Replicating Success: Leveraging Successful Data Driven Decision Making Processes

Project Report

April 2003
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Report Objectives

• Describe background, nature and scope of the Data Driven Decision Making (DDDM) study

• Communicate DDDM study findings

• Provide recommendations to ISBE for improving DDDM practices

• Identify next steps
Executive Summary

- Project study concluded that high poverty schools demonstrating high levels of academic achievement utilized Data Driven Decision Making (DDDM) practices within the school program

- Significant investments in technological infrastructure or training are not behind school's successful use of DDDM practices. "Best practices" are found in processes (e.g., data gathering, communication approaches, curriculum mapping, parental contact), not technology

- Project study recommendations are integrated with on-going ISBE sponsored initiatives (school report card, School Improvement Plan, etc.) and fit into the re-alignment proposals of the System of Support group

- Recommendations are aligned to strategic, lower cost solutions; study does not provide detailed recommendation costs or implementation milestones

- Recommendations are set within a multi-tiered implementation approach that covers three broad timelines

- NCLB requirements were factored heavily into the development of final recommendations. The allocation of NCLB funding into programs based on data driven decisions by ISBE is central to the implementation of the recommendation suite

- Implementation requires centralized coordination of various resources (both within and outside the ISBE) best positioned to execute recommendations

- To ensure recommendations are implemented successfully, ISBE must develop a clear roadmap of data-based solutions, create and promote a set of detailed project milestones based upon the study recommendations, and generate solid accountability measurements that will be leveraged by the school and administration communities
Project Overview
Project Goals

1. Identify Data Drive Decision Making (DDDM) practices at selected “Golden Spike” schools
   - Identify common themes and practices
   - Understand the role technology plays in the enablement and support of DDDM activities

2. Create set of recommendations to leverage DDDM best practices at other elementary schools, particularly high poverty/low performance schools

3. Integrate ISBE’s and related organizations’ existing resources and initiatives into recommendations

4. Identify implementation strategies*

*Scope of project study does not include prescribing specific solution details or implementation channels
Analytical Approach

- At the study’s outset, the project team identified and sought to understand common success factors demonstrated by high performing, high poverty schools.

**DDDM Central Hypothesis:**
High poverty/high performance schools exhibit common success factors that have enabled them to leverage technology and technology-enabled practices, particularly DDDM techniques, for high student achievement.
Key Findings
### Overview of Key Findings

<table>
<thead>
<tr>
<th>Exemplary DDDM processes distinguish model schools from the rest</th>
<th>Leaders drive the creation of environment where DDDM practices achieve results</th>
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<tbody>
<tr>
<td>• Distinguishing characteristics of exemplary case study schools include long-term (5+ years) efforts at DDDM education and implementation, focused on achieving staff buy-in and process sustainability</td>
<td>• Key leadership is found at both the principal and district level</td>
</tr>
<tr>
<td>• DDDM policies and practices are sustained through institutionalization – fixed meetings, required status reports, and accountable action plans ensure processes become organic to the school</td>
<td>• Leaders firmly advocate new DDDM policies – they research and promote to staff the important, strategic value of continuous assessment</td>
</tr>
<tr>
<td>• Remaining case study schools gather data (typically only ISAT, ITBS), but their efforts at continuous, year-long data analysis are informal at best and results are not tracked</td>
<td>• Leaders also win the trust and commitment of staff by soliciting feedback and by making extra efforts to train teachers on rationale and processes</td>
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<tr>
<td>• Technology is not a critical factor for DDDM best practices</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Successful schools use traditional funding sources to finance DDDM programs</th>
<th>Staff at DDDM-focused schools receive significant training on strategic use of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Government funds, grant writing, and community sponsorships dominate funding for DDDM programs</td>
<td>• “Schools must crawl before they walk” – teachers must be convinced of the benefits of data before they will dedicate themselves to the processes</td>
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<tr>
<td>• School districts control allocation of funds and select the programs supported by funding dollars with little guidance from state agencies</td>
<td>• Courses providing tactical data gathering/analysis skills are not widely sought after by schools</td>
</tr>
<tr>
<td>• Funding decisions often focus on short term problems and are not allocated to longer term, sustainable solutions</td>
<td>• Training models that include follow-up sessions and structured review processes are effective</td>
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<tr>
<td>• Funding decisions are not stringently tied to an accountability model (i.e., Annual Yearly Progress, other NCLB guidelines)</td>
<td>• On-site workshops and “train the trainer” development models are effective at high poverty schools</td>
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<tr>
<td>• Demonstrated academic success at high risk schools does not necessarily correlate to sustained or increased education funding</td>
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Policies/Procedures

- Organized, collaborative, process-driven and low-tech activities characterize exemplary schools

Data Gathering

Exemplary Schools
- Along with standardized test results, school or district-specific assessments are also applied.
- Behavioral and/or demographic profiles and assessments collected.
- Results of all classroom unit tests gathered and submitted to leader.
- Formal procedures in place to identify and gather relevant data.
- Technology resources, while used at a basic level, are not a critical input into exemplary data gathering/analysis practices.

Remaining Schools
- Coordinated, school-wide data gathering limited to standardized test results.
- Teachers are on their own to assess and track student performance on subjects.

Data Analysis

Exemplary Schools
- Additional breakdown and sorting applied to data results, usually provided by school/district leader (e.g., cross-grade, cross-year breakdowns).
- All staff receive test results.
- Meetings regularly scheduled to evaluate data and identify problem areas.
- All teachers attending analysis meetings, engaged in cross-grade data evaluation.
- Teacher and leader regularly evaluate periodic classroom unit assessments.
- Schools’ data-analysis methodologies rooted in professional guidelines.

Remaining Schools
- Teachers are on their own to assess progress of students towards curriculum, standards, or goals.
- School or district not following any specific data analysis or continuous assessment methodology.

Implementation of Results

Exemplary Schools
- Results of analysis incorporated into documented action plans.
- Action plans are fully integrated with School Improvement Plan (SIP).
- Adherence to action plans tracked throughout school year.
- Like non-exemplary schools, classroom implementation of results also focused on redistributing effort to problem areas; although richness and frequency of data provide deeper insights to problem areas.

Remaining Schools
- Implementation of data analysis by redistributing effort to identified problem areas.
**Data Gathering**

**Nielson school (Galesburg):**
Asst. Superintendent initiates a complete overhaul of district curriculum to align with IL state standards. Teachers create/own assessments and associated report cards used to monitor progress.

**Jordan school (Centralia):**
District started continuous assessment efforts with the basics: attendance, truancy rates, discipline reports, and additional operational metrics. Principals and district personnel gather monthly to map results and identify trouble areas.

**Multiple schools:**
Teachers from same grades and across grades regularly meet to evaluate assessments of unit assessments, which are timed and coordinated across grades so that lessons learned can be shared.

**Jefferson school (Belleville):**
For their district-created assessments, teachers have a high level of authorship. Every year teachers collaborate on test improvements and modifications. In addition, Principal uses locally created pivot table analyses to break down ISAT results into school specific bundles.

**Ziebell school (Posen-Robbins):**
Principal Barnes, “We would be shooting in the dark without the assessments.” With intensive training on Dr. Sizemore’s Structured Ten Routines, Ziebell’s small teaching cohort is able to tracks students’ progress before/after they arrive at their grade.

**Green Bay school:**
Five week assessments "set a target and a focus" for teachers. Enabled "us to put knowledge into practice." They built in expectation that “we should see results.”
Leadership/Culture

Data champions and key activities were the foundation and building blocks for the best models of effective leadership and optimal environments.

Ziebell school (Posen-Robbins): Assessments and continuous improvement procedures driven home daily by Principal Barnes and Title 1 teacher. All new hires given large amounts of overtime training on the time-consuming, but effective “Ziebell way”.

Franklin school (Jacksonville): For each teacher, Principal Hurst creates a professional development binder containing most recent literature, for which she regularly searches. Hurst’s commitment to teamwork also extends to her execution of the most menial tasks to ensure teachers have time to use data results.

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Galesburg district: Asst. Supt. Sappington taught self to use statistical program; he gathers, enters, complies and reports all district assessment reports. He also initiated drive to increase district assessments and completely realign school curriculum, assessments, and grade reporting.

Franklin school (Belleville): is “teacher” driven. Principal assumes role as a “peer facilitator” school decisions. Teacher-led committee’s (staffed by long-tenured faculty) are responsible for making all key school decisions – from curriculum revisions, school improvement plans, and professional development needs.
### Professional Training

- Professional development is used to support the usage of DDDM activities within high performing schools

<table>
<thead>
<tr>
<th>Challenges facing schools</th>
<th>Existing solutions responding to challenges</th>
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<tbody>
<tr>
<td>• Administrators/teachers are unclear about the benefits of data gathering and data analysis processes</td>
<td>• Gates Training, Sizemore’s 10 Routines, Baldridge business processes, etc. are leveraged to provide principals and teachers with strategic knowledge for data analysis</td>
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<td></td>
<td>• NCLB requirements now being considered when selecting any new training for teachers/schools</td>
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<tr>
<td>• School staff have demanding schedules that restrict the amount of additional training that can be received</td>
<td>• On site workshops for all teachers with class support provided by substitutes.</td>
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<td>• Professional development programs initiated and structured by tenured teachers allow for focused self improvement with hands off guidance from principals</td>
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<tr>
<td>• Teachers are uncomfortable with data gathering/analysis techniques and processes</td>
<td>• Where resources with strong data analysis skills exist, peer mentoring is promoted within the school</td>
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<tr>
<td>• Distributed data analysis activities often lead to ineffective communication of data findings</td>
<td>• A “Local Data Champion” exists in certain schools. Their responsibilities include coordinating the data gathering activities, performing relevant data analysis, and distributing findings to the teachers and district administrators</td>
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<tr>
<td>• Constrained budgets are requiring schools to control / reduce costs</td>
<td>• Peer mentoring is implemented in order to increase the level of data analysis activities internalized by teachers</td>
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<td></td>
<td>• Train the trainer model used by many schools</td>
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<td></td>
<td>• Volunteer training provided by local universities</td>
</tr>
<tr>
<td></td>
<td>• Joint training programs with target schools and universities</td>
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</tbody>
</table>
Finance & Budgeting

• Reduced funding forces districts to creatively distribute available dollars to DDDM programs that have the greatest perceived impact on student success

**DDDM Funding Opportunities**

- Federal/state Support (incl. NCLB)
- Non-profit volunteer support
- Community adoption programs
- University partnerships
- Community groups
- Local corporate sponsorships

**DDDM Allocation Successes**

- Test prep software licensed to improve student comfort with standardized tests (Study Island)
- Web based report cards for parental and teacher access to student data
- STAR, Accelerated Reader and Accelerated Math programs
- Involvement in Accelerated Schools program
- Title 1 funding is stretched into school wide programs supporting data analysis efforts
- Intervention strategies transforming entire schools into DDDM-centric sites
- Teacher stipends intended for after school meetings instead used to perform student data analysis
Findings from Best Practices Nationwide

Data Analysis

- Many states provide on-line data gathering/analysis tools directly on the state web sites. Kentucky Dept. of Ed. provides data gathering toolset that was internally developed using Microsoft Excel
- NC REL Tool Belt - tools are designed to help educators collect data about their classroom, school, district, professional practice, or community (referenced by multiple State Education Web Sites)
- National Staff Development Council promotes data gathering/analysis windows (30/60/90 days) to quickly evaluate improvement plans
- EDExplore by EDSmart provides data mining toolset and supports NCLB reporting requirements. Currently used by Connecticut school districts
- Districts across the country adopt IBM’s data warehouse and Learning Village software to aid with large scale data analysis functions

Leadership/Culture

- Director of Accountability (data leader) established in Plainfield, NJ district. District attributes this role as a key success factor to increased achievement
- Alabama develops “Learning Teams” within schools to address the stagnant teaching philosophies and to break the existing belief about the effectiveness of data usage
- Certain states are assuming strong positions supporting data initiatives. Massachusetts is emphasising data by creating a Virtual Education Space (VES) that employs individual student and teacher data along with state standards. All data is accessible by district officials, principals and teachers

Professional Development

- Colleges with education programs now promote DDDM within their coursework. 1/5 of coursework at Univ. of Connecticut is devoted to DDDM
- Rio Rancho district in Albuquerque adopted the Baldrige framework to track teacher-identified needs and then correlate those findings to student achievement results. From this, new professional development programs were tailored to assist teachers and improve student performance
- The Killeen Independent School District in Texas uses data analysis to promote a teacher mentoring program where a teacher identified as strong in a specific education area is paired with a teacher identified as having a development need. The data drives the identification based on student test performance

Budget/Funding

- Superintendent of Francis Howell School District (MO) employed data collection and analysis to identify and support needed budget cuts within the district. Data mining tools used to identify budget items to support student needs and then highlight areas that could be trimmed (retirement headcount, exact enrolment expenditures, etc.)
Recommendations
Goals behind Recommendations

• The focus behind the recommendations is for Illinois schools to improve student performance through the increased and improved use of DDDM practices

0 - 6 months

• Define state’s mission and short-to long-term goals
• Identify and gather pre-existing resources and assets
• Enhance current processes and institutions with compilation of best in class tools and guidelines

6 - 18 months

• Identify and setup DDDM leadership unit from within existing ISBE structure
• Ensure accountability and quality control responsibilities are assigned at state to school levels
• Design and deliver intermediate-level skills, tools, and practices to schools

+18 months

• Create full scale methodology, including classroom specific behaviors, activities, benchmarks
• Roll out methodologies to schools
## Overview of Recommendations

### Short Term
- Develop and communicate a “Data Mission Statement” that acknowledges the increasing importance of DDDM practices and defines the ISBE’s goals for implementation of DDDM activities, especially in relation to NCLB requirements
- Improve the delivery time of ISAT results to school districts
- Communicate the ISBE’s goals/expectations for the use of ISAT results in school improvement efforts and provide professional development to key district individuals
- **Compile and distribute a data analysis toolkit which leverages existing tool sets**
- Enhance System of Support’s SIP rubrics to better incorporate DDDM best practices
- Increase contact between at-risk schools and model schools with similar demographics through a) “Peer Exchanges” for principals/teachers and b) provision of contact information on state website

### Medium Term
- **Develop and distribute communication/collaboration toolset of DDDM best practices**
- **Develop and administer DDDM professional development opportunities for schools/districts**
- Establish and promote state DDDM director/spokesperson
- Formalize the promotion of the principal as school data champion
- Develop state review panel for at-risk school funding and NCLB funding
- Create an on-line, updated catalogue of all available grants

### Long Term
- Provide on-site grant writing support resources
- Develop and distribute state-driven classroom improvement implementation methodology

### Timelines

<table>
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<tr>
<th>0 - 6 months</th>
<th>6 - 18 months</th>
<th>+18 months</th>
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(Priority recommendations are underlined and highlighted in green)
### Short-term Recommendations (0-6 months)

- **Develop and communicate a “Data Mission Statement”** that acknowledges the increasing importance of DDDM practices and defines the ISBE’s goals for implementation of DDDM activities, especially in relation to NCLB requirements

**Rationale:** Schools do not have a clear understanding of the NCLB requirements or ISBE’s position on data gathering and analysis, nor do they understand how the ISBE intends to use student data to increase achievement. This knowledge gap is particularly acute in the midst of intensifying need for school and student performance data

**Expected outcome:** State’s mission statement will incorporate and be aligned with the NCLB requirements. School administrators and teachers will become more knowledgeable and comfortable with the purpose of state-driven and local data gathering and analysis initiatives. School resources will be more apt to “buy-in” to the procedural requirements of NCLB and Illinois DDDM activities

**Supporting evidence:** A large majority of teachers and several principals did not have a clear, complete, or consistent understanding of Federal and IL-state specific data reporting priorities and requirements

- **Communicate the ISBE’s goals/expectations for the use of ISAT results in school improvement efforts and provide professional development to key district individuals**

**Rationale:** In conjunction with “data mission statement,” clarifying the ISBE’s goals for a school’s use of ISAT results is appropriate. Many educators stressed that changes in ISAT result formats from year to year have led to confusion and difficulty in using ISAT data to analyze school trends. The Superintendent’s Advisory Task Force is already engaged in restructuring aspects of the ISAT administration and results processing

**Expected outcome:** In light of changes coming to the ISATs, clear communication around the ISAT goals and adequate training around the uses of ISAT data will help eliminate confusion at the school level and ensure increased use of data analysis practices. At the very least, training can be provided to principals in at-risk schools. Training can be as basic as a guidebook detailing fundamental uses of ISAT data for trending purposes

**Supporting evidence:** Teachers and principals often communicated confusion and dissatisfaction with the ISAT and the usefulness of the ISAT in assessing their school’s strength and weakness areas
**Short-term Recommendations (continued)**

<table>
<thead>
<tr>
<th>• Improve the delivery time of ISAT results to school districts</th>
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<tbody>
<tr>
<td><strong>Rationale:</strong> Many schools commented that the ISAT results are distributed to the school districts too late to be incorporated into school improvement plans</td>
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<tr>
<td><strong>Expected outcome:</strong> ISAT results will be perceived by educators as a timely source of student data that can be used effectively to track student progress</td>
</tr>
<tr>
<td><strong>Supporting evidence:</strong> Our findings indicate that schools relying solely on ISAT test data often receive the material too late for adequate inclusion on school improvement plans</td>
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<table>
<thead>
<tr>
<th>• Compile and distribute a data analysis toolkit which leverages existing tool sets</th>
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<tr>
<td><strong>Rationale:</strong> At-risk schools are well counseled by System of Support on the “what” aspect of school improvement requirements around data gathering and data analysis but are not provided with much information on “how”. A DDDM toolkit can quickly provide schools, particularly at-risk schools, with an existing set of processes, software options and detailed intervention strategies that can jumpstart their data analysis efforts</td>
</tr>
<tr>
<td><strong>Expected outcome:</strong> At-risk schools will reference the data toolkit during the entire improvement phase to obtain proven data analysis methods and/or to validate independent school improvement plans. Toolkit will contain a variety of items, such as, fundamental DDDM methodologies and guidebooks, costless or low cost starter software packages, process-supporting templates (e.g., data gathering and data analysis reports, worksheets, archival folders, etc.)</td>
</tr>
<tr>
<td><strong>Supporting evidence:</strong> Schools from our study repeatedly stated that data analysis solutions are not made available by the state. Even from the limited number of schools interviewed, there were found a number of existing best practices that could be quickly adopted by at-risk schools</td>
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### Short-term Recommendations (continued)

<table>
<thead>
<tr>
<th>• Enhance System of Support SIP rubrics to better incorporate DDDM best practices</th>
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<tr>
<td><strong>Rationale:</strong> This DDDM study identified additional best practices that would benefit all high risk schools. The inclusion of additional DDDM practices into the SIP rubric can help strengthen the high risk school’s improvement plans around the already required “data collection” and “data analysis categories.”</td>
</tr>
<tr>
<td><strong>Expected outcome:</strong> High risk schools preparing their SIP will have a complete understanding of state expectations. Enhanced DDDM process descriptions will help ensure that DDDM activities are being supported and implemented at all high risk schools.</td>
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<tr>
<td><strong>Supporting evidence:</strong> There was significant evidence that teachers did not appreciate or understand the role data analysis can play in school improvement processes.</td>
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<tr>
<th>• Increase contact between at-risk schools and model schools with similar demographics through a) “Peer Exchanges” for principals/teachers and b) provision of contact information on state website</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rationale:</strong> Many schools do not understand how data gathering and analysis techniques are effectively being used at high performing schools. Sponsoring Peer Exchanges with model schools and providing contact information functionality on state websites can be low cost and quickly administered solutions.</td>
</tr>
<tr>
<td><strong>Expected outcome:</strong> Knowledge sharing and collaboration between high performing and high risk schools will generate a solid level of understanding and increased comfort with data usage by high risk school administrators and teachers.</td>
</tr>
<tr>
<td><strong>Supporting evidence:</strong> NCLB guidelines are promoting the study of model schools by low performing groups. Exemplary schools from our study already collaborate locally with interested low performing schools. State-sponsored and NCLB-driven trips would benefit all low performing schools.</td>
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</tbody>
</table>
Medium-term Recommendations (6-18 months)

- Develop and distribute communication/collaboration toolset of DDDM best practices

**Rationale:** Principals and teachers need to be shown how to implement DDDM policies and procedures, *within their district and school system*. SIP rubrics identify what types of activities need to be performed, but principals/teachers require tangible examples

**Expected outcome:** Distribution of best practices around communication and collaboration processes will complement SIP rubric requirements and will help ensure success and sustainability of DDDM practice adoption. Primary example: a DDDM rubric broken down by goals, levels of achievement, expected behaviors, and accountability. Secondary examples: sample work plans, status reports, templates, and feedback surveys. Creation and compilation of best practices on state-wide basis can also lead to attractive negotiation rates

**Supporting evidence:** At all our exemplary schools, procedures for communicating and implementing data analyses were entrenched using school standardized templates, meetings, and reports

- Develop and administer DDDM professional development opportunities for schools/districts

**Rationale:** While a necessary first step, ISBE-sponsored handbooks, publications, and communiqués are not sufficient to ensure full adoption and sustained integration of DDDM practices. Principals and schools require hands-on, interactive education of DDDM rationale, value proposition, and practical day-to-day applications of DDDM practices. Professional development opportunities, such as workshops, will enable participants to integrate new procedures with school- and district-specific contexts

**Expected outcome:** Initial and, as needed, follow-up workshops will be the glue that binds the new DDDM practices to the school’s operations

**Supporting evidence:** There is strong evidence from case studies that most effective methods of learning and practice adoption has been through hands-on workshops. Most case study schools ensure workshop attending teachers disseminated their learnings to rest of teaching cohort upon return
Medium-term Recommendations (continued)

- Establish and promote state DDDM director/spokesperson

**Rationale:** State spokesperson required to promote visibility of DDDM importance, to communicate present and future vision of DDDM policies and impact, and to account for quality satisfaction of DDDM-related activities

**Expected outcome:** IL state’s movement, however slow or fast, towards a more data-rich and data-organized educational system will necessitate a delegation of authority and responsibility. Establishing a point person now will facilitate that progress. Example of DDDM director’s initial efforts would be as basic as creating and publishing newsletters, and communicating latest trends and DDDM best practices

**Supporting evidence:** From interviews at all case study schools, it was evident there is no identifiable advocate or agency behind data gathering and data analysis practices and NCLB requirements

- Formalize promotion of principal as school data champion

**Rationale:** Many of the issues around data gathering and analysis process can create resistance from teachers. An on-site champion of DDDM practices is needed to dispel concerns, promote new practices, and generate school-specific solutions. District champions and teacher champions are valuable and will be helpful to the cause. At the outset, however, the first and most important position needed to ensure successful adoption is the principal as champion of DDDM policies

**Expected outcome:** If principals become the champions, they will be in a position to build the critical mass of teacher champions, who ensure long-term success and sustainability. These requirements can be imbedded into SIP required rubrics to provide immediate dissemination to all schools

**Supporting evidence:** At all our exemplary schools, the principal, an assistant district superintendent, or both were clearly recognized champions and advocates for increased data gathering and analysis. The evidence argues that a champion is needed not only to introduce and lobby for the new practices but also to ensure practices are sustained and institutionalized over time
Medium-term Recommendations (continued)

• Develop state review panel for at-risk school funding and NCLB funding

**Rationale:** Best in breed intervention strategies can ensure that funding is not wasted at at-risk schools. A state review panel can provide intervention guidelines to districts to ensure that large infusions of funding for at-risk schools are accompanied by best practices that lead to success and sustainability.

**Expected outcome:** This panel will assist districts when considering relatively expensive interventions and will monitor the progress thereof. If it is formed from the Committee of Practitioners, a strengthening of the committee’s responsibilities, a broadening of its expertise, and an expansion of its representation across state education organizations would be required.

**Supporting evidence:** Our findings strongly suggest a) schools and districts are on their own in determining when/how to spend on at-risk school interventions, b) costly interventions need to be long term in nature (e.g., three to five years), do not fall off as soon as schools show signs of initial success, and must have some form of DDDM component and c) best practices and experiences from interventions are not captured nor shared in an organized fashion for use by other schools across the state.

• Create an on-line, updated catalogue of all available grants

**Rationale:** Educators have limited time to research the many different areas that grants can be found. A single access point for all available grants (public, private, competitive, discretionary) will reduce search effort spent by school staff and will increase the amount of time available for value-added grant application writing activities. A large number of existing online services already provide catalogues of grants and strategies for grant applications.

**Expected outcome:** District and school grant writers will rely on the grant catalog for information on all public and private grants available for Illinois schools.

**Supporting evidence:** All schools in the study identified a lack of resources to effectively pursue grant funding. Any state provided assistance will release time for schools’ primary teaching activities.
# Long-term Recommendations (+18 months)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rationale</th>
<th>Expected outcome</th>
<th>Supporting evidence</th>
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<tbody>
<tr>
<td>Provide on-site grant writing support resources</td>
<td>Schools need on-site training to establish their own capacity to learn and apply the best grant-selecting and grant-writing techniques. Grant writing strategies need to be institutionalized into school’s practices</td>
<td>Schools more successful at competing to obtain limited funds</td>
<td>Strong evidence from case studies that school resources believed that if they actually had enough time to seek out grants, they did not have sufficient time to select and apply for grants successfully. Those schools most successful with grant funding had access to grant writing expertise and assistance</td>
</tr>
<tr>
<td>Develop state-driven classroom improvement implementation methodology</td>
<td>The movement of schools from getting comfortable with DDDM rationale, to actively gathering and analyzing data, culminates when teachers are able to convert student performance data analyses into distinct classroom solutions. The existing state efforts at Standards Aligned Classrooms already provide a delivery method favored by schools and effective at delivering new methodologies in the classroom</td>
<td>Though a longer term solution that is dependent upon several preceding developments, a state-supported methodology which provides detailed guidance for teachers is the optimal level of DDDM sophistication</td>
<td>Research evidence demonstrates that comprehensive and effective use of DDDM practices requires the coordination and alignment of many elements: state-standardized curricula, creation and administration of the right locally-created assessments, professional training on appropriate methods of instruction. This degree of coordination not only requires a long term effort, but also state support</td>
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Implementation Strategy
Implementation Strategy

- Execution of recommendations should be measured against these critical success factors to assure the effectiveness and value of the initiatives

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<tr>
<th>Critical Success Factors</th>
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<tr>
<td>• Utilize NCLB funds appropriately for data analysis/data gathering practices</td>
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<tr>
<td>• Account against NCLB assessment requirements</td>
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<td>• Rollout solutions to highest risk schools quickly</td>
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<td>• Sustain results beyond rollout of solution</td>
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<td>• Involve case study schools in the solution building and implementation</td>
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<tr>
<td>• Obtain measurable buy-in from districts and schools (all levels of employees)</td>
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<td>• Increase student performance at all grade levels</td>
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- Utilize existing ISBE, Regional Office of Education (ROE) and other qualified channels and resources within the state educational system
- Leverage outside, third party expertise for execution
- Validate, test and refine recommendations before mass rollout by utilizing a sample set of schools
- Establish clear and accountable ownership assignments for each recommendation
- Select cost effective approach with set expectations and accountability measures
- Develop success milestones and/or key performance indicators for all recommendations
- Produce a follow up report for MPC/DC team outlining achieved progress against recommendations

Importance Level

- Normal
- High
- Most Critical
Implementation Strategy

Critical Success Factor

- Utilize existing ISBE, Regional Offices of Education (ROE) and other qualified channels and resources within the state educational system
- Leverage outside, third party expertise for execution
- Validate, test and refine recommendations before mass rollout by utilizing a sample set of schools

Strategy Rationale

The available resources and necessary expertise can be found with a balanced combination of public and private organizations. The required solutions, at efficient costs, can be best identified through a bidding process.
Implementation Strategy

Critical Success Factor

- Establish clear and accountable ownership assignments for each recommendation
- Select cost effective approach with set expectations and accountability measures

Roles/Responsibilities

<table>
<thead>
<tr>
<th>Responsible Party</th>
<th>Roles/Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL State Board of Education</td>
<td>Monitor progress of initiatives, Provide guidance on mission/goals</td>
</tr>
<tr>
<td>ISBE DDDM Initiative Coordinator</td>
<td>Existing ISBE agency employee, Provide regular reports to ISBE on objectives and progress of initiatives, Lead effort to convene necessary participants from across state to plan and design recommendation execution</td>
</tr>
<tr>
<td>3rd Party Vendors</td>
<td>Own and execute specific initiatives, As needed, coordinate with other state and private partners to design and implement solutions</td>
</tr>
<tr>
<td>ROE Coordinator</td>
<td></td>
</tr>
<tr>
<td>ISBE Agency A</td>
<td></td>
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<tr>
<td>ISBE Agency B</td>
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<tr>
<td>Div. 1</td>
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<td>Div. 2</td>
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<tr>
<td>Div. 1</td>
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</tbody>
</table>

Clear ownership of recommendations and tracking of execution progress are critical to ensuring initiatives achieve success. Both the ISBE board and ISBE agency need to be actively engaged in owning initiatives and monitoring initiatives’ progress.
## ISBE Ownership Recommendations

<table>
<thead>
<tr>
<th>ISBE Division Owner</th>
<th>Time to Implement</th>
<th>0 - 6 months (short term)</th>
<th>6 - 18 months (medium term)</th>
<th>+18 months (long term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching/Learning</td>
<td></td>
<td>Provide education field trips to high performing schools</td>
<td>Develop data gathering/analysis toolkit</td>
<td></td>
</tr>
<tr>
<td>Planning/Performance</td>
<td></td>
<td>Develop data mission statement</td>
<td>Develop/administer DDDM prof. development activities to schools</td>
<td>Establish state DDDM director/spokesperson</td>
</tr>
<tr>
<td>Information Technology</td>
<td></td>
<td>Ensure ISAT grading and analysis processes are streamlined</td>
<td>Create comprehensive online grant catalog</td>
<td>Establish state DDDM director/spokesperson</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establish ISAT results training</td>
<td>Formalize promotion of principal as school data champion</td>
<td>Develop state-driven classroom improvement implementation methodology</td>
</tr>
</tbody>
</table>

- Size indicates relative level of effort/cost

* SIP – School Improvement Plan
Immediate Action Items

- ISBE evaluates the recommendation priorities
- ISBE identifies owners (internal/external) of the recommendations
- ISBE determines funding to be allocated to the DDDM recommendations
- ISBE integrates recommendations with current restructuring of System of Support’s roles and responsibilities
- ISBE develops milestone and key performance indicator plans to ensure accurate measurement of progress and success
- ISBE coordinates with and delegates recommendation items to Regional Offices of Education and 3rd party vendors
Appendices
Project Background
Project Background

**Definition of Data-Driven Decision Making**

From Educational Resources Information Center, Digests 109 and 153:

- Apart from public relations and accountability issues, educators have come to recognize that they can no longer rely on "intuition, tradition or convenience" in making decisions about the best strategies to improve student learning (NCREL 2000). For all these reasons, more schools across the country are settling on the idea that carefully collected and analyzed data represent the key to improvement in education.
- Statistical data on school programs and student performance provide educators with their only real evidence of the success or failure of educational programs. Data "identify the link between teaching practices and student performance so that high achievement levels can be obtained" (Miller 2000).
- As Richard Wallace (1996) reports, "School districts usually gather much more data than they can effectively use." The challenge is to analyze the information and use it wisely….These data include statistics on attendance, grades, referrals, retentions, and standardized-test results. When compiled and reported on a regular basis, archival data provide a baseline of school operations and can be used to make comparisons among similar schools.
- With varying degrees of effort, other classes of data can be collected. Examples include survey results, interviews, numbers of books read, and other information on student achievement. These data typically require development of a means to collect and analyze the information (Calhoun). Data that may be more difficult to collect and interpret objectively include evaluations of student work, like portfolios, exhibitions.

**Information Gathering Techniques**

- The primary form of information gathering was a case study of each school. Case studies were performed first through on-site interviews of the principal and three to four teachers at the school. At schools where district personnel (typically an assistant superintendent) played a key role in DDDM policies, we interviewed those individuals as well.
- Interviews were followed up with surveys for the principals and for a larger sample (ten) of teachers. These paper surveys requested additional information ill suited for capture during in person interviews; the surveys were sent through the mail and returned to the project team in Chicago.
Project Background

Analytical Approach

- Prior to running the case studies, the project team identified a number of key hypotheses to be tested. These hypotheses fell into four categories, which structure the findings discussed in this report. Supported by secondary research and advisory council input, the following four hypotheses drove the information gathering efforts:

<table>
<thead>
<tr>
<th>Policies and Procedures</th>
<th>Leadership &amp; Professional Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clearly defined and well planned data-driven decision making and related technology policies are practiced by all teachers and administrators in the school/district.</td>
<td>• Case study schools (CSS) and Districts have effective leaders who initiate, advocate, and enable the successful use of data driven decision making and related technology practices.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Budgeting &amp; Finance</th>
<th>Professional Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Case study schools (CSS) and Districts have used innovative budgetary and funding techniques to obtain resources for educational technology and DDDM policies.</td>
<td>• Teachers at case study schools are well trained to use technology and data to assess classroom instruction design and delivery.</td>
</tr>
</tbody>
</table>

- The results of our interviews, surveys and secondary research were assembled to test the hypotheses above. The key findings discussed in this report and the individual case studies provide the detailed results of these efforts.
Project Background

Formation of Recommendations

• Our findings were then lined up against an analysis of the IL state educational environment including the ISBE organization structure, current ISBE and ROE initiatives around student performance assessments and school improvement policies.

• This analysis included socializing our findings with various ISBE representatives at key departments and with private educational policy groups. The results of those discussions and queries led to the set of recommendations found in this report.

• The socialization of our findings and recommendations was also designed to reduce the handicap that our analysis labors under given the statistically unrepresentative sample size. Though we have captured the vast majority if not the entire population of high poverty/high performance schools, which demonstrate relatively sophisticated data gathering and analysis techniques, we recognize the challenges in making recommendations from this sample size for the larger population of Illinois at-risk schools.

• These challenges are largely overcome, however, with the amount of supporting evidence coming from best practices at school districts nationwide. Our discussion of best practices in this report provides these details.
Project Background

Selection of Case Study Schools

- Not all of Max McGee’s 59 Golden Spike schools exhibited “extensive use of data.” Max McGee and his research team identified twelve\(^1\) elementary schools that did:

  - Belleville District 118: Franklin school and Jefferson school
  - Centralia District 135: Jordan school, Irving school, and Schiller\(^2\) school
  - Galesburg District 205: Katherine Nielson school
  - Jacksonville District 117: Franklin school
  - Mattoon District 2: Humboldt school and Washington school
  - North Chicago District 187: Green Bay school and Forrestal school
  - Posen Robbins District 143.5: Otto C. Ziebell school
  - Chicago Public School District: Leander Stone Scholastic Academy\(^3\)

\(^1\)One of the schools Max McGee identified -- W. Davie school from Anna District 37 -- was not included in the study because of logistical reasons.

\(^2\)Despite not being a “Golden Spike” school, Schiller school was included in the study because of its exemplary performance around data analysis and data gathering practices, its demographic similarity to the other two Centralia “Golden Spike” schools, and the highly integrated relationships of Centralia’s elementary school staff.

\(^3\)Our study came to thirteen schools because of the inclusion of a “Golden Spike” Chicago Public School that demonstrated a notable use of data gathering and data analysis activities. This inclusion was designed to balance the study with experiences and best practices from the CPS system.
Project Background

**Background of Project Sponsors**

- Founded in 1934, the **Metropolitan Planning Council** (MPC) is a nonprofit, nonpartisan group of business and civic leaders committed to serving the public interest through the promotion and implementation of sensible planning and development policies necessary for a world-class Chicago region. MPC conducts policy analysis, outreach and advocacy in partnership with public officials and community leaders to improve equity of opportunity and quality of life throughout metropolitan Chicago.
- **Network 21**: Quality Schools for Stronger Communities is a coalition of education, business, labor and civic organizations that share a common interest in reforming Illinois’ school finance system and in improving education outcomes through quality reforms. Network 21 is led by the MPC.
- **Deloitte Consulting**, one of the world’s leading management consulting firms, focuses its pro bono efforts from the Chicago office on children, education, and technology.

**Other Contributing Parties**

- Throughout the study, the project team regularly shared findings and solicited feedback and advice from an **Advisory Group** made up of experts in the field of education. They were:
  - Jonathan Copulsky, Deloitte Consulting, sponsoring Partner
  - Steve Kozlowski, former Prairie-Hills District Asst. Superintendent; current VP at About Learning
  - Holly Hart, Principal Survey Coordinator/Research Analyst, Consortium on Chicago School Research
  - Marilyn McConachie, former ISBE board member, Executive Assistant to Vice-President for Administration and University Outreach, Northern Illinois University
  - Max McGee, former ISBE superintendent, current Wilmette public school district superintendent
  - Clare Muñana, Chicago Public Schools, Board of Education member
- Other groups and individuals were solicited and contributed their feedback and advice, including:
  - North Central Regional Educational Laboratory (NCREL)
  - ISU, College of Education – Gates Foundation Training partnership
  - Various current and former ISBE personnel
Case Studies
Case Study Table of Contents

<table>
<thead>
<tr>
<th>District</th>
<th>School Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belleville District 118</td>
<td>Franklin School</td>
</tr>
<tr>
<td>Belleville District 118</td>
<td>Jefferson School</td>
</tr>
<tr>
<td>Centralia District 135</td>
<td>Irving School</td>
</tr>
<tr>
<td>Centralia District 135</td>
<td>Jordan School</td>
</tr>
<tr>
<td>Centralia District 135</td>
<td>Schiller School</td>
</tr>
<tr>
<td>Galesburg District 205</td>
<td>Katherine Nielson School</td>
</tr>
<tr>
<td>Jacksonville District 117</td>
<td>Franklin School</td>
</tr>
<tr>
<td>Mattoon District 2</td>
<td>Humboldt School</td>
</tr>
<tr>
<td>Mattoon District 2</td>
<td>Washington School</td>
</tr>
<tr>
<td>North Chicago District 187</td>
<td>Forrestal School</td>
</tr>
<tr>
<td>North Chicago District 187</td>
<td>Green Bay School</td>
</tr>
<tr>
<td>Posen-Robbins District 143.5</td>
<td>Otto C. Ziebell School</td>
</tr>
<tr>
<td>Chicago Public School</td>
<td>Leander Stone Academy</td>
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</tbody>
</table>
Next Steps to Implement Recommendations
## Next Steps to Implement Recommendations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Current Status</th>
<th>Future Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Term</strong></td>
<td></td>
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</tbody>
</table>
| • Data mission statement | • Current reorganization in Planning and Performance and System of Support departments  
 • No existing mission statements around DDDM | • ISBE to define and integrate DDDM priorities into existing ISBE goals to ensure clarity and visibility. Use reorganization opportunity to effect restated priorities. |
| • Communication of ISAT goals and uses | • Superintendent’s Advisory Task Force currently reviewing and restructuring ISAT results output | • ISBE can use this restructuring initiative to clarify intent for and procedures behind a school’s use of ISAT results  
 • Roll out these statements w/ new DDDM mission statement |
| • ISAT turnaround process | • At ISBE, high awareness of school desire for more rapid turnaround time.  
 • Advisory Task Force improving turnaround process | • In RFPs to vendors, recommended ISBE require end of year reports, and ensure contracts clarify reporting requirements and minimize intermediate data sorting steps |
| • Data analysis toolkit | • Existing elements of a toolkit already exist, from ROEs, 3rd party orgs. (public and private)  
 • Planning/Performance started compilation efforts | • ISBE to determine costs/effort to compile and distribute  
 • ISBE to bid out best vendor to finalize and distribute best in class resources to schools in need |
| • SIP rubric enhancement | • ISBE’s System of Support currently in process of revising and republishing new SIP rubrics | • System of Support to enhance data gathering and data analysis rubric areas with DDDM-specific best practices |
| • Peer Exchanges with high performing schools | • Current method of sharing best practices disjointed  
 • No regional or state-wide coordination between model & at-risk schools w/ same demographics | • ROEs in best position to identify local and regional needs and best matchups between model and at-risk schools with same demographics |
| **Medium Term** | | |
| • Collaboration/Communication toolkit of DDDM best practices | • No known state initiatives related to this recommendation | • ISBE to identify requirements for toolkit then put out bid to internal and external agencies  
 • ISBE to create new set of roadmap rubrics – goals, example activities, staged progress benchmarks |
| • DDDM Professional Development Opportunities | • ISBE aware of PD needs for NCLB compliance  
 • Limited known state initiatives related to this recommendation | • ISBE to identify requirements, best practices, best vendors  
 • ISBE then put out bid to internal and external agencies  
 • Involve and incorporate input from model school leaders |
## Next Steps (continued)

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Current Status</th>
<th>Future Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medium Term</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| - State DDDM leader | • High level of DDDM expertise across the ISBE agency & the ROEs  
                     • No defined data leader within the state structure | • ISBE establishes a DDDM leadership body (individual or committee) from existing pool of resources. Consortium of ROE leaders and ISBE personnel could be leveraged to act as a DDDM leadership team. |
| - Formalize promotion of principal as school data champion | • Data champions are randomly fostered at various professional development opportunities offered at district/school level  
                                                           • No structured process for developing local data leaders | • Strengthen the SIP rubrics to ensure structured data practices are embraced by every school and accountable to an individual champion. Dovetail w/ current rubric changes.  
                                                           • Ensure intervention programs promote data champions |
| - NCLB funding review panel | • Committee of Practitioners involved with district decision making around NCLB funding  
                               • No other state panel involved with advising for, approving of, or assessing results from expensive school interventions | • ISBE defines the role/responsibilities of the ideal panel  
                                                           • ISBE determines if a reorganization of the Committee of Practitioners or formation of new panel is needed  
                                                           • ISBE determines if new legislation needed for re-statement of Committee of Practitioners authority |
| - State developed online grant catalog | • Existing on-line state grant catalogue for discretionary and competitive grants no longer updated | • Internally develop a comprehensive, updated catalogue of existing grant providers (including discretionary and competitive grants) and make available on website  
                                                           • Bid out an RFP to allow a third party company to create a comprehensive grant catalogue |
| **Long Term** |                |                  |
| - Grant writing support resources | • Regional/local grant writing services exist and provide varying levels of quality | • Bid an RFP to third party vendors to provide comprehensive grant writing services to the state  
                                                           • State funded in-house grant writers providing service to all schools |
| - Class improvement implementation methodology | • Standards Aligned Classrooms initiative already provides proven delivery vehicle by which the DDDM implementation methodology could be delivered | • Building off of preceding recommendations, complete movement towards goal of state-wide DDDM proficiency  
                                                           • ISBE creates requirements necessary for methodology  
                                                           • ISBE offers a bid process to all vendors to create content; evaluates and selects vendor to complete project |
Contact Information
Contact Sheet

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