

Building a Culture of Quality Data for Student Success

Calhoun ISD
Marshall, Michigan
December 2007



Who Are We?

- Mike Oswalt
 - 19 years in education
 - Current Assistant Superintendent of Regional Technology Services
 - Former District Instructional Technology Coordinator
 - Former Adult and Alternative Education teacher



Who Are We?

- Kevin Bullard
 - School Data Specialist/Programmer
 - Former District Data Specialist/Trainer



Where Are We From?



- Calhoun Intermediate School District (ISD)
 - Marshall, Michigan
 - Regional Educational Service Agency providing many services to our constituent districts:
 - Special Education
 - Career Center
 - Variety of Technology Support
 - Curriculum/Instruction/Assessment
 - Workforce Development
 - 13 school districts ranging in size from 290 to 6,630 students



Why Are We Here?



- As the first implementation of Data Director in Michigan, we have a story to tell.



What have we found?



- Data Director
 - Is a tool for informing school improvement planning
- Data Director
 - Is a tool for engaging professional learning communities
- Data Director
 - Is a tool for promoting collaboration between districts
- Data Director
 - Is a tool for building a culture of quality data for student success



Data Director Consortium



- Calhoun ISD
 - 12 School Districts, 1 Career Center, 1 ISD, 1 Math/Science Center
- Branch ISD
 - 3 School Districts, 1 Career Center, 1 ISD
- Barry ISD
 - 2 School Districts
- Informal link to
 - Jackson ISD and Eaton ISD (neighbors)



Introduction



- Why are we doing this?
 - No Child Left Behind and Michigan's Education YES! Requirements
 - Schools must align student demographic and achievement data to ensure that all student subgroups make adequate progress
 - Schools are turning to data to justify programs and identify intentional areas of school improvement efforts
 - Michigan's Public Act 25 called for schools to design school improvement goals
 - It is only recently that data is being used to identify meaningful school improvement goals (goals based on fact, not on feeling)



Introduction



"Being data driven is an admirable goal. Just because a school collects data, does not mean the data are being used to improve student achievement."

Marzano



What is Our Journey?



- 2000
 - Urgency of access to data for various needs identified by pupil accounting, curriculum, and technology departments
- 2003/2004
 - Data focused professional development for Principals – set the stage for the importance of data in identifying school improvement focus areas. Very critical to begin building a culture of quality data through professional development.
- Fall 2004
 - Committee of data stakeholders (e.g. principals, school improvement/curricular staff, technical staff, ISD staff, superintendents, etc.) determined the scope of a data warehouse by identifying the key questions that should be answered by a data warehouse solution (data mining framework)
- January 2005
 - Began using Data Director at the ISD level; districts began using summer 2005.



What is the role of the ISD as it relates to data warehousing?



- “ISDs provide efficiencies of scale and are trusted because they have longstanding, beneficial relationships with local districts and intimate knowledge of local contexts” (Perspectives, Fall 2006)
- “Educational Service Agencies, by virtue of their proximity, local knowledge, ‘sense of place,’ trustworthiness and collaborative nature, provide significant opportunities for district-wide reform...” (Perspectives, Fall 2006)



2007 ISD Survey



- Data Warehousing in Michigan ISDs
 - 25 ISDs indicated they each have a consortium of school districts involved in some stage of data warehousing.
 - 13 ISDs indicated they have partially or fully implemented a data warehousing solution
 - 22 ISDs indicated they paid for some portion of the project for the districts



What is the role of the ISD as it relates to data warehousing?



Leadership

- Take the lead in facilitating professional learning communities focused on using data for school improvement planning.
- Determine the collective needs of the districts and facilitate research for the data warehouse product.
- Use the product when working with school districts on school improvement planning.
- Provide some 'seed money' to help get the project going.



What staff resources did the project require at the ISD?



- ISD School Improvement Data Consultant (first three years)
 - Primary project manager of the project, reporting to curriculum, general services, and technology assistant superintendents. Serves as connecting point between school improvement and technology needs.
- ISD School Data Specialist/Programmer (after first three years)
 - Primary technology support for the project, reporting to technology department, but working closely between vendor, curriculum and technology departments at ISD, and local schools



What staff resources did the project require at the ISD?



- Existing ISD Education Consultants
 - Requires current ISD education consultants to use the product in their school improvement professional development with districts.
 - Although there was increased learning by the staff, it helped them address deep questions that focus on school improvement planning
 - "What DD allows us to do with our [professional learning community] PLC work is to find the data easily which used to be one of the stumbling blocks to running effective PLCs. The use of DD in PLCs has allowed the teams to become "data driven" in that the data are readily available and the PLC discussions/work can revolve around that data. The teams are able to get to the "work" using the data instead of using all the team time to pull the data together." (Julie McDonald, Calhoun ISD Education Consultant, 2007)



What financial resources did the project require at the ISD?



- ISD funded for first four years of project
 - Includes product and training of key staff from the locals.
 - Districts who choose to stay involved after that will pay for the product and Calhoun ISD support on a per student fee.



Calhoun's Two-Phased Approach



- Phase One
 - Clean the data, learn the tool, clean the data, learn the tool, etc.
 - Technical contact is primary contact
- Phase Two
 - Use the tool for School Improvement Planning (while still cleaning and learning)
 - School Improvement contact is primary contact



“Instead of overloading teachers, let’s give them the data they need to conduct powerful, focused analysis and to generate a sustained stream of results for students.”

Stiggins



Building a Culture of Quality Data for Student Success



- Essential Components
 - Principals as Instructional Leaders
 - Professional Learning Communities
 - Sustained Support



Principals as Instructional Leaders



- Starts with professional development for principals and bringing principals from other districts/buildings together to engage in conversations and learning
- Must be part of their building/district team
- Principals must be part of the visioning for their building



Professional Learning Communities



- Empowers teacher leaders to foster innovation
 - "If these teachers and teams are identified (the job of the school and district) their success and expertise can lead to expanded success and can inspire, as no outsider can, a vision of what's possible." (Schmoker, 2006)
 - "A successful face-to-face team is more than just collectively intelligent. It makes everyone work harder, think smarter, and reach better conclusions than they would have on their own." (James Surowieki, as quoted in *Results Now* by Schmoker, 2006)



Professional Learning Communities



- Essential Professional Development Topics
 - Using state data to identify school improvement goals
 - Good entry point for data mining to identify trends and areas for focus
 - Using school data to clarify and address the problem
 - Grade level teams come together to review assessment results and identify areas of focus
 - Examining student work to inform instruction
 - Based on the interpretation of the data, PLCs examine specific assessment items, such as writing samples, to identify areas to focus specific instructional interventions
 - Using classroom data to monitor student progress
 - Using classroom assessments to show progress, identify areas of focus, and predict performance on standardized assessments



Sustained Support



- Consortium Committee support structures
 - Key Contacts: a collaborative cross district support model
 - Superintendent assigned technology and curriculum/instruction leaders
 - Meet regularly
 - Teach each other and share best practice
 - Collaboratively define implementation strategies and future enhancement needs
 - Front line support in district
 - Big picture focus: provide support for beyond K-12 to include early childhood, career center, special education



Sustained Support



- Calhoun ISD provided resources
 - School improvement support
 - Curriculum/Instruction/Assessment: Data Director has become the school improvement tool used by the ISD curriculum/instruction/assessment staff when working in and with districts
 - Provide support for beyond K-12 to include early childhood, career center, special education
 - Technology support
 - Assist schools in streamlining the data collection process and providing support for Data Director
 - Provide liaison between curriculum/instruction and technology departments as a front line support for districts and a link to Achieve (aka Kevin Bullard)
 - Leadership
 - Visioning for how to build a culture of quality data in schools
 - School improvement project with a resource meant to drive classroom instruction (with a cool technology tool), not a technology project that is just another tool to collect data for state reporting
 - Funding local district software costs initially to keep the focus on the forming stage of transition rather than on finding funding



Sustained Support



- Local school district resources needs
 - Leadership
 - Commitment of superintendent to the project and principals to motivate staff to use data to inform instruction
 - Power Users
 - School Improvement and technical key contacts and key teacher leaders who are front line support for using Data Director as a school wide tool for driving classroom instruction
 - Professional Learning Communities
 - Principals and key teacher leaders who are using the tool appropriately and able to show others through professional learning communities.
 - Big picture focus
 - More than just K-12; early childhood, career center, special education



Advice from Calhoun ISD



- Keep communicating the focus
 - Data warehousing is not a technology project; it is a school improvement project with a great technology tool.
- Keep all stakeholders informed
 - Communicate the vision, the progress, the results frequently to superintendents, school improvement staff, curricular staff, principals, technology leaders, teachers, counselors, data entry staff.
- Don't work in isolation, especially when planning
 - When designing the project for bid, and then for the first two months after selecting the tool, engage school improvement staff together with technical staff to define the school improvement scope of the data warehouse.



Advice from Calhoun ISD



- Ask questions
 - When someone wants to add data to the data warehouse, always ask 'what school improvement question will this assessment data answer?' If that can't be answered, don't add the data.
- Hold staff accountable
 - Districts need to think and articulate why they think they want in a data warehouse and then once they have it, how will they hold administrators accountable for using it and then teachers.
- Establish support structures
 - Support structures, both technical and school improvement, need to be established minimally at both the district and intermediate school level in order to answer questions in a timely fashion. This encourages collaboration and shared learning/leadership among all stakeholders.



Lessons Learned: Calhoun ISD



- Once school improvement leaders have designed their data warehousing scope/needs, it becomes a technology project until the data is 95% clean.
- A data warehouse project has two phases; depending on multiple variables, districts will grow through the phases at different speeds
 - Phase One – Data Warehouse is a Technology Project after the scope is defined
 - Keep school improvement leaders informed, but not engaged fully until the technological glitches are fixed.
 - Phase Two – Data Warehouse is a School Improvement Project after the first six months
 - Keep school improvement and technology leaders informed and engaged – AND retrained on the basics as necessary



Lessons Learned: Calhoun ISD



- ISDs need to provide leadership (and funding) because they have longstanding relationships with local districts and intimate knowledge of local contexts
- ISD needs to provide liaison between curriculum and technical departments that is the
 - Key contact at the ISD for the districts,
 - Primary technical support for the districts, and
 - Primary contact to vendor for all product needs.
- Though school improvement staff at ISD and districts rely on technical contacts, they must integrate the use of the tool into their professional responsibilities



Lessons Learned: Calhoun ISD



- School district key contacts are central to the success of the data warehouse. Each district technical and school improvement contact must communicate with each other and work together.
- School district key contacts prefer to train each other
- Superintendents need to initiate some questions; principals need to find the answers and use those results to probe deeper (data mining).
- Principals need to be given a meaningful pre-built report(s) that encourages them to ask more questions (i.e. hold their hand at first).
- There will always be technological glitches.
 - Student unique IDs MUST be complete and accurate.
 - Teacher IDs must be unique, no matter what school building they are located.
 - Course names should be unique and consistent year to year.
 - Data should be refreshed every other week minimally.



Lessons Learned: Calhoun ISD



- Student registration is the point closest to the source data and is the most critical time to fully and accurately collect data .
- It is a critical learning experience for district staff to work to clean and validate their own data:
 - District staff can best assess the data they receive to determine why it is not accurate – which is a critical step in problem-solving.
 - District staff can best assess who is responsible for the data error so that that individual(s) can be brought along to enter data correctly in the future.
 - District staff can monitor data for 'red flags' that aren't apparent to 'outsiders.'
- Data Access agreements signed by superintendents are essential for consortium models; provides permission for school district, ISD, and vendor staff to access student level data.



In Summary, Data Director is:



- A tool for informing school improvement planning
- A tool for engaging professional learning communities
- A tool for promoting collaboration between districts
- A tool for building a culture of quality data for student success



Questions After Today?



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