data sets will sit on secure server to be retrieved. This is time limited to 14 days or upon delivery.
• For non-partner sector data requests data can be delivered:
  • Individual – De-Identified
    • Masked identifiers will be unique across all data sets in one request
  • Aggregate
    • Small Cell Suppression Applied
Questions
Additional Slides
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Karl,

Thank you for providing a demonstration of your new tool designed to ease the burden of data requests. When I was with the Florida Department of Education, one of my roles was to move external research requests through the data request process. The process we had in place at the time involved handing off a folder for review and approval. It was cumbersome and time consuming, often requiring me to spend several hours “translating” what data they thought they wanted into what they really wanted. I envisioned an automated workflow process that would allow the requestor to choose from elements we had available, kick off an approval process and once approved to seamlessly move the request into data extraction. What North Carolina has recently launched is a wonderful representation of the vision I had for automating the data request process. I can immediately see the value of this tool and how it will save your state many resources when used by requestors. I expect other states will learn from this tool as they also work to make the data request process easier. I applaud you for your efforts!

Sincerely,

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