Introduction:

DMC has been working with the district over the past year and a half on a variety of initiatives aimed at improving student outcomes and enabling the district in efficiently managing its financial resources.

Significant changes have already taken place in the district towards achieving the defined objectives and numerous more changes will be in place for the 2014-2015 school year. School districts are complex organizations and special education especially so, requiring a slow and deliberate change management approach. Bringing about changes in special education in any district is a challenging task.

DMC’s work with the district has resulted in instituting new services for supporting students with or without disabilities aligned with best practices, at a lower cost to the district. In addition, DMC has provided the district several options to consider in order to more cost effectively manage special education services and at the same time raise student achievement without reducing the level of support services. DMC has also helped create and embed tools and systems within the fabric of the central office in order to build the capacity of individuals and teams within the district to continue this work for years to come without the continued support of DMC.

DMC has supported five major efforts, many of which are interrelated:

1. Refine the reading intervention program at the elementary level
2. Develop strong remediation and intervention supports for students at the secondary level.
3. Review and refine the model for supporting students with disabilities included in general education.
4. Create a special education financial management system integrated with the business office and human resources. This will dramatically streamline and simplify the complex tasks associated with setting and managing the special education budget.
5. Provide recommendations for the creation of a special needs school at district owned property.

**Section 1: Refine the reading intervention program at the elementary level**

For a school system, few tasks are more important than teaching children to read. Reading is the gateway to all learning. Research has shown overwhelmingly that early intervention in reading can change the trajectory of a student’s life; helping low-income students to read at grade level by third grade closes the graduation gap with their wealthy peers and all but assures that they will graduate on time. Early and targeted support strategies for students who struggle in reading, therefore, create long term benefits in secondary and post-secondary outcomes.

The district asked DMC to help design and implement a best practice based reading intervention program at the elementary level. Prior to our work many struggling students did not receive extra help in reading and the services offered were often at odds with best practices.

**DMC contributions**

To support the district in designing and implementing a reading intervention program at the elementary level, DMC regularly convened a group of central office district leaders and elementary principals to emphasize the need for an intervention program for struggling readers with or without an IEP based on a best practice approach that DMC has helped implement in numerous districts nationwide. By helping this group of leaders bridge differences of opinion, remove logistical obstacles, and maintain a sense of urgency, DMC supported the district’s efforts with the following contributions:

- **Sharing and aligning school and district leaders on best practices for reading instruction, including:**
  - Setting clear and rigorous grade level expectations for proficiency
  - Conducting frequent measurement of student learning and adjusting instruction accordingly
  - Identifying struggling readers as early as kindergarten
  - Ensuring balanced core instruction in the five areas of reading (phonemic awareness, phonics, fluency, vocabulary, and comprehension) as part of a 90-minute literacy block each day
  - Providing immediate and intensive additional instruction for struggling readers, averaging 30 minutes a day and using multiple pedagogical strategies
- Teaching phonics in the younger grades and comprehension in the later grades
- Connecting remediation and intervention seamlessly to core instruction
- Using highly skilled teachers of reading to providing reading instruction

- **Ensuring that all schools implement the reading program with fidelity and consistency:** Without the many conversations facilitated by DMC, it is unlikely that all of the schools would have implemented the reading program with fidelity and used the same assessment schedule, entry and exit criteria, or staffing guidelines, all of which are necessary for successful implementation. The change management challenge of creating shared understanding, commitment, and actual implementation in a district with a history of school based variation in programing and strong feelings was no small task.

- **Helping create and implement specific actions to convert broad principles and best practices into reality for students.** Through DMC’s efforts, the district leaders agreed upon the daily duration of extra reading support, the training and qualifications of the teachers providing the support, and standardized assessment calendar with clear criteria for entry into and exit from the reading intervention program. This agreement led to a truly district wide, best practice based reading program.

In addition to facilitating the design and faithful implementation of the program, DMC has provided significant analytical and technical support that has expanded the district’s capacity to leverage formative assessment data to strengthen program implementation and precisely calculate staffing requirements. DMC’s work to date has included:

- **Conducting multiple analyses on the number of students below benchmark across all elementary schools to estimate reading staffing requirements:** These analyses will not only help the district with accurate budgeting, the ability to expand reading at no added cost, in fact to expand reading while reducing costs but also to bring equity and transparency to staffing decisions, and to shift resources based on student needs. The work has also resulted in the identification of some shortcomings in the district’s assessment process that DMC and the district are currently working to address.

- **Strengthening the use of formative assessment data by school and district leaders:** As the result of multiple data collection efforts, DMC has
created a stronger district-wide practice around data collection, resulting in a more systemic and proactive use of formative assessment data.

- **Building simple, intuitive, and automated tools to facilitate data analysis:** Over the past year, DMC has completed multiple analyses of student assessment data to determine staffing levels for reading intervention. Through that work, DMC created tools for the district leadership to use in the future to quickly and accurately determine staffing requirements.

- **Strengthening and simplifying the collection and reporting of formative assessment data:** DMC has identified several problematic areas in the current system for collecting and reporting formative assessment data. During the coming months, DMC will provide recommendations, best practice approaches from other districts, and in district support to strengthen and simplify the current process, with the goal of being able to provide district leaders with progress reports within 24 - 48 hours of completing an assessment. Infusing this level and depth of progress monitoring and accountability is a critical element of ensuring that the reading intervention program in fact raises achievement.

**Impact in the district**

As a result of DMC's work with the district, SOMSD has a robust, cost effective, best practice reading program. Specifically:

- **Implementation of a pull out extra time reading intervention program for reading in grades K-2 in the 2012-2013 school year across all elementary schools:** Based on the recommendations of the DMC Special Education Opportunities Review, this effort provides intensive support to struggling readers with and without an IEP. Additionally, because the program starts as early as kindergarten, some students receive support one to two years earlier than they would have previously in the district.

- **Cost effective expansion of the reading intervention program to grade 3 (and to grade 4 in some schools) in the 2013-2014 school year.** It is important to note that the reading program was expanded to grade 3 in a cost neutral way. In fact, the district was able to simultaneously make reductions of 6 special education teachers as the scope of the reading program was being increased.
Fine tuning both the K-2 and grades 3-4 programs to create a district wide program based on best practices for reading instruction. Significant refining and improvements were made to the initial K-2 plan to strengthen implementation effectiveness. This included formalizing eligibility requirements, the amount of instructional time, when and how extra help will be provided, and more cost effective staffing models. The district is now poised to roll out a uniform reading intervention program across all elementary school next year in grades K-5. This program is based on research-based best practices for reading instruction, and reflects the experience of implementing programs in grades K-2 and grades 3 and 4.

Implementation of systems to track the faithful implementation of the reading intervention program: The district has implemented systems to track the faithful implementation of the reading program across schools. These systems will foster effective collaboration between the academic and special education departments, and incorporate the use of formative assessment data at both school and district levels to ensure student success.

Assessment and remedy of inefficiencies in the current systems for collecting and reporting formative assessment data: During the implementation of the new tracking systems, the district has recognized the need to ensure that data can be quickly and accurately collected at the classroom level, sent to the central office, and aggregated across schools to derive meaningful insights about what’s working, and where district or building level support is needed to ensure the reading program is in fact raising achievement. The district is working with DMC towards the goal of having progress reports available to the Superintendent and district/building leadership within 24-48 hours of test administration.

Creation of staffing guidelines and a tool to precisely determine staffing needs: By creating consistent, cost effective staffing guidelines and DMC’s simple and intuitive excel based tools driven by hard data and student needs, the district has the ability to implement the reading program in a cost-effective manner and accurately budget staffing for the program. It is likely that without these tools and the insights behind them that the reading program would have cost $1,000,000 (10 FTE) extra or more.

Identification of a method to shift staff so that the reading program could be expanded while requiring fewer staff: During the 2012-2013 and
2013-2014 school years, the district expanded reading intervention at the K-2 level and grades 3 and 4 while reducing the required staff by 6 FTEs for a savings of $600,000 per year, or $1.2 million over the course of two years. This was made possible through detailed analysis of student needs and precise determination of staffing requirements by DMC.

- **Increase in the number of students receiving extra support in reading with simultaneous reduction in total costs:** Previously, very few students received reading support in Kindergarten, and roughly 10% of students in other grades received support. Under the new program, approximately 20% of students across all elementary grades will receive support, meaning that the district is offering support to over 300 additional students and saving at least $1,200,000 over two years.

**Section 2: Develop strong remediation and intervention supports for students at the secondary level**

To sustain and build upon learning in the core curriculum, DMC was asked to help revise the remediation and intervention efforts at the secondary level to help struggling students with or without an IEP to master grade level material. This best practice based effort prioritizes extra time during the school day to learn current material, revisit past year’s material and unlearn misconceptions. All of this extra help from skilled teachers is closely connected to grade level, core curriculum. This is quite different from existing practices, in which students, especially those with special needs, did not receive extra time to learn and much of their instruction and support was provided by staff with limited content expertise.

**DMC contributions**

DMC has worked closely with the middle school principals and central office leaders to create expanded, effective interventions for struggling students at the middle schools.

- **Staffing analysis:** DMC analysis of staffing requirements revealed a cost neutral way to expand these support services to middle school students. This is a significant achievement given the simultaneous expansion of other programs in the middle school (i.e. IB and world languages) and a general perception of being understaffed at the middle school level.
• **Sharing of best practices:** DMC brought to the district the emerging best practices for serving struggling students at the secondary level. The approach provides more learning time, stronger content expertise by the instructor, expands services to more students all without increasing costs.

• **Scheduling support:** DMC provided a sense of urgency, and helped remove logistical barriers especially in scheduling. DMC has provided extensive scheduling support to the middle school principals to enable the incorporation of extra remediation time in the existing schedule (with existing staffing level) across grades 6-8, along with world languages, in grade 7-8 and adoption of the IB program. It is nearly certain that without DMC’s support in scheduling this effort would have stalled or required over 5 FTE or more.

**Impact in the district:**

- **Increased teacher planning time:** Through the staffing support provided by DMC, in the school year 2014-15, all core teachers in the middle schools will be able to have a common planning time and personal planning periods. A common planning period could be devoted to the interdisciplinary team as well as the subject-matter teams.

- **Cost neutral expansion of extra time intervention program:** In the school year 2014-2015, the number of struggling students supported through extra time interventions will double without a corresponding increase in costs. Additionally, in the 2014-2015 school year, the schedule and staffing in the middle schools will have the capacity to offer extra time intervention classes in both math and language arts, potentially supporting twice as many struggling students as are currently served, without additional cost to the district.

- **Extra time intervention model in English and Math:** The middle schools implemented extra time for students struggling in either math or language arts with content strong teachers in the school year 2013-14. This extra support is provided to students with and without IEPs. In the school year 2014-15, these supports will be expanded so that all struggling students in middle school will be able to access extra time in both language arts and math during the school day.

In particular, DMC would like to acknowledge the efforts of both middle school principals, Joe Ugliario and Jeff Truppo, for their time and thoughtful effort on the expansion of the double time intervention model.
Section 3: Review and refine the model for supporting students with disabilities included in general education

The district charged DMC with creating a best practice based, consistent, effective and cost effective approach to supporting students with special needs in an inclusion setting.

DMC contributions

In order to refine the district’s approach to serving students with special needs in a general education setting at the elementary level aligned to best practices, DMC facilitated several meetings with elementary school principals, district administrators, and parents of students with IEPs in order to develop a consistent vision for inclusion. The result of these sessions is a vision that includes:

- Prioritizing inclusion as the preferred method of supporting students with special needs
- Creating consistency across schools, so that all students receive support that is based on best practices, not the history of past practices in a particular school.
- Integrating support across subjects to provide a more comprehensive, less fragmented approach to content
- Providing greater opportunity for students to develop independence and self-reliance academically

To ensure that the district could implement this vision in an effective, consistent, and cost effective manner, DMC conducted multiple analyses of student IEPs to understand in fine detail current practices. DMC’s contributed towards the effort in the following ways:

- **Facilitated discussions with district leaders.** DMC has shared best practices from across the country to provide exposure and understanding of alternative service delivery models that meet the district’s deep commitment to inclusion but are financially more sustainable and serve students well.

- **Analyzed all student IEPs at the elementary level to provide a deep level of insight into current district practices:** DMC’s analysis of student IEPs identified the current model of providing in class support to students with IEPs, and exposed the variation of practices across school. Based on these findings, DMC identified opportunities to provide the in class supports more
efficiently and cost effectively. This was a particularly challenging task given that IEPs are individualized and practices vary from school to school. This detailed analysis led to DMC developing best practice teaching and staffing models that identified opportunities to streamline provision of in class support as well as to provide in class support in a financially sustainable manner.

- **Developed grouping techniques to optimize the allocation of available FTEs:** Using the tools DMC created, the district has the ability to accurately determine staff requirements and effectively group students (without increasing group size), while requiring fewer staff to provide the same amount of support than necessary under previous grouping practices.

- **Provided research and analysis that enabled the district to reduce the number of special education teachers by 6 FTEs in the 2013-2014 school year without reducing even one minute of service or support to students:** DMC identified several opportunities for the district to more effectively allocate staff to provide in class supports leading to significant savings for the district, $600,000 a year. This exceeds the contract performance assurance.

- **Developed multiple options to revamp the district’s in class support model to make it financially sustainable:** DMC updated its analysis of student IEPs during the 2013-2014 school year and identified multiple options to control the costs associated with in class support and to streamline and strengthen the support model across all elementary schools.

- **Created numerous tools that use existing IEP data to determine staffing needs for in class support by grade and by school:** DMC has created several easy to use, intuitive tools to allow the district to quickly compare the staffing requirements for different models of in class support, ultimately enabling effective allocation of district resources.

**Impact in the district:**

DMC began this project with three objectives: to develop an integrated and consistent approach to supporting students with disabilities in an inclusion setting, to develop an action plan to implement the new approach, and to allocate resources more effectively to align with the new approach. The district has seen the following results from its work with DMC:
• **Adoption of a best practice reading intervention program at the elementary level:** Implementation of the elementary reading intervention has reduced the number of students requiring in-class supports, thus freeing up resources to allocate towards the expansion of the extra-time reading program.

• **Refinement of the district’s approach towards in class support, making it more targeted, effective, and cost effective:** By focusing on providing targeted in-class supports in a more holistic manner, and providing extensive analysis of IEP data to accurately estimate staff requirements, the district is now able to provide better support for students with special needs in the general education classroom in a more efficient manner.

• **Implementation of efficient grouping techniques of students with IEPs within general education to make optimal use of available staff:** The opportunities review indicated that the district had difficulty matching staffing to student needs, making the scheduling process burdensome and requiring additional staff to be hired. The current process is smooth, efficient, and cost effective. In particular, DMC would like to acknowledge the efforts of Ella Rideau in implementing this process.

• **Use of data based tools and consistent methodology to analyze staffing requirements for in class support in precise detail at each school:** The district now has the ability to quickly and precisely calculate the amount of in class support required for each grade in each school, and determine staffing requirements based on pre-defined guidelines for in-class support.

• **Providing a range of options for adapting in class support given the expansion of the reading program during the 2014-2015 school year, the new student grouping practices, and best teaching and learning practices:** DMC has provided the district with a range of options to free up between $300,000 to $1.8 million each year in in class support, in addition to the $600,000 per year already freed up. This significantly exceeds the contract performance assurance.

• **Implementation of a more consistent approach to in class support across all schools:** Through its work with DMC, the district identified multiple areas of variation in how in class support is provided across different schools. The district has worked to identify best practices and use these to implement a more consistent approach across schools in 2014/2015.
Section 4: Create a special education financial management system

Managing special education resources requires accurate and real time information. Knowing how current resources are being used is the first step in developing thoughtful, effective, and cost effective budgets. With good information in hand, the district can proactively develop spending, staffing, resource plans that meet the needs of students.

However, tracking staffing, service levels, spending and operations can be difficult as data is often housed in multiple areas. Integrating key information can help provide district leaders with a clear picture of how resources are currently allocated.

With this in mind, DMC has helped the district in the following areas with the ultimate intent of creating a robust financial management system for special education. This work has three major, interrelated efforts.

4 A. Understanding in great detail how staff use their time, ultimately leading to the creation of staffing and workload criteria based on the district’s strategies for students with special needs, current practices and best practices.

Expanding reading support, finding ways of making in class support financially sustainable, and identifying opportunities to reduce costs, while expanding services to students would not be possible without detailed understanding of how staff use their time. DMC’s consulting support and technology tools made this possible.

DMC contributions

- Conducted staff interviews: DMC conducted numerous interviews with special education staff to understand the full range of services provided. This provided valuable context to the senior leadership around the pain points and concerns of staff members within the department. This also helped the district recognize staff members with potential for leadership positions in the department in the future.

- Collected detailed staff schedules using DMC’s proprietary web based tool: Staff working with students with special needs often perform a number of different roles. Their day includes direct service with students, indirect service such as testing, team meetings, IEP writing and consultations, travel between buildings, and lunch. Interviews alone can never capture the entire breadth of
services that staff members provide with precision. Using its proprietary web based tool, DMC conducted extensive schedule collection exercises (in 2012 and 2013) for all special education staff members (e.g., special education teachers, paraprofessionals, speech and language therapists, etc.) to understand the current workload and allocation of staff time, providing a clearer understanding of how resources are currently allocated.

- **Generated recommendations around staffing guidelines and workload expectations:** By analyzing the data collected from interviews and staff schedule surveys and comparing with like districts, DMC synthesized a list of recommendations for the district related to staffing and workload criteria of special education staff. This will aid the district in more accurately developing the special education budget and in the creation of a district-wide vision for special education criteria for staffing and workload.

- **Mapped current process of budgeting in special education to identify strengths and weaknesses in the current system:** Based on conversations with numerous employees in special education, HR and the business office, DMC mapped out the step by step process and decision making flow of budgeting for special education. This has resulted in a deeper understanding of the shortcomings and strengths of the current system and has led to the identification of process improvement that the district can institute to enhance transparency, efficiency and accuracy in budgeting.

- **Recommended new organizational structure:** DMC has recommended that the district restructure who and how key aspects of special education is managed, particularly subcontracted services and paraprofessionals. The new organizational arrangement and staffing models will improve the quality of services to students and free up funds, without reducing services to students.

- **Provided recommendations for inter-departmental responsibilities for special education budgeting:** DMC interviewed numerous staff members within special education, HR and finance to develop an in-depth understanding and process maps of the current system of budgeting and managing contracted services, paraprofessionals, out of district transportation and tuition expenses. DMC has identified opportunities for improvement in the current process and workflows, and has recommended new processes (and responsibilities among departments) for consideration by district leaders. We anticipate this will lead to
lower spending without any reduction in services to students. We anticipate these changes will be used during the development of the 2014/2015 budget.

Impact in the district:

- **Financial savings:** Based on DMC’s report on current staff workload and proposed staffing guidelines, the district realized savings of approximately $600,000 in the school year 2013-14 and every year after that, owing to the reduction of six special education teachers in the district. DMC has provided numerous other options around staffing and efficiently scheduling special education staff to the district based on the most recent analyses of shared schedules. Adoption of these options may result in annual savings of up to $3 million for the district, when fully implemented. These numbers include savings that can result from changes in the in-class support model discussed in section 3, changes to how social workers use their time, and scheduling of speech therapists, and management of subcontracted related services providers.

- **Data driven systems for managing special education:** The district now has access to simple excel tools as well as DMC’s proprietary software that have helped in better management and adoption of a data driven approach to determining staffing needs in each school.

- **New, interdepartmental process for building budgets.** We anticipate that the new methods of building the budget will be implemented this school year. It should provide greater clarity and potential savings in contracted services.

4 B. Create a system for better managing, staffing and scheduling paraprofessionals.

The district made a bold and cost effective decision to subcontract paraprofessional services. This has served the district well. DMC has identified a number of improvements for better managing this large subcontracted service.

**DMC contributions:**

- **Analyzed extensively the role of paraprofessionals in the district:** DMC collected extensive data on the role of paraprofessionals in the district, analyzed their schedules and benchmarked the results with like districts.

- **Developed new organizational structure for managing and scheduling paraprofessionals:** DMC recommended hiring a part time manager of
paraprofessionals who would be responsible for the day to day management, staffing and scheduling. Recommendations included an accountability system to ensure that good service at lower costs is achieved.

- **Recommended new approach to ensure students are gaining social and academic independence**: DMC’s analysis indicated that some current practices, specifically, the heavy use of 1:1 paraprofessionals may be undermining student’s long term success.

**Impact in the district:**

- **System for better management of paraprofessionals**: Paraprofessionals account for nearly $2.5 million of the special education budget. Owing to the absence of dedicated supervision and the use of an external vendor, the level of clarity around schedules and staffing of paraprofessionals in the district was limited. The district now has greater clarity into the role and will in the future be better able to better manage and schedule paraprofessionals, ultimately leading to more independence for students.

4 C. Develop tools for forecasting, budgeting and managing sub-contracted services.

The district has made effective use of subcontracted services, but can build upon this effective practice.

**DMC contributions**

- **Identification of appropriate data**: DMC has helped the district identify data and other information required to thoughtfully budget and manage spending on contracted services.

- **Options for reducing costs without reducing services to students**: Based on the extensive analysis of actual invoices and purchase orders for vendors providing contract services in the district, DMC has presented numerous options to enable the district to realize savings without reducing a minute of services to students.

- **New process (with clear roles and responsibilities) to budget contracted services**: DMC conducted an in-depth analysis of the current process of managing contracted service in the district and discovered numerous opportunities for improvement. Based on these, DMC has recommended a new process flow for budgeting, managing and forecasting contracted services. Over
time, this will result in greater efficiency, predictability and transparency in the management of contracted services ultimately enabling cost savings.

Impact in the district:

- **Potential financial savings:** When and if implemented, the district should be able to realize savings of at least $120,000 in the first year. More savings might come into effect in future owing to better management and process improvements.

- **Adoption of a new method for managing contracted services:** DMC has suggested numerous changes in the process of budgeting and managing contracted services, including process of flow of information from one department to another and the responsibilities of the individuals involved. Implementation of the new process will result in streamlining of the system and will ultimately result in enhanced transparency and efficiency in budgeting.

Section 5: Provide recommendations for the creation of a special needs school at district owned property

This was a small portion of DMC's contract with the district taking the lead on this workstream. DMC was asked to provide recommendations and best practices, insights and lessons learned from our work in other districts around the development of program to serve students with more significant special needs.

DMC made the following recommendations:

1. Not to rush into a premature decision, since the program must be successful from day 1. A troubled start can undermine parent confidence for years to come.

2. To target young students before they leave the district, rather than attempting to bring back older students.

3. To ensure that the program is financially sustainable by ensuring a reasonable level of tuition paying students.

4. To seek a partner with disability specific expertise.

All four recommendations have been incorporated into the proposals brought to the school committee.