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### **PART III: APPLICATION NARRATIVE**

Located in Wichita, Kansas, Unified School District 259 (doing business as Wichita Public Schools, or WPS) is pleased to submit this proposal to the U.S. Department of Education Magnet Schools Assistance Program (MSAP). Our proposal seeks funding for a total of five schools – all of them significantly revised magnet school programs:

- Brooks Center for STEM and the Arts Magnet Middle School
- Jardine STEM and Career Explorations Magnet Middle Academy
- Buckner Performing Arts and Science Magnet Elementary School
- L'Ouverture Career Explorations and Technology Magnet Elementary School
- Spaght Science and Communications Magnet Elementary School

#### **Competitive Preference Priority 1: Need for Assistance**

Our need for assistance is based on a thorough analysis of the Wichita community, WPS, and school choice options that are available in the District.

**About Wichita, Kansas.** The City of Wichita, Kansas, occupies 163.59 square miles and is roughly bisected by the Arkansas River, which flows south-southeast through the City. Several tributaries, the largest being the Little Arkansas River, join the Arkansas River. Wichita is at the junction of Interstate 35 and U.S. Route 54, linking Wichita to Denver, Oklahoma City, Kansas City, and economic hubs inside and outside Kansas. There are three major economic challenges currently facing the City: 1) it is growing in population, 2) poverty is on the increase, and 3) cultural and ethnic diversity in the school District does not mirror that of greater Wichita.

Wichita is the largest city in Kansas with a population estimated at 384,445 in 2011. Between 2000 and 2010, the population of Wichita grew 11.1%, gaining 38,084 citizens, according to the US Census. In 2010, the racial makeup of Wichita was composed of the following: 71.9% White,

11.5% African American, with the remaining 16.6% comprising various other racial categories. In 2010, over 58,348 (15.3%) citizens identified themselves as Hispanic or Latino of any race. While relatively small in number, the Hispanic/Latino population is increasing, more than doubling since 2000. Presently, around 12.1% of families and 15.8% of the entire population are living below the poverty line, including 22.4% of those under 18 years of age. According to Lefler, (2012, September 12) the latest figures published by the Census Bureau show that Kansans' real household income has persistently fallen and that more Kansans are living in poverty now than at any other time in the past 30 years. These figures reveal that in inflation-adjusted dollars, Kansas has fallen to its lowest point since 1995, and that the median household income is \$4,000 less than the US average – a significant reduction from 10 years ago.

Despite the various economic challenges confronting Wichita, it has a rich history of entrepreneurship that it draws upon to create outstanding economic opportunities for its citizens. Wichita has been a proving ground for business entities ranging from Coleman, Mentholatum and Pizza Hut, to White Castle, Taco Tico and Koch Industries. Despite the negative impacts that the September 11, 2011 terrorist attacks in New York and Pennsylvania has had on the global aviation industry which resulted in a significant drop in orders of new aircraft, Wichita is still considered the “Air Capital of the World” as it is home to Bombardier Learjet, Cessna, Hawker Beechcraft and Spirit AeroSystems. Boeing and Airbus also maintain a large workforce in the City. Wichita's second-largest industry is healthcare; comprised of various hospitals, medical centers and healthcare providers that employs nearly 30,000 people in the area.

Despite the economic downturn of 2008, Wichita has ample opportunities to partner with organizations in the community—and for the purposes of this proposal—the ability of WPS and Project DISCOVER schools to build partnerships with career and post-secondary entities. WPS

has secured a substantial support base for Project DISCOVER among local businesses and international corporations, universities, colleges, community-based organizations and other members of civil society. WPS has built long-term partnerships with many of these organizations, some of which have collaborated with magnet schools that are part of this proposal. Many of these organizations have provided letters of support, all of which can be found in the appendices, though a small sampling includes: The President of Wichita State University (WSU), The Dean of WSU's College of Education, Communities in Schools of Wichita and Sedgwick County and Girl Scouts of Kansas Heartland. The Wichita Eagle, the Council Office for the City of Wichita and Exploration Place pledge their support of Project Discover. In recognition of the STEM and performing arts themes, Airbus, WSU College of Engineering, Cessna, WSU School of Music and the Wichita Symphony have also provided letters of support.

Wichita is home to three universities whose main campuses are located in and around the City, the largest of which is WSU, a public four-year university with a student population of over 14,000. Friends University and Newman University, as well as Wichita Area Technical College, a two-year public college, also play significant roles in the area's education.

**About Wichita Public Schools.** WPS is the largest school District between the Mississippi River and Denver, CO and from Dallas, TX to the Canadian border. WPS educates 11% of the public school students in Kansas; operating 98 schools serving 50,639 students as of 2013, with 55 elementary, 15 middle and 10 high schools, 3 K-8 schools and 15 special program locations. Twenty-four school sites house magnet programs of some type. Since 2000, WPS enrollment has been relatively stable, with a growth of approximately 1,574 students over the past 12 years.

**Table 1. Wichita Public Schools K-12 Enrollment Trend**

2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
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48,705	49,146	50,042	50,033	50,103	50,639
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The percentage of low-income students in WPS is greater than in the community at large and growing. As of October 2011, 74.3% of K-12 students qualified for free or reduced meals. For the 2012-13 school year, WPS has a total of 40 schools that qualify for Title 1 Services: 31 elementary schools; two K-8 schools; and 7 middle schools—three of which (Jardine, L’Ouverture, Spaght) are part of Project DISCOVER. In 2012-13, 13.31% of WPS students were identified as Students with Disabilities and 18% were identified as Limited English Proficient.

Ethnic and cultural diversity in the District does not mirror that of the greater community. Many neighborhoods are single race, where “White flight” has been significant and where White and affluent families are reluctant to have their children attend school in less affluent areas. This has led to trends that have heavily contributed to minority group isolation (MGI) in many schools. Percentages of Hispanic/Latino students has steadily increased in recent years and the percentage of White students has declined, as indicated in Table 2. There is also a slow but steady decline in the percentage of African American students across WPS.

**Table 2. Percentage of K-12 Student Enrollment by Major Racial Groups**

Year	Enrollment	Asian	Afr Am	Hisp.	Am In	Multi	Pac Isl	White
07-08	48,705	5.21%	20.43%	23.32%	2.68%	8.97%	n/a	39.39%
08-09	49,146	5.33%	19.86%	23.79%	2.54%	10.17%	n/a	38.31%
09-10	50,042	4.85%	19.49%	28.08%	1.73%	7.52%	0.18%	38.14%
10-11	50,033	4.77%	19.17%	29.61%	1.57%	7.98%	0.15%	36.75%
11-12	50,103	4.71%	18.57%	31.12%	1.43%	8.26%	0.15%	35.76%
12-13	50,639	4.53%	18.32%	32.11%	1.35%	8.55%	0.16%	35.07%

In recognizing the need to improve educational services to prepare students for future

careers, WPS has developed a strategic plan with the mission of empowering, “all students with the 21<sup>st</sup> century skills and knowledge necessary for success by providing a coherent, rigorous, safe and nurturing, culturally responsive, and inclusive learning community.” The strategic plan has five objectives: (1) 100% graduation rate using aligned Pre-K–12 system; (2) Continuous increase of 21<sup>st</sup> century skills and knowledge for all students; (3) Continuous reduction in academic skill and knowledge gap among student populations; (4) Continuous reduction in social skill and knowledge gap among student population; and to nurture (5) A sustainable learning community that is coherent, rigorous, safe and nurturing, culturally responsive and inclusive. Since going into effect in 2009, the strategic plan has already led to a number of achievements, described as District “Points of Pride.” These include: a) More than \$26.5 million in scholarships awarded in 2012 to WPS graduates; b) The Kansas Department of Education presented 41 schools in WPS a total of 141 Standard of Excellence Awards in math, science and reading as a result of its 2012 state assessments; c) Over the past five years, the District has seen an increase of 3.1 percentage points in math scores, and d) Voters approved a \$370 million bond issue in 2008. The District has worked to encourage more than 300 businesses and organizations to register as business and community partners to form educational partnerships. For example, Brooks—one of Project DISCOVER’s proposed schools—and Airbus have partnered in the Airbus Flying Challenge, which matches students and Airbus engineers for the purposes of helping students learn about aviation, science, math and engineering. WPS has ensured that there are over 36,500 computers across District classrooms, and WPS has outfitted Promethean Smart Boards in almost every classroom.

One of the biggest challenges the District faces is that of State budget cuts, which has amounted to over \$46 million over the last four years. An additional \$100 million in cuts is

expected in coming years. Though WPS has implemented Smart Boards and computers in classrooms across the District, many students lack access to standard technologies made available in other school districts such as smart-pads and software programs critical for a dynamic education and career readiness.

WPS is proud that one of its mottos is, “The World Walks Our Hallways”, recognizing the fact that more than 88 languages are spoken in the homes of District students. However, WPS recognizes that another challenge is educational equity for diverse demographic groups on the State’s assessment programs. The table here shows that student performance in the District lags behind that for Kansas as a whole in all major population groups, and there are considerable achievement gaps among these groups relative to Whites. This proposal is a critical piece in our effort to reduce achievement gaps and, through demonstration, across the District.

**Table 3. Overall Percentage of Students Achieving Proficiency on the Kansas State**

**Assessment: 2011-12**

Population	All	Afr Am	Hispanic	White	ELL	Spec Ed
Kansas	87.7%	71.7%	78.0%	91.7%	71.9%	71.6%
WPS	74.3%	63.8%	68.0%	83.4%	61.8%	52.4%

**About Wichita Public Schools Choice Options.** WPS operates the following *magnet* schools providing school choice: 17 elementary schools, two K-8 schools, four middle schools, and one high school. While WPS has a commitment to reflecting the community’s diversity in its enrollment across all schools, it has not always been successful in doing so. The racial makeup of Wichita is most similar to the racial makeup of WPS in the Asian, American Indian, and Pacific Islander ethnic groups; with no more than 0.3-percentage points difference between the City and District’s figures. For Whites, African Americans, Hispanics and Multi-Racial groups, the

disparity between WPS and Wichita demographics is significantly larger. In an effort to tackle this issue, the Diversity, Equity and Accountability Committee has been charged with reviewing student assignments and attendance patterns and reviewing the quality and equity of educational programs, facilities and staff. This highlights the school board's commitment to bringing about greater balance in student socio-economic diversity in order to advance academic excellence for all students. Furthermore, WPS has recently reached an agreement with the Federal Office of Civil Rights to maintain a racial population at its schools that is reflective of the district-wide population within +/- 20 percentage points of district averages for its racial groups.

In terms of WPS magnet schools, two kinds exist: "neighborhood" magnet schools and "pure" magnet schools. They differ in that neighborhood magnet schools consist largely of students that live within a specific proximity (assigned attendance zones) to that school, and those students are not required to make an application to attend the magnet as they are already within the attendance zone area. These neighborhood magnet schools do hold a number of seats open for application through the magnet lottery however. In contrast, WPS "pure" magnet schools are those that do not have a neighborhood attendance zone assigned to them. All students who attend a pure magnet school are required to submit an application and be accepted through the lottery system. Students across the district may apply to attend either the neighborhood or pure magnet school programs through the lottery. WPS supports an extensive transportation network permitting students across the District to enroll at the varied magnet programs. In the 2013-14 school year, WPS will be operating 16 neighborhood magnets, 7 pure magnets, and one K-8 school that are mixed (neighborhood for K-5 and pure for 6-8). In this proposal, Brooks MS is a pure magnet, enrolling all lottery-based students, and the other four schools in the proposal are neighborhood magnets, enrolling neighborhood students along with lottery students.

When implemented with fidelity to magnet school principles, these programs offer exciting opportunities for diverse student populations to interact and excel academically. However, especially relevant to this proposal is the fact that a significant number of WPS magnet school staff believe that their respective themes are not particularly robust and are not fully integrated into daily curriculum. In other words, the general feeling among District leadership and school staff is that the schools are “magnet” in name only. Thus, in 2010, WPS made its first application to the MSAP competition and was successful in receiving an award to significantly revise one magnet school. That school, Mueller Aerospace and Engineering Discovery Magnet Elementary is now in its third year of MSAP funding and is demonstrating how to fully implement a magnet program. Now Project DISCOVER will advance systemic reform throughout the District by expanding significant revisions to five more WPS magnet schools.

**(a) The costs of fully implementing the magnet schools project as proposed**

WPS is seeking \$11,999,972 dollars in Federal funding to implement Project DISCOVER and plans to dedicate as much as \$9 million of its own resources to this program. Accordingly, we estimated the cost to fully implement this program to be approximately \$21 million on top of the normal expenses associated with school operations. Without question, Project DISCOVER requires considerable financing, but these resources are essential and necessary to fully implement the project with fidelity to its design as explained in this narrative.

**(b) The resources available to the applicant to carry out the project if funds under the program were not provided**

The funding the District receives from the State of Kansas has been significantly reduced, with cuts amounting to \$46 million over the last four years. Prior to this, according to The Rural School and Community Trust (2012), \$500 million in cuts to school funding had also been made.

Though cuts to the annual District budgets have been made as far away from the classroom as possible, it will not be possible to avoid cuts to the classroom if these State funds the District are further reduced in the future. These deep budget cuts have contributed to some magnet schools functioning largely as names on buildings while lacking deep thematic learning as a result of lacking necessary supplies, equipment and professional development. And, due to an income tax reduction enacted by the 2012 State legislature that went into effect January 1, 2013, combined with an upcoming sunset of a sales tax increase, the District contemplates that the funding it receives from the State could be cut over the next several years by an *additional* \$100 million.

For the 2009-10 school year, Kansas ranked 26<sup>th</sup> among all States in per pupil school system financing (U.S. Department of Commerce, 2010). The State funds around 62% of annual school District costs, with the Federal Government funding 11%. The remaining funding of 27% comes from local sources that include property taxes, investment income, local grants and contributions with some businesses and foundations providing financial support for District efforts.

Like other States, Kansas employs a per-pupil funding formula to calculate the amount of funding provided to school districts. School funding was reduced significantly from \$4,433 per pupil in 2009 to \$3,838 in 2012-13. The cut of \$595 per student (13.4%) plus elimination of capital outlay state aid totals \$47 million less in base state aid and capital outlay funding annually and takes the District back to 2001 per-pupil funding levels for regular education.

In the 2010-11 fiscal year, WPS developed a phased budget cut plan to manage current and expected funding gaps. Following this plan, WPS has aggressively sought solutions including but not limited to: changing start and end times of schools which will reduce the need for dozens of buses; raising ticket prices to sporting events; eliminating matched funding for various programs including AmeriCorps; reducing custodial and security services at schools; delaying the purchase

of student textbook adoptions; eliminating Driver's Education classes across all high schools; and significant reductions in non-teaching staff FTEs, among many other budget-saving measures. Despite the economic challenges, the District and community continue to identify ways to be proactive, demonstrated by the \$370 million bond issue that Wichita voters approved in November 2008. WPS is committed to supporting the five magnet schools in this proposal and will make cash value contributions to Project DISCOVER, some of which are bulleted here.

- Personnel: The District will commit an additional 5.5 FTE positions to the elementary schools (e.g., dance, drama, technology teachers) valued at approximately \$1 million over the 3-year grant period. Of note, these added FTE positions will help to sustain the magnet program after the grant funding ceases;
- –Transportation: Transportation that the District will provide for lottery students to enroll at the five schools is valued at approximately \$3 million over the three years of the grant;
- –Technology Infrastructure: During the 3-year period of the grant, the District anticipates investing approximately \$90,000 (e.g., digital sinage screens, Cytek collaboration tables, Tri-caster broadcast system) at the five project schools; and
- Capital Outlay thru Bond projects: Renovations that are planned for Brooks, Buckner, and Jardine following the latest bond issue will be made in a fashion that supports implementing the magnet theme, valued at approximately \$5,185,000.

**(c) The extent to which the costs of the project exceed the applicant's resources**

When the bulleted items indicated above are totaled, the District estimates that it will be able to provide as much as \$9 million in fiscal support from its own resources to support implementation of Project DISCOVER. However, most of the District's contribution is in capital outlays and transportation expenses rather than programmatic expenses. Without question, the

District is committed to supporting Project DISCOVER, but the programmatic costs of the project greatly exceed the District's resources.

**(d) The difficulty of effectively carrying out the approved plan...**

Project DISCOVER falls within the larger WPS strategic plan to significantly revise existing magnet schools across the District. Within the narrative that follows, WPS describes its ambitious plan to significantly revise five magnet schools so that they are substantially more effective in integrating STEM and STEM components across all curricula, while also reducing MGI. Though there will most likely be challenges with implementation, the award of MSAP resources combined with WPS' strong and focused District and school leadership will kick start the overarching goal of revitalizing educational opportunities throughout Wichita.

There are three principal difficulties that we foresee: 1) District and school administrators at all five schools must be empowered to be relentless in "talking the talk" and "walking the walk", and the magnet schools must be more than names on buildings; 2) Teachers at all five schools need extensive professional development, not only to better understand the principles and practices of embedding a magnet theme in core curriculum, but to also gain new understandings of how to do this for "state-of-the-art" STEM curricula; and 3) Recruiting more students and more diverse students to these five schools will be challenging, although possible to the degree that the magnet programs can be made academically rigorous. In some regards, Wichita is a community divided with school district populations (e.g., race and poverty) that do not reflect the greater community populations. To be successful, Project DISCOVER will need to draw students back to public education—particularly those who have left for private or home schooling. All WPS staff are well aware of the challenges that they face, and are committed to realizing the significant revisions to the magnet programs across the proposed schools.

## **Competitive Preference Priority 4: Promoting STEM Education**

All schools described in Project DISCOVER will promote STEM practices and STEM subject knowledge for students with evidence-based practices meant to increase access to engaging STEM coursework. The practices will include; project-based learning with collaboration; partnering with the community, meaningful daily integration of technology; connections to careers and engaging parents in their child's future learning and career options.

### **(a) Providing students with increased access to rigorous and engaging STEM coursework**

Project DISCOVER includes students' interest in the design of the modules, electives and integrated project-based activities. Research points to the positive relationship of increased student knowledge when school activities acknowledge students' out-of-school interests. This is of particular importance to Project DISCOVER in order to capture under-represented groups' perceptions of STEM's value to their lives and/or their ability to participate in STEM disciplines. The STEM-based design implemented at Mueller Aerospace and Engineering Magnet School provides an example for this project's five schools. Through the example set at Mueller, all five schools under Project DISCOVER are committed to integrating their magnet themes throughout the day and across multiple subject areas through project-based learning. Project DISCOVER's schools will develop a community of practice with STEM at its core.

Brooks Center for STEM and the Arts Magnet Middle School and Jardine STEM and Career Explorations Magnet Middle Academy will both implement full STEM disciplines with their unique themes of the Arts and Careers, respectively. All three elementary schools will increase science instruction, include technology augmentation and thematic integration, which is intended to prepare the elementary students for full-STEM middle school curricula. Buckner Performing Arts and Science Magnet School will integrate science with the Performing Arts; L'Ouverture

Career Explorations and Technology Magnet School will integrate science and social studies in careers modules; Spaght Science and Communications Magnet School will integrate science in modules with reading, writing, speaking and listening communication projects such as broadcasting, podcasts, and virtual fieldtrips.

Meaningful life and career preparation challenges educators to provide strong grounding in STEM disciplines for all students. President Obama, 21<sup>st</sup> Century Skills advocates, Career and Technical Education fields and the STEM community demand that schools provide rigorous STEM coursework to a diverse cultural, linguistic and socioeconomic community of learners. Project DISCOVER meets this instructional design challenge by using themes supported by the community and integrating STEM subjects within the engaging themes using their schools' modules, electives, after school activities, clubs and multidiscipline courses throughout the day.

Comprehensive curricular products, such as those created and/or used in WPS' Project DISCOVER, require longer than the typical 3 to 5 year research cycle to design and revise for fidelity to determine if achievement and interest in STEM is increasing and impacting high school course participation and career choices for all groups of students. Project DISCOVER is committed to supporting the project's STEM focus beyond the three years and treating curricula and instructional materials as living documents requiring continual attention in order to maintain their usefulness through updates with new knowledge from the STEM disciplines, data on student achievement, up to date professional development, and parent feedback about their child's academic readiness for post-secondary STEM careers.

Providing rigorous STEM coursework to under-represented groups requires the inclusion of strategies to build membership into the scientific community through engaging experiences. Research does not indicate that race, gender, income status, disability, English speaking

competency or being a member of any category is a barrier in-and-of-itself to successful STEM learning. Project DISCOVER increases the experiences in STEM subjects at all five schools using research-based strategies. Some of those strategies include: participating in project-based and problem-solving activities, identifying oneself with the processes of collaborating, taking on leadership roles for a project, presenting projects using the language of scientific disciplines and technology, and becoming aware of careers through interactions with businesses and universities.

Each of the five schools are including additional strategies: Brooks is including activities in each module for teachers to use mathematics and science standards with an informance, sharing learning with others in an interactive way; Jardine is including business partners and virtual trips to businesses for every one of its STEM/Career modules; Buckner has used research from Multiple Intelligences (MI) to include creative expression at every grade level's science standards to showcase all learners' giftedness ; L'Ouverture's strategies also uses Multiple Intelligences with collaborative technology-based science standard activities in career modules; and Spaght will facilitate increased success in science and communication by matching grade level community role models as partners for tutoring, mentoring and creating the "Spaght School Ambassadors" program in an effort to develop leadership skills.

**(b) Increasing opportunities for high quality preparation of, or professional development for, teachers or other educators of STEM subjects**

Curricula and instructional delivery will begin by using the District Common Core from all disciplines as the "thin core" to bring together rich curricular project-based learning that reflects STEM knowledge. Project-based and problem-solving learning serves a number of purposes with room for student interests and a variety of expressions of learning to be included in curricular units. All schools will have periodic learning performances for parents to participate in. These

performances will be based on the projects from a grade level, team or subject area. Project DISCOVER will have a District position to coordinate the schools' parent engagement events throughout the year and through the ongoing meetings of the integration teachers, schools will be able to share which events are most effective in engaging parents, increasing all schools' strategies for engaging parents in their child's learning.

Project-based and problem-solving activity development includes teamwork of teachers, community partners, volunteers and parents. This increases students' learning support from the community through mentors, tutors and increasing parental involvement in the schools. The partnerships support teachers by providing real world connections to the curricula and increasing teacher knowledge of STEM subjects in the work force and community.

Professional development for Project DISCOVER will increase teachers' knowledge of STEM content, and how to merge school curricula and student learning interests to improve the academic performance of their diverse student body in STEM subjects. School-based PLCs will become Global PLCs using questions to engage with other STEM schools through digital means to problem-solve by maintaining meaningful integration of technology. Questions will include: *How do we connect students' prior knowledge with digital information and how do we find interesting problems? How do we allow personalized learning without losing site of the learning goals? How can authentic assessment be collected to match multiple Standards?*

Websites will help to increase teacher knowledge of STEM content and types of instructional delivery strategies. The Kansas Department of Education – Science, Technology, Engineering and Mathematics website provides information about career pathways, middle school exploratory classes and links to other STEM information sites. The [www.STEMx](http://www.STEMx) website includes tools for STEM education from 15 states including STEM teaching and learning,

evaluation and assessment. Digital communication and visits to other STEM magnet schools and professional conferences will supplement onsite District professional development for the schools unique delivery of STEM with up to date information for revisions over the years.

On site professional development will include increasing knowledge of meaningful integration of technology, the science standards, inquiry, integration of mathematics and science across the curriculum at each grade level and how to carry out authentic assessment with project-based learning. Both contractual trainers and District trainers will be used for some portions of professional development. Training will also occur through partnerships with STEM-focused businesses such as KOCH, and will further teachers' knowledge of careers in the STEM disciplines. Partnerships with WSU's College of Education and College of Engineering will increase teachers' instructional strategies for STEM disciplines.

### **A. Plan of Operation**

Our Plan of Operation is grounded in best practices associated with magnet school programs. WPS will significantly revise five existing magnet school programs—two middle schools serving grades 6-8 and three elementary schools serving grades K-5. The two middle schools will implement all four components of STEM, and the elementary schools will each feature particular STEM aspects that synchronize with the middle school programs. All five programs will function as “whole school” programs with all students fully engaged in theme-based curriculum and activities. Four of the five schools have assigned neighborhood attendance zones and also enroll students through a lottery process; one middle school—Brooks—is a “pure” magnet, enrolling all students through a lottery process. While students from across the District may apply by lottery to enroll at any of the five schools, targeted recruitment activities will draw back students and families who have left public schools for private or home school options.

**A(i) The effectiveness of the management plan...**

Management planning has multiple facets and is critical to the success of a project of this magnitude. The management plan we described here has been styled on a Management Planning “Practices Guide” produced at the National Centers for Disease Control. Much of this management plan is already in place, due to the District’s commitment to carry out these magnet programs in the coming years. While the overarching management plan will be a single document, it will be composed of a number of subsidiary plans including the following components: a) Scope and Work Management: Specifying roles and responsibilities for Key Personnel; b) Communications Management: Describing how information is shared with stakeholders, including parents and the community; c) Schedule/Time Management: Providing a schedule for the initialization, refinement and expansion, and sustainability of major strategies and completion of activities; d) Cost/Budget Management: Monitoring the expenditure of MSAP as well as District funds in accordance with the Project Design; e) Issue Management: Providing a structure for sharing and resolving varied issues in a timely fashion as they develop; and f) Quality Management: Providing an evaluation plan to monitor progress being made towards desired outcomes and implementing continuous improvements in operations.

**a) Scope and Work Management.** The Management Plan will provide a clear determination of the major roles and responsibilities for Key Personnel. While more information is provided in the Key Personnel section that follows in this narrative, here we briefly emphasize that our management plan has both “depth” and “breadth”, with depth indicating that leadership of the plan resides high in the organization. Dr. Kim Burkhalter, WPS Director for Equity/Diversity and Parent/Community Support, will serve as Project Director for the project, reporting directly to Mr. John Allison, WPS Superintendent. Dr. Burkhalter will commit 10-15% of her time to the

role, and will supervise a full-time Project Coordinator and a full-time MSAP Recruiter, both to be hired with MSAP funding. Dr. Burkhalter, the Project Coordinator and the MSAP Recruiter will provide overall leadership for the project. Our management plan also demonstrates “breadth”, deriving support from the full scope of WPS operations including Personnel for recruiting diverse staff, Finance for fiscal management, Instruction and Accountability for curriculum development and academic rigor and Staff Development supporting professional development and Technology supporting STEM integration across the core curriculum. An Advisory Council will be developed specifically for Project DISCOVER consisting of WPS central operations and school-based staff, partnering agencies and parent representatives. The letters of support secured by the District and schools demonstrate even greater “breadth” as the project reaches into the community, post-secondary, nonprofit, business and industry worlds.

The management plan features the best of two worlds: 1) Leadership at the school district level with Dr. Burkhalter as Project Director and a Project Coordinator providing guidance and support for school-based operations, and 2) Leadership at the school level with the Building Principals and key staff providing daily guidance to the integration of all student populations (e.g., racial, income, disabilities, gender, limited English, etc.), and the development and integration of STEM-themed curriculum in all classrooms. WPS will contract with an independent evaluation firm to carry out formative and summative evaluations.

The work of the Project Coordinator and MSAP Recruiter will be guided by a job description (included in Resumes), and these individuals will adhere to Management by Objective (MBO) practices. MBO places an emphasis on participatory goal setting whereby Dr. Burkhalter, the Project Coordinator, and the MSAP Recruiter will jointly identify common goals, objectives aligned with the six MSAP Purposes, and metrics that define and measure their respective roles

in terms of the management responsibilities assigned to each person.

**b) Communications Management.** Project DISCOVER’s management plan also includes a communication plan that identifies important communications about the project, target audiences, when and how such communications are to be relayed, and assigns responsibilities for collecting feedback from these communications. An example of a critical communication is how information about the five magnet programs and application to the lottery is to be widely disseminated throughout the year, including translating communications for limited English-speaking populations. The communications plan will take full advantage of multiple venues, including the varied forms of social media (e.g., Facebook, Twitter, Linked-In), District and school websites, newspaper and radio public service announcements, direct mailing, and printed materials (e.g., business cards with Project DISCOVER logos, brochures, flyers). Students, staff and parents will be invited to create a logo and design for brochures, flyers and business cards that “brand” the five schools with a common identity featuring their STEM components. Ms. Wendy Johnson (see resume), WPS Director of Communications, will work closely with the MSAP Recruiter in support of the communication plan.

**c) Schedule/Time Management.** In Table 4 we emphasize some of the major activities for the first year of the award with many of these activities being repeated throughout the 3-year performance period. Dr. Burkhalter, the Project Coordinator, the MSAP Recruiter, and all Principals will revisit the management schedule at quarterly intervals to coincide with meetings of the Advisory Council.

**Table 4. Project Management Timeline for 2013-16, with Proposed 7/1/13 Start Date**

TASK/ACTIVITY ( <i>Person/Division Responsible</i> )	2013-16
Announce award; convene Advisory Council; establish budget; post and hire grant	Jul-Sep

<b>TASK/ACTIVITY (<i>Person/Division Responsible</i>)</b>	<b>2013-16</b>
positions, develop purchase orders, initiate service contracts, finalize management and evaluation plans (Dr. Burkhalter—Project Director, Project Coordinator, Principals, School leadership teams, Contracted Grant Evaluator)	2013
Facilities Modifications (Project Director, Project Coordinator, Principals, District Facilities Department)	Jul - Sep 2013
Professional Development for 2013-14 school year planned and delivered (Project Director, Project Coordinator, Principals, MSAP Teachers, Leadership Teams)	Sep – Jun 2014
School Presentations to families and community partnerships of STEM activities, school themes and changes in the school (Project Coordinator, MSAP Teachers, MSAP Recruiter, Principals, Leadership Teams, Teachers, Students)	October 2013 and ongoing
Monthly Fidelity meetings for STEM and Project-based learning with District Goals (Project Director, Project Coordinator, MSAP Recruiter, Grant Technical Assistant (GTA), MSAP Teachers)	Beginning in October ongoing
Quarterly Evaluation and report to Magnet Advisory Committee (Independent Evaluator, Project Director, Project Coordinator, MSAP Teachers)	Beginning Oct 2013
Annual data analysis related to outcomes and review, revision, recruitment, and planning for summer programs and year 2 (Project Director, Project Coordinator, MSAP Recruiter, GTA, MSAP Teachers, Principals, Grant Evaluator)	May – June 2014
Professional Development for 2014-15 school year planned and delivered (Project Director, Project Coordinator, Principals, MSAP Teachers, Leadership Teams)	July 2014 – June 2015
School Presentations to families and community partnerships of STEM activities, school themes and changes in the school (Project Coordinator, MSAP Teachers,	October 2014 and

<b>TASK/ACTIVITY (Person/Division Responsible)</b>	<b>2013-16</b>
MSAP Recruiter, Principals, Leadership Teams, Teachers, Students)	ongoing
Monthly Fidelity meetings for STEM and Project-based learning with District Goals (Project Director, Project Coordinator, MSAP Recruiter, GTA, MSAP Teachers)	October 2014 and ongoing
Quarterly Meetings for Sustainability Strategies and Action Steps (Project Director, Project Coordinator, MSAP Recruiter, GTA, Principals, MSAP Teachers and Leadership Teams)	November March July
Quarterly Evaluation and report to Magnet Advisory Committee (Independent Evaluator, Project Director, Project Coordinator, MSAP Teachers)	Oct 2014 & ongoing
Annual data analysis related to outcomes and review, revision, recruitment, and planning for summer programs and year 3 (Project Director, Project Coordinator, MSAP Recruiter, GTA, Principals, MSAP Teachers, Grant Evaluator)	May – June 2015
Professional Development for 2015-16 school year planned and delivered (Project Director, Project Coordinator, Principals, MSAP Teachers, Leadership Teams)	July 2015 – June 2016
School Presentations to families and community partnerships of STEM activities, school themes and changes in the school (Project Coordinator, MSAP Teachers, MSAP Recruiter, Principals, Leadership Teams, Teachers, Students)	September 2015 – June 2016
Monthly Fidelity meetings for STEM and Project-based learning with District Goals (Project Director, Project Coord., MSAP Recruiter, GTA, MSAP Tchrs)	July 2015 & ongoing
Quarterly Meetings for Sustainability Strategies and Action Steps (Project Director, Project Coordinator, MSAP Recruiter, GTA, Principals, MSAP Teachers and Leadership Teams)	July 2015 Nov, Mar, Jul

TASK/ACTIVITY ( <i>Person/Division Responsible</i> )	2013-16
Quarterly Evaluation and report to Magnet Advisory Committee (Independent Evaluator, Project Director, Project Coordinator, MSAP Teachers)	October 15 ongoing
Annual data analysis related to outcomes and review, revision, recruitment, and implementation of Sustainability Action Steps (Project Director, Project Coord., MSAP Recruiter, GTA, Principals, MSAP Teachers, Grant Evaluator)	May and June 2016

**d) Cost/Budget Management.** The MSAP Project Director, Project Coordinator and Grant Technical Coordinator (GTA) (see Job Description) will work closely with the WPS Finance Office and the five school principals to monitor the expenditure of funds in a timely manner and with fidelity to the budget submitted with this proposal. When there are variances in how these funds may be expended, the Project Director will communicate with the Federal Program Officer to seek approval as appropriate. The GTA will produce an analysis of how funds are being expended at monthly intervals to ensure that strategies and activities are being properly resourced in accordance with the Project DISCOVER’s design. Along with District and State fiscal guidelines, OMB Circulars A-87 for cost principles, A-102 for administrative requirements, and A-133 for audit requirements will be maintained as reference documents. An objective for budget management is to fully expend funds as allocated in each year of the grant.

**e) Issue Management.** The Project Director, Project Coordinator, MSAP Recruiter and School Principals will widely disseminate information about Project DISCOVER to staff, parents, partnering agencies, and community members and will establish “issue management” procedures whereby all parties are encouraged to bring questions or concerns to their attention. Maintaining an issues management log, these individuals will reply to all such inquiries within 48 hours. For inquiries that cannot be resolved to the satisfaction of the individual raising the

question or concern, the issue management log shall provide documentation to project leadership of outstanding issues that will be considered in the next iteration of the management plan.

**f) Quality Management.** Beginning in the pre-grant period with the capture and organization of baseline data, quality management will have both formative and summative aspects. Along with WPS District administrators, Ms. Caroline Massengill, past Director of Magnet School Programs in the Wake County Public School System, NC, will provide consultation to the school staff on magnet school principle and practices, providing a proactive “formative” aspect to managing the quality of the program (see the Appendices for Massengill’s resume). Additionally, formative and summative evaluation activities will occur in all three-grant years and extend into the post-grant period to permit a final accounting of project outcomes. While evaluation activities are chiefly the function of the independent evaluator, *GrantProse, Inc.*, these are overseen and supported by the Project Director and Project Coordinator. The Project DISCOVER evaluation plan (described below), linking MSAP purposes and performance measures quantifying annual benchmarks and desired project outcomes, becomes the blueprint that guides our quality management and continuous improvement activities.

**A(ii) The effectiveness of the plan to attain specific outcomes that will (A) accomplish the purposes of the program; (B) are attainable within the project period; (C) are measurable and quantifiable; and (D) For multi-year projects, can be used to determine the project’s progress in meeting its intended outcomes**

WPS employed logic modeling to align the six MSAP purposes with measureable outcomes for the project so as to ensure that the project will accomplish the purposes of the program.

SMART (Specific, Measurable, Achievable, Relevant, Time-bound) outcomes are defined for each objective. Interim benchmarks are set for the measurable outcomes, providing multi-year

targets that are attainable within the 3-year period of the grant. Table 5 indicates the multi-year targets for each outcome and the means by which the outcomes will be measured.

**Table 5. Project DISCOVER Outcomes and Annual Targets**

<b>MSAP Purpose 1: The elimination, reduction, or prevention of minority group isolation (MGI) in elementary and secondary schools with substantial proportions of minority students...</b>				
<b>Outcome 1.1:</b> The five project schools will reduce or eliminate MGI, as defined here to occur when the percentage enrollment at a school for any single racial group surpasses by 20 percentage points the district-wide average for that racial group. This definition is consistent with a current agreement between WPS and the Federal Office of Civil Rights. For all but Jardine, African American students are most divergent from the District averages where 17.2% of students at the elementary level in the District are African American and 18.7% at the middle school level. At Jardine, Hispanic students are most divergent from the District average where 37.1% of middle school students are Hispanic in the District. Baseline data for racial populations by grade level are presented in Table 1 in the Appendices. Multi-year targets for the prevention or elimination of MGI are set below.				
<b>Multi-Year Targets for Reduction in MGI for Identified Racial Group</b>				
	<u>2012-13</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
a. Bucker – African-American, reduce MGI	55.2%	52.9%	50.1%	47.3%
b. L’Ouverture – African-American, reduce MGI	47.5%	45.1%	42.0%	39.4%
c. Spaght – African-American, reduce MGI	65.7%	63.3%	60.5%	57.0%
d. Brooks – African-American, eliminate MGI	44.2%	42.4%	39.8%	36.2%
e. Jardine – Hispanic/Latino, eliminate MGI	56.9%	54.0%	51.1%	47.4%

**Outcome 1.2:** By the end of the performance period, the applicant pool at the project schools will not deviate from annual district-wide percentages by more than 10 percentage points for any of the seven racial groups. *[MSAP Performance Measure (a)]*

**Deviation in Percentage Points Between Applicant Pool and District-Wide Percentages**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	≤ 16 pts	≤ 13 pts	≤ 10 pts

**Outcome 1.3:** Relative to baseline data from 2011-12 (2012-13 data not available at the time of submission), the applicant pool will increase annually over the three-year performance period.

**Number of Magnet Applications in the Lottery Relative to 2011-12 Baseline**

	<u>2011-12</u>	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
a. Buckner ES	116	125	140	160
b. L’Ouverture ES	41	50	65	85
c. Spaght ES	50	60	75	95
d. Brooks MS	285	295	310	330
e. Jardine MS	71	80	95	115

**MSAP Purpose 2:** The development and implementation of magnet school programs that will assist LEA in achieving systemic reforms and providing all students the opportunity to meet challenging State academic content standards and...achievement standards.

**Outcome 2.1:** Each school will annually review, revise, and implement a high quality and comprehensive school improvement plan associated with its magnet theme to assist the District in achieving National, State and local reforms, as measured by rubrics designed to rate the plan.

**Percentage of Schools with Annually Updated School Improvement Plans Incorporating Aspects of the School’s Magnet Theme**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	5/5 Yes	5/5 Yes	5/5 Yes
<b>Outcome 2.2:</b> By the end of the grant performance period, all five project schools will meet their annual measurable objectives set by the State for WPS. <i>[MSAP Performance Measure (f)]</i>			
<b>Number of Schools Meeting Growth Proficiency Standards</b>			
	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	2/5	4/5	5/5
<b>Outcome 2.3:</b> Reform-based curricular units for the magnet themes at each school will be developed at each grade level and will reflect challenging State academic content standards and student academic achievement standards.			
<b>Cumulative New Curriculum Units Aligned with Kansas' Standard Course of Study</b>			
	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each elementary project school	6	12	20
Analyzed for each middle project school	7	14	22
<b>MSAP Purpose 3: The development and design of innovative educational methods and practices that promote diversity and increase choices in elementary and secondary schools</b>			
<b>Outcome 3.1:</b> The District will develop and implement innovative educational methods and practices that promote equitable and diverse participation in themes, curriculum, programs and activities associated with each magnet school, as measured by student participation in magnet-themed specials and electives.			
<b>Percentage of Students Participating in Magnet Theme-Related Curricula and Activities</b>			
	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	100%	100%	100%

**Outcome 3.2:** The District will develop and implement innovative educational methods and practices at each project school that increase choices for families as measured by parent survey.

**Percentage of Parents Reporting Satisfaction with Magnet Curricular Offerings**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	50%	75%	90%

**Outcome 3.3:** Annually, there is an increase in the number of parents participating in and supporting innovative educational methods and practices that promote diversity and increase choice, as measured by participation in parent conferences and parent programs.

**Percentage of Parents Participating in Parent Conferences and School Programs**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	75%	85%	95%

**MSAP Purpose 4: Courses of instruction within the magnet school that will substantially strengthen the knowledge of academic subjects and the attainment of tangible and marketable vocational, technological, and professional skills of students.**

**Outcome 4.1:** At each project school, students from the seven major racial and ethnic groups for whom data are statistically significant, meet or exceed state standards in reading/language arts [MSAP Performance Measure (b)]

**Number of Racial Groups Achieving Standards in Reading for All Racial/Ethnic Groups**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Disaggregated by race for each project school	4	6	7

**Outcome 4.2:** At each project school, students from major racial and ethnic groups for whom data are statistical significant, meet or exceed state standards in mathematics. [MSAP Performance Measure (c)]

<b>Number of Racial Groups Achieving Standards in Math for All Racial/Ethnic Groups</b>			
	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Disaggregated by race for each project school	4	6	7
<b>Outcome 4.3:</b> STEM implementation at the project schools shall: 1) be aligned with State standards, 2) reflect community and industry engagement, and 3) demonstrate connections to post-secondary education and careers, as measured by “STEM Attribute” curriculum rubrics.			
<b>% of STEM Attributes Meeting at Least “Prepared” Level *</b>			
	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	50%	75%	100%
<i>* Note: See the Evaluation Plan for a discussion of the STEM Attributes rubrics.</i>			
<b>MSAP Purpose 5: Improvement of the capacity of LEAs through professional development to continue operating magnet schools at a high performance level after federal funding for the magnet schools is terminated.</b>			
<b>Outcome 5.1:</b> Each MSAP school will develop community and business partnerships that will sustain its magnet program three years after federal funding ends, as measured by partners’ documentation showing how partners actively support the implementation of the magnet programs [MSAP Performance Measure (e)]			
<b>Partners Evidencing Active Involvement in Each MSAP School</b>			
	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each elementary project schl	5	7	10
Analyzed for each middle project school	5	7	10
<b>Outcome 5.2:</b> Teachers at each MSAP project school shall implement instructional content and strategies learned through professional development activities, as measured by teacher survey			

and observations of teacher instruction.

**% of Teachers Using Strategies Learned from Magnet-Related Professional Development**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	50%	75%	100%

**Outcome 5.3:** Students at each MSAP project school are taught by highly qualified teachers.

**% of Highly Qualified Teachers at Project Schools**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	100%	100%	100%

**Outcome 5.4:** Teachers participate in high quality professional development programs related to the magnet school program.

**% of Teachers Achieving at Least 50 Hours of Professional Development per Year**

Analyzed for each project school	70%	80%	90%
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**Outcome 5.5:** The school district will evaluate the per-student cost in each project school, as measured by dedicated funding provided to the magnet program by the school district and MSAP. *[MSAP Performance Measure (d)]*

**Per Pupil Expenses at Participating Schools**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project schl	\$\$/pupil/school	\$\$/pupil/school	\$\$/pupil/school

**MSAP Purpose 6: Ensuring that all students enrolled in the magnet school program have equitable access to high quality education that will enable them to succeed academically and continue with post-secondary education or active employment**

**Outcome 6.1:** All students enrolled at magnet schools will participate and interact in diverse curricular activities and will have equitable access to a high-quality education that promotes

academic success and preparation for post-secondary education or employment, as measured by student survey.

**Percentage of Students Reporting an Active Involvement in Magnet Theme Offerings**

	<u>2013-14</u>	<u>2014-15</u>	<u>2015-16</u>
Analyzed for each project school	60%	75%	100%

**A(iii) The effectiveness of the plan for utilizing resources and personnel...**

It is our goal that Project DISCOVER will utilize resources and personnel in the most effective way possible to achieve a reduction in minority group isolation and to significantly revise curricula across the five schools to more fully integrate STEM subjects and knowledge. One way that Project DISCOVER will do this is by utilizing some percentage of pre-existing staff time that is funded by the District and other resources to provide overarching leadership and of the project. Dr. Kimberly Burkhalter, the current Director of WPS’ Office of Equity and Accountability will provide up to 15% of her time to leading various efforts and project management. She will work alongside other leaders and coordinators to make Project DISCOVER a success. See Quality of Personnel for further details. Other resources at the disposal of Project DISCOVER are the dozens of businesses, universities, non-profits and other STEM-oriented organizations in and around Wichita that will be partnering with Project DISCOVER schools to build the capacities of students and teachers alike in STEM subjects.

**A(iv) How the plan will ensure equal access and treatment for eligible project participants who have been traditionally underrepresented...**

Enrollment in Project DISCOVER is open to all children in grades K-8 grade, and the innovative teaching strategies, curricula and student engagement activities have been designed to engage every student, regardless of race, color, national origin, gender, religion, disability or any

other discrimination. All five schools under Project DISCOVER are *already* serving traditionally underrepresented populations as the majority of its students are African American or Hispanic or Latino of any race. Though Brooks is the only pure magnet, enrolling only lottery-based students that can come from any part of the District, all five schools are located in low-income areas and draw predominately minority students. It is our goal that all students that attend Project DISCOVER schools will have equitable access to every educational opportunity offered.

Project DISCOVER staff are trained in CHAMPS (Conversations, Help, Activity, Movement, Participation and Signal) foundations through Safe and Civil Schools and are comfortable with applying these principals to students. All staff are well-versed in MTSS and will use this tool to ensure that students' needs are met, no child is incorrectly identified, and no racial group is over-represented in disciplinary action or referrals for special education services. Well-established grievance procedures will allow parents to appeal actions and decisions they feel are inappropriate. Families and school staff will be expected to support the principles of equal treatment and acceptance of diversity with their children. Parents will be oriented on the policies and measures in place to insure that all students and families are treated equitably.

**A(v) The effectiveness of the plan to recruit students from different social, economic, ethnic, and racial backgrounds into the magnet schools**

WPS and all Project DISCOVER staff hold the philosophy that every child is a prospective magnet school student, and that every parent is their champion. In recognition that most students do not enroll themselves but rather are enrolled by a parent or guardian, Project DISCOVER understands that student recruitment is part and parcel of "parental recruitment". In fact, various research (e.g. Fullan, 1993; Fuller & Elmore, 1996) documents that differential access is a substantial issue, and there is need to educate parents on the diverse school options available to

their children. Parents will enroll their children into competitive, academically rigorous magnet schools if they know that these alternatives exist. The recruitment of high quality staff also plays a role in successful student recruitment, and will thus be discussed further in the section below.

WPS states that Project DISCOVER is open to all children in grades K-8 regardless of their race, color, national origin, religion or disability. As well as students currently attending other WPS schools, targeted recruitment efforts will focus on populations that have left the public schools, and who may currently be attending private schools, home schools, etc. Within the official lottery system, WPS and Project DISCOVER are fully commitment to upholding policies of racial neutrality.

As Brooks is the only pure magnet school out of the five proposed schools, the marketing campaign for this project will concentrate on recruiting from all areas of Wichita relying on the quality of the educational programs available to attract a diversity of student applicants. In offering significantly revised and high-quality magnet programs and launching a targeted recruiting campaign to publicize these magnet school options, Project DISCOVER will prove successful in the prevention, elimination and reduction of minority group isolation.

**Student Recruitment.** Project Dream will employ a full-time (1.0 FTE) MSAP Recruiter that will support the recruitment efforts of all five schools. Recruitment will be a shared function, with both central operations at the District level and each individual school playing an active role. Therefore, the MSAP Recruiter will work alongside such District level personnel as Wendy Johnson, the Division Director for Marketing and Communications for WPS, and will report directly to the Project Coordinator. The MSAP Recruiter will also work in collaboration with school based family engagement teams and leadership teams within each school to broaden recruitment efforts.

As the MSAP Recruiter will work at both the District level and with each of the five schools to develop marketing plans, it is important to note that though each school will create its own flyers and develop unique marketing materials to reflect its specific theme and academic philosophy, all five schools under will carry a like appearance. The marketing plans developed for each school will include magnet brochures that will describe each school's specific theme, how that theme is integrated across the core curriculum and any other special programs offered.

All written District and school materials, including Applications for Enrollment at each magnet school, will be provided to parents in both English and Spanish and possibly other languages, in an effort to address the needs of parents with limited literacy. Regular newsletters will be sent to parents and prospective parents to share exciting developments at each school. Currently, a number of the school websites have a "translate this page" feature that translates all information into Spanish, Arabic, Vietnamese and Chinese simplified.

Specific strategies for effective student recruitment will be developed and constantly revised by the Implementation Team over the course of the project. This comprehensive recruitment and marketing plan will emphasize consistent messages about all five of the magnet schools. Working alongside District and school-level staff, Project DISCOVER's MSAP Recruiter will work with schools to connect with community partners in order to develop community partnerships and raise awareness about the magnet schools. The MSAP Recruiter will also work with schools in order to seek ways to advertise their schools to various organizations within the community. They will work with each school in the design of their booth for the annual Wichita Public Schools Choices Fair and with planning magnet school visitations throughout the school year.

The comprehensive recruitment and marketing plan will help all five magnet sites develop a

clear and concise message about their respective themes, benefits of attending their schools, as well as their vision and academic mission. This comprehensive plan will make use of free and paid publicity, print, digital, and video media; and will include multiple public events throughout the year, for all three years of project implementation. The specific recruitment strategies that the MSAP Recruiter, in collaboration with others at the District and school levels, will employ for Project DISCOVER could include the following:

- Organizing and participating in the District’s annual Choices Fair, a large multi-school magnet fair where all magnet schools provide information to prospective students and parents;
- Coordinating media coverage of the project, including press releases that will include communication on the inclusionary intent of Project DISCOVER and contact information;
- Organizing and advertising Project DISCOVER’s application acceptance period;
- Working with each school to develop brochures, ads, posters, banners, flyers, and organize free publicity, direct mailings, local billboard advertising, televised Board of Education meetings, radio announcements and presentations (in English and Spanish);
- Developing comprehensive websites or updated webpages for each school;
- Produce a video for each school feature it on each school website;
- Designing and producing exciting display booths for use at recruitment events;
- Ensuring that recruitment literature and other materials include information on the inclusionary policies of all five schools and the expressed intent to provide high quality education within racially, culturally and socially diverse environments;
- Ensuring that recruitment materials include information on Project DISCOVER’s intent to prepare students to live and work in a diverse society and to value the uniqueness of

individuals and groups, and that all aspects of the program will model equal treatment;

- Offering personally-guided tours of each school and “open house” sessions;
- Scheduling guest spots on local talk-radio programs;
- Visiting homes and neighborhoods to share about the opportunities available at the five magnet schools, and to provide in-depth information on the program; and
- Networking with local businesses to create a groundswell of community support for Project DISCOVER that will be sustained long after the MSAP grant has come to an end.

The MSAP Recruiter will work to form a local advisory council composed of parents volunteering to help disseminate information and spread the word regarding Project DISCOVER. A parent who will be trained by the MSAP Recruiter in critical magnet school matters including school budgets, bussing, and other issues will chair the local advisory council and share this information with its members. The MSAP Recruiter will meet with the local advisory council at least once every four to six weeks to discuss ideas on how to recruit other parents and students into Project DISCOVER’s five magnet schools. Working in collaboration with the local advisory council, the MSAP Recruiter will also develop one pamphlet that brings together the information for all of Project DISCOVER’s magnet schools so that parents can have an overview of what is being offered and therefore more easily navigate the school selection process.

The MSAP Recruiter will also work to capitalize on one of the most effective techniques for creating interest in Project DISCOVER among students and parents alike – word of mouth. Studies (USDOE, 2004) have shown that teachers, counselors and school administrators that share success stories about their magnet schools within the community have a significant impact on generating interest in their schools. With this in mind, the MSAP Recruiter will ensure that these key people, teachers, counselors and school administrators are prepared to speak

knowledgeably with prospective parents and community members about Project DISCOVER.

To further disseminate information by word-of-mouth, the MSAP Recruiter will work alongside the family engagement team at each site who, among other tasks, will support home to school communication and assist with aspects of recruitment. For instance, with oversight from Project DISCOVER's MSAP Recruiter, the school staff will personally contact and follow up with families that have shown an interest in enrolling their children into the Project DISCOVER's magnet schools. These follow-up visits might include porch and living room visits if the family so-chooses, informational chats over coffee and other non-threatening meeting places. The MSAP Recruiter and those with whom he/she collaborates will contact parents with limited or no literacy by telephone to explain information regarding Project DISCOVER and to offer this as an alternative option. For those families in which literacy is non-existent or limited, the MSAP Recruiter and members of the local advisory council will assist the parent in completing the enrollment application if needed.

**Recruitment of High Quality Staff.** One of the greatest incentives of recruiting and retaining high quality staff is found in research (US Dept. of Education, 2004) that suggests that parents often list the principal as one of the major reasons for choosing a given magnet school for their children to attend. This points to the larger issue of recruiting high quality staff (not only principals) for magnet schools that in turn supports academic quality. Parents, in response, happily enroll their children as a result of the magnet school's reputation for academic rigor. Thus student recruitment is intrinsically tied to the recruitment of high quality staff.

In synthesizing case studies from a number of successful magnet school programs across the United States, the USDOE (2004) identifies that some of the largest contributing factors to successful magnet programs are that of having high quality staff. In fact, in the 2004 study, both

Hamilton County Schools (TN) and Montclair Public Schools (NJ) identify high quality staff as being the number one contributing factor to their magnet school success. According to Hamilton County Schools, the most important factor is, “The right personnel...the District looks for leaders who are passionate, committed, hard working, and capable of establishing a culture of collaboration.” Montclair Public Schools asserts that the critical key to their success is, “High-quality teachers and administrators. Montclair has made it a priority to have well chosen, well-prepared principals working with an integrated staff of well trained, committed teachers.”

Though WPS has a solid foundation of high quality staff to lead and implement Project DISCOVER, any and all professional recruitment for the project will be handled jointly – by individual schools in partnership with the District – and coordinated by the MSAP Recruiter. WPS reserves the right to require that some existing staff reapply in order to ensure that all staff are a good match to each school’s theme and programmatic philosophy. WPS has already built strong relationships with local teacher training colleges and universities with high percentages of minority graduates and have worked to place qualified minority student teachers within a number of the schools. Project DISCOVER’s MSAP Recruiter will continue to maintain relationships with these academic institutions and ensure that information regarding available positions for Project Discover are disseminated.

## **B. Quality of Personnel**

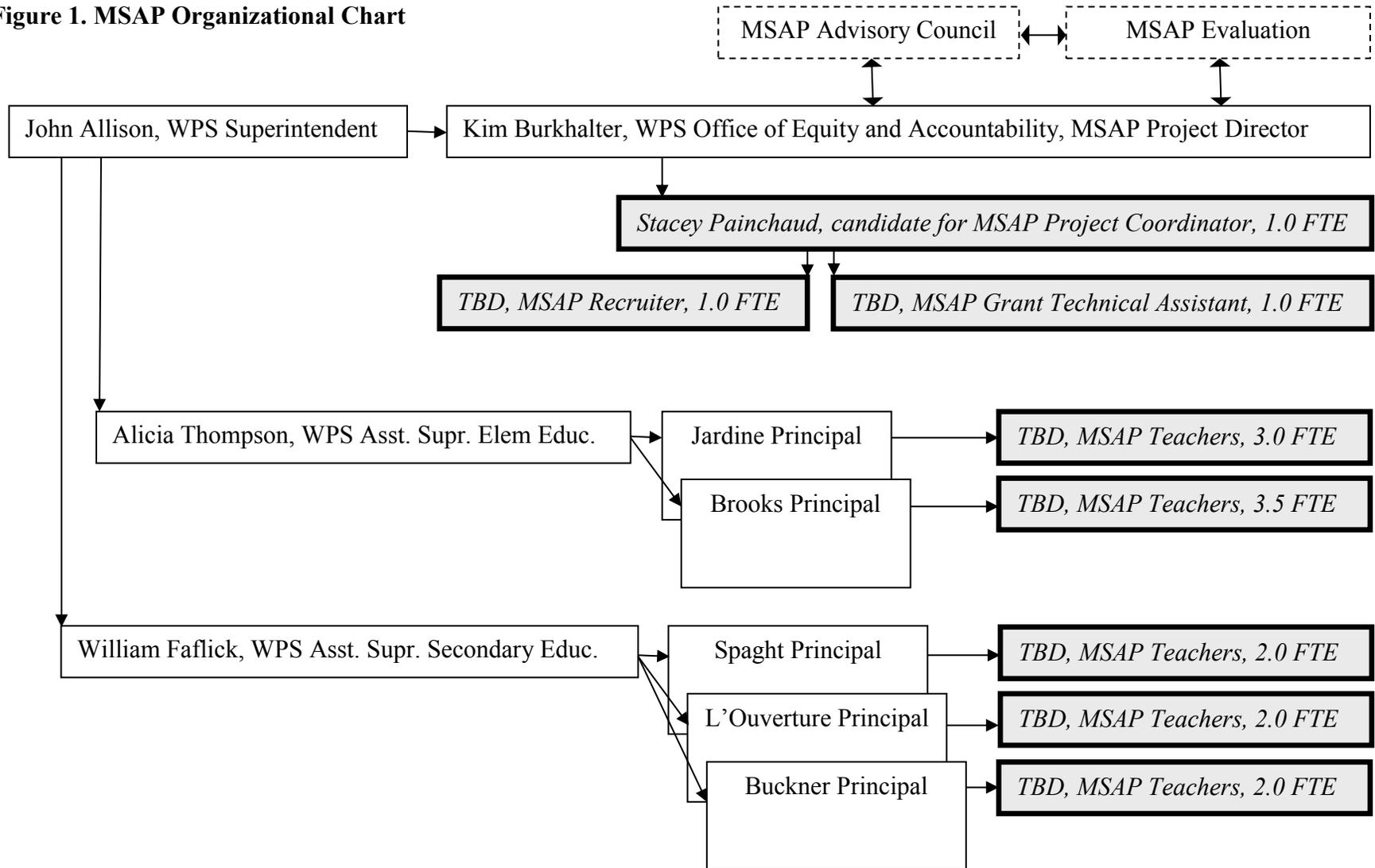
Successful magnet schools attribute their success to a number of factors; from choosing appealing and sustainable themes to cultivating community resources for continued support of the school. Research (e.g., USDOE, 2004; Dentler, 1991), suggests that, “the more critical factor is having teachers, administrators, and board members committed to the theme.” At every level, WPS staff has shown their commitment to significantly revising the five proposed schools.

Project Discover will be led and implemented by a team of exemplary instructional leaders who are committed to reducing MGI while building solid magnet school programs that emphasize STEM. Additionally, to maximize diversity and to more closely reflect the cultural and ethnic identity of greater Wichita, Project DISCOVER will strive to recruit for diversity for all newly hired positions. Our organizational chart depicted in Figure 1 shows how the project leadership will be mutually accountable at the District and school level of the WPS organization.

**B(i) The project director is qualified to manage the project**

Dr. Burkhalter holds a PhD in Education Leadership, an MA in School Social Work, a BA in Social Work and has worked with WPS since 1994. In her current role, she has developed the District professional development curriculum for Cultural Proficiency and works collaboratively with staff members to develop equity and diversity goals, ensuring that these goals are aligned across all areas including but not limited to curriculum and professional development, program and course offerings, as well as student and staff assignment. Dr. Burkhalter assists with program implementation, including working with staff to analyze data regarding student assignment, including the impact of student assignment on the ability of schools to recruit and maintain highly qualified faculty as well as to increase the involvement of students and parents in their schools. Dr. Burkhalter serves on the Magnet Advisory Committee, the Boundary, and the Diversity, Equity and Accountability Committee to determine whether policies and procedures are consistent with the District's equity and diversity goals.

**Figure 1. MSAP Organizational Chart**



Note: Shaded boxes represent positions to be employed on the grant.

Dr. Burkhalter's certifications, training, and association affiliations further demonstrate her preparedness for the Project Director role. She is highly involved in the local community and is a member of many professional organizations including: Positive Connections Mentoring and Tutoring, Wichita Hispanic Community Council on Education, Wichita Special Olympics, Wichita Alliance of Black School Educators, Wichita Urban League, and the NAACP. Her salary will be fully covered by the District, and she will commit approximately 15% of her time to Project DISCOVER. She is an exemplary educator and administrator whose professional background in school and District leadership and management makes her an excellent choice for the role of Project Director. Please refer to the appendices for Dr. Burkhalter's full resume.

Dr. Burkhalter's duties as the Project Director will include: leading the project planning process and project implementation; working with the Project Coordinator to develop strategies and activities; providing support to principals at all five schools; chairing the Project DISCOVER Advisory Council; directing continuous improvement activities throughout the grant cycle and ensuring that the project remains sustainable throughout and after the funding period.

As shown in Figure 1 above, Dr. Burkhalter reports directly to John Allison, District Superintendent. She will advise Superintendent Allison and his administrative cabinet—Alicia Thompson, Assistant Superintendent of Elementary Schools, and William Faflick, Assistant Superintendent of Secondary Schools—on Project DISCOVER developments. She will supervise the Project Coordinator who is charged with carrying out the day-to-day tasks for the project.

**B(ii) Other key personnel are qualified to manage the project**

The following professionals discussed make up the leadership of WPS as well as the accountability structure at the District level for Project DISCOVER. John Allison began his tenure as the WPS superintendent in July, 2009, before which he served for two years as

superintendent of a school district in Pennsylvania and as deputy superintendent for a school district in Texas. Mr. Allison has been appointed to the Education Commission of the States and is a member of the Kansas/Missouri Superintendents' Leadership Forum.

Ms. Alicia Thompson has worked for WPS for the past 18 years, serving as Assistant Superintendent of Elementary Education for the past 7 years, where she leads the work of 60 elementary school principals. As well as serving as a Board member for Leadership Wichita and being a member of the African American Coalition and the NAACP, Ms. Thompson received the NAACP Education Award in 2006 and was the first to be inducted to the W.G. Williams Community Foundation Hall of Fame, a notable community award for African American Wichitans, in 2009. Mr. William Faflick has served as Assistant Superintendent of Secondary education since 2011, where he oversees the work and administration of all WPS middle and high schools. Prior to this, he served as WPS Athletic Director for 12 years. Mr. Faflick also serves as president and member of numerous educational, civic and community organizations.

In her current role as Division Director for Marketing and Communications for WPS, Wendy Johnson oversees recruitment and marketing for District magnet schools, and has done so for 12 years. She develops relationships with local businesses and community groups, creates marketing materials and community presentations, assists school-based committees to create individual marketing plans and markets magnet schools to families, the community, and prospective teachers. With over 25 years in marketing, media, community and education relations leadership, Ms. Johnson was honored with the "Marketer of the Year Academic/Non-Profit/Government" award from the Wichita Chapter of the American Marketing Association, in 2008. Ms. Johnson will support the communication plan through assisting the project leadership to promote the magnet school and recruit a diverse student enrollment.

To manage the day-to-day operations of Project Discover, WPS will employ a Project Coordinator, who will be supervised by Dr. Burkhalter. The Project Coordinator will be a full-time position that will run for the duration of the three-year grant. Stacey Painchaud, the current Project Coordinator for WPS's Project DREAM MSAP grant, is a probable candidate for this position. Ms. Painchaud's experience and resume are discussed here as an example of the type of person that will be employed as the MSAP Project Coordinator.

With over 10 years as a classroom teacher and as an elementary learning and instructional coach, Ms. Painchaud's expertise in curriculum development was critical in developing 2010's MSAP proposal for Mueller. In her current role as the Grant Coordinator for Project DREAM at Mueller Aerospace and Engineering Discovery Magnet, Ms. Painchaud is involved in planning and facilitating professional development with staff K-5, planning new curriculum units integrating magnet themes into K-5 instruction, managing grant budget and audits, facilitating marketing and recruitment and developing and maintaining community partners. Ms. Painchaud's previous experience includes working as an instructional coach, MTSS facilitator and learning coach with STEM magnet schools, and she has a background in assisting with cultural proficiency training at six Title I schools that serve diverse populations. Ms. Painchaud's proven ability to develop curricula across magnet programs, and her experience in team leadership and professional development is a critical competency for the Project Coordinator's role. Ms. Painchaud holds an MA in School Leadership, a BA in Elementary Education and has attended national Magnet Schools of America and National Science Teachers' Association conferences. One hundred percent of the Project Coordinator's time and effort will be dedicated to directing the: a) planning, coordination, and implementation of Project DISCOVER, and b) overseeing the effort to recruit an increasingly diverse student body from outside the five

schools' assigned attendance zones. Additional responsibilities held by the Project Coordinator will include the following: Ensure compliance with Federal, State, local and school District laws and policies; Coordinate staff development training; Assist in managing budget and seeking resources to ensure the grant's sustainability; Disseminate information on best practices, and continuous improvement; Assist program evaluators with data collection, process and outcomes evaluation; Prepare written Federal, State and other reports; and build relations with community agencies in support of the grant and its sustainability.

As previously mentioned, a full-time MSAP Recruiter will be employed on the grant. The MSAP Recruiter will work collaboratively with the Project Coordinator and each school principal; coordinate a comprehensive outreach program to the entire community for the project schools; assist each school in the development of school level marketing and recruitment efforts; provide information to parents, community members and community agencies about the magnet schools' programs; participate in the annual WPS Choices Fair and coordinate the presentations of the magnet schools; develop a plan for recruitment and advertisement in coordination with the District marketing team; and work cooperatively on a regular basis with the Project Coordinator and school leaders. And, a full-time GTA will be employed on the grant to support the Project Coordinator. This position will manage the MSAP budget for the District and the five schools and will possess strong organizational, communication, and technology skills. Please refer to the appendices for job descriptions for the Project Coordinator and GTA.

**School Principals.** The principals at all five schools have over 50 years experience as school administrators. Resumes for the principals are provided in the Appendices.

Brooks: Robert Garner has served as principal at Brooks since 2006 and brings a background in AVID, ESOL and technology leadership to the project. In recognition of his commitment to

educational excellence, Mr. Garner received the Star Implementer for “Professional Development” Award and a Standard of Excellence Award. Mr. Garner’s professional experience includes six years in the classroom and 15 years in school leadership.

Jardine: Lura Jo Atherly has served as principal at Jardine since 2011 and she brings a background in alternative education leadership and AVID programming to the project. Ms. Atherly also served as principal at Blackbear Bosin Academy, a school for academically and behaviorally at-risk students, for three years. Ms. Atherly has worked as a National Trainer at the AVID Summer Institute and as a Title I Resource Teacher and Instructional Coach. Her professional experience includes 11 years in the classroom and 8 years in school leadership.

Buckner: Brandi Flisram has served as principal at Buckner since 2010 and brings a strong technology background to the project. Ms. Flisram’s experience includes six years in the classroom and five years in school leadership. In an effort to magnify Buckner’s commitment to academic excellence, Ms. Flisram has taken advantage of various professional development opportunities that include: Adaptive School Leadership, Data Academy, Kagan training, Behavior Intervention Support Team (BIST) training and Cognitive Coaching.

L’Ouverture: Greg Croomes has served as principal at L’Ouverture for 11 years and brings a background in technology integration to the project. Mr. Croomes has served as a technology specialist, chair of general education support teams at previous schools and currently serves on the District’s Magnet Advisory Council. Mr. Croomes’ professional experience includes six years in the classroom and 13 years in school leadership.

Spaght: Kimberly Sherfield has served as principal at Spaght for six years and brings a combination of technology integration, professional staff and curriculum development and a background in working with Title I schools to Project DISCOVER. Specially trained in Kagan

Cooperative Learning, Adaptive Schools training, Cognitive Coaching and ESOL, Ms.

Sherfield's experience includes 11 years in the classroom and six years in school leadership.

**B(iii) Teachers who will provide instruction in participating magnet schools are qualified to implement the special curriculum of the magnet schools**

The teaching staff at Project DISCOVER schools have decades of combined classroom experience and many hold advanced degrees. The teachers we mention here are only a few examples of the many highly qualified staff at these five schools. Please refer to the appendices for resumes of selected teaching staff at these schools, along with a job description for an Instructional "STEM Integration" Support Lead teacher.

**Brooks Middle School:** Angela John is pursuing an M Ed. in Curriculum and Instruction-Functional Special Education and is certified in TEACCH (Treatment and Education of Autistic and Related Communication-Handicapped Children). She has taught at Brooks for three years and has six years' experience working with children with intellectual disabilities and autism. Clint Dayhuff holds an MBA and covers a multitude of subject areas with his students, including web design, sound recording and mixing, video editing, as well as music and video production. Jaelyn Briggs is an art and math instructor at Brooks, holds three BA's in Arts education and Studio Painting as well as multiple certifications including Pre-Kindergarten-12 Art and Middle School Math. Karen Line, Brooks' Data Leader and Site Technology Specialist, holds an MS in Learning Disabilities, and has a strong background in AVID, usage of technology in the classroom and teaching students with learning disabilities. Wendy Donaldson holds an MA in Educational Administration and is licensed as a Building Administrator. In recognition of her commitment to teaching, Ms. Donaldson has received multiple awards including the Patricia Behring Teacher of the Year Award (History) in 2012 and the Carl D. Knepper Education Award

for Teacher of the Year in 2005-06. Along with these and other teachers, MSAP funding will support hiring another 3.5 full-time equivalent positions: two STEM Integration Teachers, one STEM Instructional Support Teacher, and a half-time Magnet Classroom - Dance Instructor.

**Jardine Middle School:** Lexsea Stickrod has been an ESOL teacher at Jardine since 2009, and holds two BAs—in TESOL and Spanish. Ms. Stickrod’s strong background in ESOL as well as her time spent studying in Chile and China will contribute to Project DISCOVER’s goal of increasing diversity at Jardine. Michael Williams has taught Leadership through JROTC since 2006 and has been an AVID elective teacher since 2010. Mr. Williams’ Leadership JROTC Leadership program is Jardine’s #1 elective, while his AVID program has set the standard for program feeder patterns with high schools in the District. Stacy Malicoat holds an M. Ed. in Curriculum and Instruction, has a strong background in implementing AVID and has been an ESOL specialist for 13 years. Brandi Miller brings a background in cultural proficiency and ESOL certification to Project Discover, and holds an MA in Curriculum and Instruction. Brenda Kuhns-Lingle holds certifications in science and math, as well as an MS in Aviation and Aerospace Education. As a Site Technology Specialist with 7 years of experience teaching science, Jesse Milne holds an MS in School Leadership and an MS in Environmental Science. Along with these and other teachers, MSAP funding will support hiring another 3 full-time equivalent positions: one Magnet Program Facilitator, one STEM Integration Teacher, and one Career Exploration Integration Teacher. Since Jardine is completing the most significant theme change with the addition of two integrated themes, the Magnet Program Facilitator will lead these efforts and oversee the project at the building level. The two full time integrations teachers will consist of a STEM Integration Teacher and a Career Exploration Integration Teacher. The STEM Integration Teacher will bring a background in STEM instruction and curricula in order to

assist teachers in creating STEM based units of instruction. The Career Exploration Integration Teacher will assist teachers in making connections to careers within their newly created units, help ensure curriculum is relevant for students and help organize virtual and actual field trips for students to engage in other practical ways with their STEM and career based units.

**Buckner Elementary School:** Denise Jackson-Simon has taught drama and language arts at Buckner for 23 years and brings a wealth of experience in the connections between science and the performing arts to Project DISCOVER. Kathleen Travis is a Technology Master Teacher, holds an MA in Elementary Education and is currently studying for Special Education. Lucas Rodriguez has been Buckner's Site Technology Coordinator for 13 years, has significant computer and technology education and holds an MS in Curriculum and Instruction. Sarah Walden brings a strong background in integrating kinesiology, anatomy, physiology and other science-based curriculum into the performing arts. Sondra Witsman is certified in ESOL and Gifted, has a strong background in foreign languages including French, and holds an MA in Curriculum and Instruction. MSAP funding will support a full time Arts Integration Teacher as well as a Science Integration Teacher. The Arts Integration Teacher will work with classroom teachers to help them integrate the arts and multiple intelligences within their lessons for core curriculum. Integrated units may include dramatizations and integration of music and art within language arts and math lessons. The Science Integration Teacher will work with teachers to integrate inquiry and teaching science within the arts.

**L'Ouverture Elementary School:** Jennifer Nicholson has been L'Ouverture's Technology Integration Specialist and Site Technology Specialist for six years, and has a background in teaching Adobe graphic design software, podcasting, blogging and other technologies in the classroom. Monique Brown holds an MA in School Leadership, and an MA in Curriculum and

Instruction with an ELL Concentration and brings strong AVID and technology experience to this project. Rhonda Willome is a veteran Special Education teacher, is certified in ESOL, has been trained in Behavior Intervention Support Teams, Cultural Proficiency, and CHAMPS and holds an M. Ed. in Educational Psychology. MSAP funding will support a full time Technology Integration Teacher and a full time Career Exploration Integration Teacher. The Technology Integration Teacher will co-plan and co-teach with teachers to assist them with creating integrated technology units and increase student use of technology in all subjects. The Career Exploration Integration Teacher will help teachers plan social science units teaching social studies and science lessons through project based learning. The social science units will integrate technology and will culminate with connections made to careers. Speakers from different careers will be arranged by the Career Exploration Integration Teacher making connections clear for students between the units and possible careers associated with their learning.

**Spaght Elementary School:** Amanda Amador holds an M. Ed. in Curriculum and Instruction, is currently enrolled in an ESOL Endorsement Program and brings a solid understanding of multimedia education to the project. David Bost is the assistant principal at Spaght, has a strong background in ESOL and FOSS and holds an MA in School Leadership. Julie Ronk is Spaght's Technology Integration Teacher and Site Technology Specialist, has a strong background in technology integration and is currently pursuing an MA in Curriculum and Instruction with an ESOL endorsement. Kimberly Schmidt's experience includes differentiated instruction for ethnically diverse student populations, as well as implementation and use of Systematic Instruction in Phoneme Awareness, Phonics and Sight Words (SIPPS). Melissa Lent has strong experience in multimedia technology integration across math and science curriculum. Along with these and other teachers, MSAP funding will support hiring another two full-time

equivalent positions: one Science Integration Teacher and one Communications Integration Teacher. The Science Integration Teacher will help teachers plan science lessons using state science standards, gather science materials and co-teach science lessons with teachers. The Communications Integration Teacher will support the integration of communication strands through the use of a communications classroom, which each class will visit once a week. The lessons taught within the communications classroom will connect with the integration of communications within the regular classrooms through collaborative planning.

**B(iv) The applicant...will ensure that its personnel are selected for employment without regard to race, religion, color, national origin, sex, age, or disability (1 pt)**

WPS Board of Education's Equal Opportunity Employment policy (2005) states, *"Employment for each specific vacancy shall be offered to the individual judged best qualified for the position with no discrimination with regard to race, color, religion, sex, national origin, or age, or persons with disabilities."* WPS will ensure that all hiring for the MSAP grant is rigorously aligned with this policy. In addition to the necessary professional background and educational qualifications required for these positions, WPS will also take into consideration life experience, ability to speak additional languages, and STEM talents held by applicants, among other attributes. WPS will ensure that the diversity of WPS staff reflects that of the community.

The BOE will work closely with the Diversity, Equity and Accountability Committee and other groups to ensure that its personnel continue to reflect a professional, equitable and diverse work environment. Beyond staffing policies, the Diversity, Equity and Accountability Committee (2009) will, *"provide recommendations and advice to assist the Board in achieving its goals to promote a broad-based diversity among students recognizing all facets of diversity, including, but not limited to race, ethnicity, culture, age, gender, sexual orientation, language,*

*socioeconomic status, religion, disability, skill level, and life experience.”*

### **C. Quality of Project Design**

Four of the five schools in Project DISCOVER are neighborhood magnet schools that had experienced success in the past, but are in need of significant revisions to redefine their uniqueness. The fifth school, Brooks, is a “pure” magnet, meaning that the entire student body is drawn from the lottery; this school is also in need of significant revisions to its magnet theme. For all schools, there is also a need to improve academic rigor and a need to reverse a pattern of increasing racial, ethnic, social and economic isolation as a result of the end of school busing in 2008. The revised themes of these five schools will unify diversified stakeholders while increasing academic rigor through STEM disciplines. The elementary schools will all include technology and science integration and the middle schools will include all STEM disciplines. Project DISCOVER includes the following five schools and their significantly revised themes:

- 1. Brooks Center for STEM and the Arts Magnet Middle School** – delivering collaborative project-based learning of the arts, District curriculum and STEM disciplines with community partners Wichita State University School of Engineering, Wichita Arts and others.
- 2. Jardine STEM and Career Explorations Magnet Middle Academy** – delivering collaborative project-based learning of District curriculum and STEM disciplines with connections to careers, leadership skills and community partners City of Wichita and others.
- 3. Buckner Performing Arts and Science Magnet** – delivering interdisciplinary project-based learning of the arts, science, District Curriculum, and Howard Gardner’s MI with Wichita Arts, Wichita State University College of Fine Arts Institute and other partners.
- 4. L’Ouverture Career Exploration and Technology Magnet** – interdisciplinary project-based learning of science, social studies and technology through career exploration modules with

Wichita State University College of Education, Golden Age Club and other community partners.

**5. Spaght Communications and Science Magnet School** – integration through project-based learning, science, communication forms for listening, speaking, reading and writing augmented by technology, and District Curriculum with AKA Sorority, Bigs in Schools, YES (Young Engineers and Scientist) after school program and other community partners.

**C(i) Promote desegregation...increase interaction among students of different social, economic, ethnic, and racial backgrounds**

WPS District, the largest in Kansas, is a District of choice, using research-based desegregation strategies including: successful implementation of magnet schools, parental choice in school selection, providing transportation District schools for families, supporting schools' targeted recruitment strategies, researching and supporting professional development to schools for heterogeneous grouping, collaboration, project-based learning, development of cultural proficiency competence, career and college ready culture, tiered student support for all students, and a data-driven blueprint for change resulting in increased diversity and academic achievement at all District schools. Meaningful desegregation is Wichita's district-wide commitment to improve academic achievement for all students and diversity in every school and classroom.

**Promoting desegregation:** As Wichita is a District of choice, parents are encouraged to make school selections based upon what best fits their child's particular needs and interests. Magnet schools are important to the District as they provide school choice to parents who in turn report how much they appreciate these choices. Provisions for transportation for students from across the District, supports targeted recruitment strategies.

**Research-based initiatives:** The Ed. Government sponsored website description of successful magnet school characteristics was applied to District level data analysis of diversity

patterns and supports the following strategies in order to reduce minority group isolation:

Developing and supporting magnet schools with themes that are visible and deeply embedded into the curriculum; Advancing academic rigor through theme-based curriculum alignment (STEM at middle schools and science at elementary schools in this project); District Common Core curriculum integrations engaging student learning through themes; Recruiting for parent involvement and community volunteers; Holding frequent celebrations of learning with student performances; and integrating technology on a daily basis in curricula. The success of the 2010 Mueller Aerospace & Engineering Discovery Magnet DREAM project is both evidence and motivation to the five schools applying for this MSAP grant. The significant revitalization of these schools will include successful strategies used at Mueller Aerospace Magnet School and other magnets with similar themes in the United States. All schools will maintain fidelity with District-wide reform, by keeping all staff current through professional development for Cultural Proficiency competency, using Professional Learning Communities (PLCs) for continual progress monitoring of student achievement; developing a K - 8 college and career readiness through AVID and Project Lead the Way professional development; developing interventions within the modules, electives and units to support MTSS system for students' academic success; and maintain a safe and orderly school culture motivated to learning using CHAMPS and building based management plans based on MTSS.

The District has reviewed its recruitment efforts to attract students to attend District magnet schools, including but not limited to: encouraging personal tours for prospective students' families, increasing exposure of the school's unique themes over local broadcast networks and using data from successful school recruitment for all schools. Results from District magnet schools with long waiting lists provided information about the importance of a school's culture.

Parents report that they like a school to share the same expectations – high academic achievement, respect, responsibility and effort. Research supports the positive relationship between a strong school culture and academic achievement. During the process of revising themes, this proposal’s five magnet schools were mindful not to remove the popular themes of their schools. Instead, the principals and leadership teams strengthen their school culture through embedding rigorous academics into the recognized theme.

**Increasing interaction across diverse groups:** WPS is aware that diversity at every school cannot be forced upon the community, as mandating this may not necessarily work. Rather, the District is addressing the increased interaction of students from different social, economic, ethnic, and racial backgrounds as a journey, with a plan using researched characteristics for increasing interaction among students as the framework for the revised magnet schools.

**Heterogeneous grouping:** The five magnet schools will increase the interaction across diverse groups by using Spencer & Kagan’s Cooperative Learning professional development training to prepare teachers to guide students in information sharing through tools such as Carousel Feedback, Round Table, Stand Up, Hand Up, Pair Up, Team Stand-N-Share and Timed Pair Share. Other domains of Cooperative Learning are class building, teambuilding, thinking skills and communication skills for group sizes – group, teams and pairs. Students will be provided behavior and learning expectation guidelines for each setting with CHAMPS.

**Project-based learning:** The theoretical foundation for project-based learning lies in Constructivist Theory. The classroom is characterized by a teacher guiding the learning process through projects, rather than the traditional model of lecturing from the front of the room. This approach to acquiring knowledge includes students learning and using strategies similar to those in STEM careers – ask, imagine, draft, create, test and adapting their projects. Problem solving

interactions, a researched characteristic of engaging diverse students, is at the core of project-based learning and is supported by cooperative learning and CHAMPS behavior expectations.

**Collaboration** will be built between students, schools and families, community businesses, churches, organizations and is a researched characteristic of increasing interaction in schools across diverse groups. Collaborating on a project with other students deepens understanding of each other through social interaction. Collaboration with parents to provide frequent encouragement and attend celebration for their child's learning is critical to a school's success. Each school will reach out to parents to be involved in their children's education using school events, electronic communication, frequent educational presentations by the students and opportunities for parents to share in the learning activities with their children.

Forming partnerships with the community provides a broad connection between stakeholders and supports change in both the District and the school through working together for the benefit of children's learning. Partnerships will increase in numbers as project-based units are developed. Project DISCOVER is discovering the wide range of Wichita businesses ready and willing to become partners in STEM disciplines.

**Support for learning:** Another strategy for attracting all racial, social, economic and ethnic groups is support for learning. All schools provide support for learning through Kansas-MTSS differentiated interventions and follow Cultural Proficiency competence guidelines. Additional support for students' learning will include educating parents on opportunities for STEM-related careers through the District Career and Technical Website, videos and face to face meetings arranged by the schools and MSAP Recruiter.

Support for students' learning is embedded within the project-based activities, which include: modeling, manipulatives, and grouping patterns to provide language support, visual cues, visual

presentations, multimedia, Bilingual dictionaries, word bank, structuring wait and processing times, connecting students' prior knowledge and providing immediate feedback.

**Blueprint for change:** A culture of diversity within the schools and community is built over time following theory of change. Our Plan of Operation follows a theory of change through (a) using a goal-setting process supported by data, (b) defining non-negotiables for achievement and instruction, (c) monitoring District and individual goals for achievement and instruction, and (d) defining a school's level of autonomy.

**C(ii) Improve academic achievement for all students...the manner and extent to which each magnet school program will increase student academic achievement...**

All five schools embed the District non-negotiables (K-MTSS and Tiered interventions; AVID, Safe and Civil Schools/CHAMPS, Core Curriculum, Cultural Proficiency) reforms for increasing student achievement. The schools in Project DISCOVER exercised autonomy, under the leadership of principals and leadership teams, for their theme selection, signage for their theme and instructional design to deliver an increased rigorous curriculum. Leadership teams reviewed their students' academic and behavioral data as part of creating their project based learning design with an emphasis on science, technology, engineering and mathematics.

Instructional design at Brooks and Jardine takes into consideration; (1) their students' interest in future pathways to college and careers, (2) how to increase students' engagement with the STEM disciplines throughout the day, (3) efficient use of current technology in all classrooms, and (4) providing after school experiences in STEM. The three elementary schools' design is centered on; (1) efficient use of current technology, (2) increasing amount of student engagement time in science, (3) increasing behavior management consistency using CHAMPS and MTSS guidelines with fidelity, and (4) recognizing and celebrating multiple intelligences through performances.

**Professional Learning Communities:** WPS is devoted to advancing student achievement. Ongoing collaboration amongst staff to address curriculum, instruction and assessment is a characteristic of schools that improve academic achievement for all students. The Project DISCOVER leadership teams have designed the professional development needed by their schools' staff to deliver STEM and science in every classroom, every day and use multiple instructional strategies. Much of the schools' information about their students is collected through data (e.g., numbers, percentiles), but not all. PLCs, professional development times and team times provide teachers time to talk specifics about their students' achievement successes and struggles with specific standards, to share strategies that work and to create powerful project-based activities based on both the formal (data) and informal (teacher to teacher) student information. Excitement about engaging with teachers from schools with similar themes is a catalyst for all the hours needed to create, deliver, revise and assess projects to support the Core Curriculum and STEM subjects.

**Support for teachers in non-ability grouped classes:** Support for teachers in the non-ability grouped subjects occurs daily through MTSS interventions included in the project-based learning activities. Tier 1 and 2 interventions are part of the project-based activities and delivered through differentiated and scaffold activities. Intervention teachers and para-professionals at each school support the regular education teacher during the intervention times by providing instruction to identified Tier 3 students and through collaboration. The Tier 3 interventions involve pulling students out of the larger peer groups and instructing them in smaller groups with teachers trained in the use of research-based literacy programs. All three tiers include progress monitoring and collaboration with regular education teachers.

**Increasing engagement behaviors, motivation to learn and positive behaviors:** All

schools noted concerns with student engagement, behaviors, and motivation to learn.

- Cultural Proficiency competency: District teachers have all received a level of professional development in Cultural Proficiency competency, though with each demographic change in a school's student body, a cultural audit is needed. All schools will use an observation tool, such as the one suggested by Bustamante and Nelson (2007). The audit collects evidence and documentation that pertain to a number of domains and are measured against the following litmus: 1) The school Mission and Vision Statements includes global citizenry; 2) Literature selections reflect a variety of cultural perspectives; 3) Linguistics and content are addressed for second language learners, gender equity and portrayal of disabilities; 4) A variety of prospects exists for all students to take on leadership and community engagement opportunities; 5) A process exists for new students to have the opportunity to adapt to the school; 6) Teachers and PLCs represent diverse groups; 7) Professional development includes scaffolding; 8) Researched strategies account for a variety of learning styles; 9) Prior knowledge is included in units; 10) Parent involvement programs exist for all cultures; 11) Global ties are established through partnerships; 12) Conflict management procedures are in place; 13) Measures of student achievement include authentic assessment; and 14) Celebrations of learning reflect all cultures.

- AVID: The District middle and high schools have ongoing training and use Advancement Via Individual Determination (AVID) to improve and support student engagement in rigorous learning and to create a college-and career ready culture. The AVID school-based facilitator also trains local college tutors to work with middle school students, and holds Family Workshops to increase parents' knowledge of careers.

At the elementary schools (Buckner, L'Ouverture and Spaght) training in AVID will begin in the summer of 2013. AVID promotes learning by writing inquiry, collaboration, organization,

and reading, is complementary to and supportive of developing communication skills needed in the project-based activities. AVID's theoretical underpinnings in constructivist theory promotes students' engagement with deep learning, discovering the power of their intellect and enjoying the process (Marzano, Pollack, Pickering, 2001), and are a good fit with all five schools by addressing staff concerns of low student motivation to learn.

- *Project Lead the Way*: A project-based activity-learning curriculum with a focus on engineering is used by the two middle schools. Business and community mentors provide career exposure and relevance. Project Lead the Way is delivered using tutors and mentors during or after school.

- *Randy Sprick's Safe and Civil Schools*: This includes school-wide (Foundations), classroom (CHAMPS), and individual levels (Intervention) and is customized for special education. All five schools use strategies outlined by *Safe and Civil Schools* in their classroom, and the CHAMPS charts are used for each location in a school. The *Safe and Civil Schools'* consistency in expectations for learning behaviors will positively impact teachers' classroom management of behaviors and will lead to increased student engagement.

**SWD and ESOL student support:** The District supports Students with Disabilities and English Language Learners programs by actively recruiting highly qualified staff, including professionals who work with SWD and ESOL professional development, and by utilizing curriculum that is proven to maximize student success. All regular education teachers support SWD and ESOL students through differentiated and scaffold instruction and process monitoring. Some classes, at all five schools, use the inclusion model of a regular and special education teacher being in the classroom, delivering instruction in a co teaching model.

Teachers and administrators routinely provide feedback to the IEP for students with

disabilities through IEP team meetings and include information for instructional, behavior or assessment accommodations. Special education teachers maintain progress monitoring data as to the degree the special education student is succeeding in the regular education curriculum and adjusts the types of supports and instruction to increase success. Parental involvement increases in importance in middle school with a SWD transition development plan – transitioning from school to postsecondary settings of work, college, training, and careers.

Support for ESOL students in the regular classroom includes strategies from the shelter instructional model. This instructional model includes clearly stated objectives, emphasis on vocabulary in core curriculum, concept clarity through a variety of techniques, opportunity for using language to interact and clarify key concepts, and continuous progress monitoring.

All five schools have teachers with ESOL endorsement who provide strategies to regular education teachers, particularly for vocabulary development in the content areas of science, mathematics and social studies for students who are learning English as their second language.

Each school's design description is organized by four characteristics that encompass the attributes of successful magnet schools with pre-existing resources, and include: A) Innovative practices through integration of the magnet theme and District Core Curriculum; B) Staff and Curricular Coherence; C) Parent and community involvement, and D) Student Engagement.

### **Brooks Center for STEM and the Arts Magnet Middle School**

Brooks has a history of being a strong performing and visual arts program, and is known for being the first technology middle school in the District. Students at Brooks Center for STEM and the Arts Magnet Middle School will continue to produce two major performances each year, win Flight Challenge Technology awards and take pride in being the only District middle school with both a dance and drama department. Now, they will draw further attention as a fully

implemented STEM Middle School.

*A. Innovative Practices:* Brooks has expanded its project-based learning through integrated units. An integrated unit delivered during Language Arts will connect literature and expository reading to STEM content areas and include creative expression such as Poetry Café and Readers' Theater performances. Brooks' STEM education will exemplify the axiom, "the whole is truly more than the sum of its parts", through technology supported performances and informances to summarize and showcase what they have learned.

Meaningful design technology integration will support project-based learning with a visual connection. For example, school achievement data from Flight Challenge projects indicates the ESOL population at Brooks has demonstrated significant achievement gains on science and mathematics standards through their project supported with a visual connection. Project-based learning at Brooks using Paxton/Patterson Action Labs deepens STEM by alignment to include science, technology, engineering and mathematics and District Common Core standards in each science lab class. The Arts performances will expand to include informances by students, providing multiple avenues for creative expression for Brooks students.

*B. Staff and Curricular Coherence:* Professional development at Brooks for project-based learning will provide teachers the tools and resources needed to support students who need interventions in order to be successful. Each project-based activity integrates technology, engineering design, virtual learning, authentic assessment and differentiation activities for the curriculum standards it addresses. Additionally, the ability of the individual project-based activities to offer success for all students will be evaluated by staff during PLCs, PDs and team times. The PLCs will be composed of staff from different departments to combine their knowledge while evaluating the project's impact on learning for all students. For example, by

expanding exposure to science, technology, engineering, mathematics, and the fine arts, students with Autism who are served primarily in the Brooks Autism classroom will work to develop skills towards more independent living. Weekly cooking lessons, as part of an IIUS, will develop math and science concepts as student's measure and melt ingredients, and engage in other cooking activities. Within the area of technology, students will learn construction techniques for building houses and designing bridges. All students will develop an understanding of how these subjects all tie together. The two STEM Integration Teachers at Brooks will provide leadership in (1) integration of STEM and (2) integration of the arts. Brooks will also have a half time Magnet Classroom - Dance Instructor to provide the staff needed for 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade arts integration. The last additional MSAP is a STEM Instructional Support Teacher to assist classroom teachers in the science lab.

*C. Parent and Community Involvement:* Parent volunteers and community partners (Arts Partners, WSU College of Engineering, etc.) will collaborate with students to create and update Brooks' visual representation of its magnet theme. The outdoor entrance will include sculptures, informal seating, and designs that identify STEM and the Arts. Inside, there will be a large TV monitor to showcase upcoming events, display celebrations of students' learning with images of classroom and lab investigations using technology and the performing arts. Staff, students and community partners will develop TV informances to run continually throughout the day.

*D. Student Engagement:* Students' projects will be shown throughout the hallways and identify the team for 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> graders by their STEM and Arts displays, mottos, and informances. Students in graphic arts will create colorful signs for their teams while art students decorate the school Mascot to advertise upcoming events. During the day, students' engagement in project-based learning will be strengthened through finding solutions to real world problems.

The different learning environments will range from classrooms, laboratories, stages and computers, indoors and outdoors. Peer and teacher collaboration will support active engagement. Brooks' goal for all students is to have multiple opportunities to perform using principles of engineering, graphic arts software, and other technology tools (both live and digital). The AVID and Project Lead the Way teacher/facilitator will support all students in choosing their STEM electives in order to be ready for high school and college careers in STEM-related fields.

### **Jardine STEM and Career Explorations Magnet Middle Academy**

Jardine STEM and Career Explorations Magnet Middle School has high parent involvement and school pride. The school has staff with expertise in science, technology, engineering, mathematics, leadership and ESOL endorsements to guide the school's STEM and college/career explorations theme. The innovative practices designed by the leadership team will give all teachers the tools to integrate STEM into their content or elective teaching responsibilities.

*A. Innovative Practices:* Students will receive instruction through integrated project-based modules. All modules will be treated as living documents with revision adaptability for movement of the STEM Core Curriculum Standards between modules and include additional connections—career and community—in the modules. An example of Jardine's modules for 7<sup>th</sup> grade involve: (Science and Technology) virtual field trips to planets; (Technology, Social Studies and Language Arts) creating power point presentations of scientists from the field of Astronomy; (Engineering and Careers) exploration of aerospace, environmental, and biomedical careers; (Mathematics) mapping and measuring, exploring the weight of objects on other planet's conversion tables, (project-based activity) exploring lunar maps, performing gravity experiments, edible solar systems, tracking sun spots and orbiting system models; (Community and Partners Connections) trips to Lake Afton Observatory, Kansas Cosmosphere and Space Center in

Hutchinson, and NASA (virtual), Museum of Science and Industry in Chicago (virtual).

Determination of module revisions will be guided by student achievement, interest and information from community partners. The leadership team has selected materials to increase rigor in STEM subjects, increase student engagement and improve students reading comprehension. Some of those materials include Anodes/Electro Backpacks, Paxton Patterson Labs, Lego Robotics, Seeds of Science Literacy Program and GeekDad books. The school has redesigned space at the school to include space for STEM Exploration and module instruction.

*B. Staff and Curricular Coherence:* Jardine will use staff development to increase content knowledge of STEM subjects for all teachers, integrate modules using current and new technology tools and careers. Teachers will participate in technology and ESOL training to update their certifications in both subjects either onsite or through ESSDACK online workshops. Jardine will continue to review and practice professional development District programs with successful strategies for increasing student engagement, achievement and leadership including: AVID, Project Lead the Way, CHAMPS, ESOL sheltered instruction training, Cultural Proficiency, Kagan & Kagan's Multiple Intelligences (MI) and Spencer & Kagan Cooperative Learning. MI provides information on preferences, skills and careers through engaging activities. Leadership for these innovative practices will include three MSAP-funded positions: one Magnet Program Facilitator, a STEM Integration Teacher and one Career Exploration Integration Teacher.

*C. Parent and Community Involvement:* Jardine has developed an incentive program to have students whose parents attend events. The AVID Teacher/Facilitator holds parent information meetings at school about academic courses, career options for students and ways to improve behavior and increase learning in children. Parents are also invited by teachers to volunteer for

athletic events, academic events and to help teachers on class projects. Jardine will expand parent involvement using student project “performances” and increase the use of technology in connecting with parents through email, the school website and local TV broadcasts.

*D. Student Engagement:* Support from Community partners such as TRIO for mentoring and tutoring students will occur throughout the year. Project Lead the Way, fieldtrips and professional partnerships with Chapel Hill Methodist Church and Communities in Schools will provide tutoring and mentors to students at Jardine. Academic engagement will increase project-based activities in the STEM subjects. Meaningful technology integration will increase student engagement with a school-broadcasting program, interactive websites such as Careership, Citizens as Scientists, fieldtrips – virtual and onsite, and support for STEM through the reading programs such as Seeds of Science/Roots of Reading. Jardine will expand its Buddy system for new students to increase their information about the ‘unwritten culture’ of the school routine.

Engaging MI activities created by staff will link to careers by including career information on what attracts a person to one of the eight intelligences. For example, Logical/Mathematical Intelligence is strong in individuals who are attracted to numbers, relations and problems and those respective careers.

### **Buckner Performing Arts and Science Magnet**

Buckner will merge the performing arts (dance and drama) with laboratory-based science, and Multiple intelligences (MI) integrated units.

*A. Innovative Practices:* Buckner’s popular Performing Arts Program will expand to make science come alive with guides for arts and science. The entrance hall showcases performance clips and advertises for upcoming performances. The hallways and galleries are filled with arts and science projects made by students. Doors lead out of the classrooms and halls to a garden

and an amphitheater, expanding the arts and sciences classroom walls to the outdoors. The garden area includes a storage shed, workspace, tools and chairs for students and parents to use.

The theoretical foundation for all project-based activities will be MI. The seamless integration with the arts and sciences will take place with students participating in hands-on activities throughout the day – building models, designing board games, using dance routines to present science problem-solving processes, creating one act plays around a science experiment with students’ exploring different learning strengths or preference. Kindergarten will explore The Art of Science using artistic 2-D expression in lines and shapes, computer generated pictures and smart board painting; 1<sup>st</sup> grade will explore Physical Education, Nutrition and Food Science using Bodily Kinesthetic Intelligence with Family KINECT/Wii Night, Scrap book/Cookbook, Healthy Bodies Make a Better Performer and Skeletal Muscles projects; 2<sup>nd</sup> grade will explore Creative Arts and Nature/Environmental Science using Visual-Spatial and Naturalist Intelligences with a Courtyard Garden, DJS Found Material Re-purposed Art, Animal Habitat, Bugs and Seasons projects; 3<sup>rd</sup> grade will explore Music and Mood through Social Sciences using Musical Rhythm and Interpersonal Intelligence with band and woodwind instruments and Historical Musician reports; 4<sup>th</sup> grade will explore dance and motion, Gravity and Force with a focus on Skeletal/Muscular through Bodily & Kinesthetic Intelligence with Physics-4-Kids website activities and Leap Tall Buildings activity; and 5<sup>th</sup> grade will explore theater and technology through Linguistics Intelligence with a power point poetry slam, Clay animation, Lego Robotics and film making projects. MI improves acquisition of knowledge through personalizing curriculum standards, rather than standardizing “one size fits all” learning.

*B. Staff and Curricular Coherence:* Professional development for the staff will begin with a theoretical foundation of MI as a differentiating instruction tool (Gangi, 2011). Buckner will

incorporate the eight MIs through centers, simulations and presentations. Each project-based learning activity will be dedicated to one of these intelligences and simulations will permit the students to experience learning concept through technology. Teachers will also learn to introduce new concepts through multiple entry points, increasing the likelihood of activating the prior knowledge of more students. Activities that use multiple entry points result in students arriving at an understanding in a variety of ways, which broadens their prior knowledge for future learning activities. Buckner will use their Arts Integration Teacher position to guide the development of the integrated units. A Science Integration Teacher is in place to deliver science lessons, provide support to classroom science lessons through coaching, and to order materials to build the media collection, both paper and electronic, to support units at each grade level.

*C. Parent and Community:* The platform of MI for integrated units will interest parents who want to bring their children to a school that explores all kinds of intelligences. A new black box theater welcomes parents to performances throughout the year and affords them opportunities to take part by assisting with costumes, props, advertising and getting the word out into the community about the performances. Buckner will work in coordination with Arts Partners, a local organization that integrates arts into core instruction. Local artists will visit classrooms to demonstrate how artistic expression integrates into the core curriculum.

*D. Student Engagement:* The infusion of MI activities in each unit supports the school's belief in, and recognition of, all types of learners and levels of giftedness. Excitement for learning is increased while exploring concepts in science with others who have similar intelligence strengths and crosses gender, social, economic and racial lines. Students will experience more personal academic growth when their intelligence strengths are recognized and included in daily learning. Students with Disabilities and Speakers of Other Languages have

accommodations to address their learning style or intelligence. By instructing using MI, accommodations are often met within the regular classroom with no extra supports required. Students' self-confidence as learners has been found to increase when instruction is diversified using MI as students are proud to be celebrated for the diverse ways in which they learn.

### **L'Ouverture Career Explorations and Technology Magnet**

L'Ouverture is a significantly revised computer technology magnet school where the classroom walls are windows that lead to the world outside and students study careers for the 21<sup>st</sup> century and understand how technology supports and underpins those careers.

*Innovative Practices:* L'Ouverture will expand the number of integrated modules from 3 to 5 per week for all students. The modules will be project-based integration of science and social studies standards, Core Curriculum and technology. Based upon improving achievement research through the presence of a professional library media specialist, the library media program will be part of the module's daily rotations, including a new E-books collection with titles supporting Science standards for each grade level. Four Cytek (electronic) learning stations in the media center will accommodate an entire class for their media rotation but will also be available to teachers for flexible scheduling as projects come up that require additional time using the Cytek learning stations. All students will receive online keyboarding instruction through District approved keyboarding software and all classrooms will be outfitted with auditory augmentation speakers to improve students' auditory reception of information. A Technology Integration Teacher will facilitate module development and co-teach the Media Module rotation with the media specialist. The Multipurpose space in the school will be equipped with a podium, speakers, and projector for performances for the student body, Physical Education, evening parent engagement activities and professional development for staff.

Students will wear badges that symbolize the future career they are interested in pursuing. Modules will integrate science, social studies and technology. For instance, a Kindergarten module may revolve around the local community (visits with firemen and exploration of local geography, goods and services). Modules will be on three-week rotations so there is an efficient use of resources in grades K-3. Ribbit Computers, a Wichita business partner, will work with grade levels to co-teach the publication modules. The students will have five days per week of using Windows DELL tablets and maintain a school ratio of two students to one tablet. Smart Tables, for children to collaborate will be in each primary classroom. A Career Exploration Integration Teacher will facilitate the careers integration at L'Ouverture by scheduling community partners with modules, guiding staff on the module development and scheduling family engagement events with the MSAP Recruiter. The Technology Integration Teacher will guide teachers with innovative practices of technology integration throughout the day at L'Ouverture.

By teaching and clarifying expectations, establishing clear and consistent rules, enhancing social and problem solving skills, providing students opportunity to practice expectations and reinforcing appropriate behaviors, the modular project-based learning will embed instructional strategies to increase students' engagement, learning motivation and positive behaviors.

*B. Staff and Curricular Coherence:* Summer professional development and half-day planning for modules will provide ongoing training for teachers to develop integrated curriculum units with alignment to District Core Curriculum standards. L'Ouverture is on track to becoming a paperless school and is a critical piece of Project DISCOVER.

*C. Parent and Community Involvement:* The main hallway will have a Kiosk for parents to see what is being taught in class on a weekly basis and will link to the school website for parents

to check lunch accounts, library check-outs and homework assignments. The Kiosk will be part of a Parent Information Station in the main hall and include District and Community activities for parents and families. It will also have an electronic check-in for volunteers to input information and print out ID labels to wear throughout the school and turn-in to the office. This will provide accurate information as to the number and purpose of volunteers on a daily basis. Signage at the front of the building and marquee at bus and carpool pick-ups will inform parents of upcoming school events to promote and further their involvement at school.

*D. Student Engagement:* Students will have something to look forward to every day during modular time. The materials used during modular time are staff-developed integrated modules that are interesting and intellectually stimulating to students. Like the other schools in Project DISCOVER, L'Ouverture will use students' extracurricular interests, school visits from community partners, exciting onsite and virtual fieldtrips to raise the engagement of students. In each hallway, LCD screens will showcase students' learning throughout the school and wall-mounted Smart boards in the hallways will engage students in learning activities.

### **Spaght Communications and Science Magnet School**

The theme at Spaght is more than just communication and science integration. The theme will infuse leadership skills, District mathematics curricula, and the engineering design process: ask, imagine, draft, create, test and adapt, into integrated units. One goal is for staff to take the technology tools associated with all forms of communication out of the hands of the teachers and place them into the hands of students.

*A. Innovative Practices:* Spaght's theme of science and communication is evident from the moment you enter the door. The entranceway has a large screen TV is used to showcase science activities. Spaght's revised vision is that it: *"Supports all students' development of Common*

*Core State Standards. We engage students through the use of cutting edge communication and technology tools, creative expression, critical thinking through inquiry, global awareness and teamwork.*” Spaght will deliver instruction in Science and Communication to its student body using a communication lab, laptop carts for classrooms, digital tablets, flat screen TVs, remote controls for student responses, ear buds, and an electronic marquee in the main entrance. Spaght will advance students’ critical thinking through inquiry using the science curriculum, science lab, and science materials. Students’ awareness of global issues will increase through the weekly use of the Polycom systems and virtual field trips.

*B. Staff and Curricular Coherence:* Professional development will consist of integration of the District curriculum, technology tools for communication and science project-based learning. Spaght currently has centralized computer stations, mobile computer stations and other forms of technology. The missing link of what to do with all the technology will be taken care of through ongoing professional development in using technology as a tool for students’ learning. All grade levels will include meaningful use of technology in project-based learning in science.

Along with other District-wide elementary schools, the introduction of AVID training for Spaght during the summer of 2013 is very exciting for staff as the foundation for a college and career ready culture and leadership skills. At Spaght, the Communications Integration Teacher’s and Science Integration Teacher’s primary roles will include supporting professional development and the integration of units beginning the summer of 2013, continuing throughout the school year. All grade levels will meet for discussion on vertical alignment of mathematics and science standards through their PLCs once per month: data analysis for progress monitoring PLCs will meet once a month with intervention, ESOL and SWD staff present to provide data on students’ academic progress for each child.

*C. Parent and Community Involvement:* Parent volunteers and community partners will select a number of 5<sup>th</sup> graders to be Ambassadors for Spaght. Parent volunteer numbers will be increased as a result of school leadership and staff's weekly contact with parents. Parents will be involved as guests at their child's student-led conferences and will actively engage with their child's science project presentations. For the sake of convenience, the use of teleconferences will be one way that busy parents and volunteers can increase their involvement. In partnership with WSU, Spaght will have multiple family engagement activities demonstrating student communication skills per year – both onsite and virtual and will partner with Exploration Place for virtual field trips and classroom speakers.

*D. Student Engagement:* Staff members at Spaght are excited about the integrated units and will be able to transfer their excitement to students through presenting video clips of upcoming events on the entranceway TV monitor. The conversion of the teachers' lounge into a science laboratory for project-based learning will also provide space needed for active learning and will house AIMS science and mathematics modules, Building Blocks of Science (Carolina Biological curriculum) and Picture Perfect Science Programs. LEGO Engineering will be used as a tool for guiding inquiry and teaching science. The students will keep science notebooks for sharing at student-led conferencing with their parents.

Standardized student dress will reinforce that students have a job, which is to come to school each day to learn as much as possible in a safe and intellectually stimulating environment. Leadership skills will be developed from Kindergarten – grade 5, with 5<sup>th</sup> graders given opportunities to become School Ambassadors. Student engagement will increase through creative expression using green screens, cameras, after school enrichment clubs, broadcast teams, newspaper publications, blogs and websites.

**C(iii) Encourage greater parental decision-making and involvement**

A research synthesis produced by the Southwest Educational Development Laboratory (2002), has found compelling evidence that meaningful parent involvement (regardless of the parents' economic or social background) in their child's education, results in children who are more likely to: (1) Perform better academically, receive higher test scores and enroll in higher-level programs; (2) Pass classes and earn credits; (3) Attend school on a regular basis; (4) Possess stronger social skills and social behavior; (5) Adapt well at school; and (6) Graduate and move on to postsecondary education. Further research (Fan & Chen, 2001) also confirms that parent involvement fosters better student classroom behavior and minimizes discipline issues, and that parent involvement creates better understandings of relationships between and among parents, teachers and schools (Epstein et al., 2002).

A number of things often stand in the way of low-income or minority parents from taking a more active role in their children's education, which includes parents feeling that they do not have a voice in their children's educational experience as a result of their own level of education, reading or writing literacy and other economic and social reasons. However, Project DISCOVER will address a number of these issues by putting various best practices to use, which include; (1) actively engaging with parents to learn about their child's needs and any previous academic experience, and to learn their own goals for their child's education (Gonzalez-DeHass et al., 2005); and (2) capturing staff's knowledge of each family's home culture to provide successful home-to-school communication (Trumbull & Pacheco, 2005). Through these methods, Project DISCOVER will achieve and support meaningful family and parent engagement.

Based upon the success of Project DREAM's family engagement strategies at Mueller Aerospace and Engineering Discovery Magnet Elementary School, Project DISCOVER will

scale up a number of activities while combining other best practice strategies from magnet schools across the country to create strong parent-student links at all five schools. In order to nurture parent and family involvement in children’s education, and to support the process of academic achievement as a result of that involvement, Project DISCOVER has aligned itself with National PTA (Parent-Teacher Association) Standards for Parent and Family Involvement. Using the PTA’s (2009) six National Standards for Family-School Partnerships in Table 5 as headings under which to group strategies, the following initiatives that this Project DISCOVER will employ include but will not be limited to the following activities:

**Table 6. PTA Standards 1-6**

**1. Welcoming All Families into the School Community:** *“Families are active participants in the life of the school, and feel welcomed, valued, and connected to each other, to school staff, and to what students are learning and doing in class”.*

District Level: (1) There will be a “Grant Launch Event” organized at the District level in collaboration with each school that will capture the interest of families. (2) The District magnet leadership will include a Parent and Community Resource Specialist to assist the five magnet schools in connecting with parents about events and play an active role in the targeted recruitment for families interested in the schools.

School Level: (1) School-sponsored meetings are held at convenient times and places for parents and cultural and racial barriers are taken into account; (2) Listening to parents during and outside of meetings and thanking them for their participation; (3) Calling new parents to invite them to PTA events and curriculum nights.

Household / Community Level: (1) Organizing home visits to welcome new families; (2) School-encouraged family activities that are free or low cost.

**2. Communicating Effectively:** *“Families and school staff engage in regular, two-way, meaningful communication about student learning”.*

District Level: (1) Each school will update the District website weekly with events taking place at each school; (2) District training for the VIP (Very Important Parent) will teach parents how to be helpful volunteers at school for project-based learning, performances, and technology instruction.

School Level: (1) Each school will produce and distribute an events calendar that will mark out important events during the year, both school wide and by class or grade level (2) Each school will host curriculum nights to explain vision and standards; (3) Each school will ensure that school principals are accessible to parents; (4) Schools will hold student-led conferencing so that students can share projects with family members, their academic successes and goals.

Household / Community Level: 1) Each school will establish its own Parent Information Center where parents will be able to access District, school and classroom information ranging from calendars, special events, blogs and other helpful information. This will include parenting information and activities for parents to do with their children that will help to nurture strong links between parents and students. The Parent Information Center could be something like “SchoolFusion”, which is a virtual, web-based version of this space; (2) Each school will use a variety of meeting places (in and outside of school) in non-threatening environments in order that parents can have equitable access to information regarding their children (NMSA, 2003).

**3. Supporting Student Success:** *“Families and school staff continuously collaborate to support students’ learning and healthy development both at home and at school, and have regular opportunities to strengthen their knowledge and skills to do so effectively”.*

District: (1) The District will work with schools to provide parenting workshops that bring in

parenting experts to offer tips to struggling parents, explain STEM and STEM careers in and around Wichita, as well as how to help their children prepare themselves for learning every day, and ways to encourage their child to plan for college.

School Level: (1) Teachers will engage parents at various milestones in their children's' school year by inviting them to project presentations and school events; (2) Student-led parent/teacher conferences will be held twice per year; (3) Teachers providing website and blog page links to parents with daily homework postings so parents can support and hold their children accountable in doing homework; (4) Showcasing technology through students' informances for their parents during scheduled day and evening times.

Household Level: (1) Take away activities made available to families with ideas for home-based projects to be completed as a family. Links to a calendar with family friendly events each month.

**4. Speaking Up for Every Child:** *“Families are empowered to be advocates for their own and other children, to ensure that students are treated fairly and have access to learning opportunities that will support their success”.*

District: (1) Establishment of a District-level Choice Advisory Board where parents, staff, community and NAACP representatives can receive data and monitor policies and procedures to maintain equity; (2) Establishment of a Magnet School Review Panel that analyzes issues that affect individual families and responds to inequities; (3) District and school information is readily available (handbooks, websites, workshop opportunities and resources for parents –in parent's first language); (4) Hosting workshops at school sites for parents to learn about cyber-bullying and online safety using Net Cetera (e.g., [www.onguardonline.gov/topics/net-cetera.aspx](http://www.onguardonline.gov/topics/net-cetera.aspx)) and tours of websites for children to use to increase learning on STEM disciplines.

School Level: (1) Work with parents to develop a long-range Parent Involvement Plan as part of

each school's Comprehensive School Plan (Comprehensive School Reform Quality Center, 2005); (2) Children's academic goals and development will be tailored in response to parent interest and support within the community (Ruebel, K., 2001); (3) The PTA and school plan a transitional program that helps students and families transition to next school level.

Household / Community Level: (1) The PTA and other parent groups mobilize to advocate on student issues within the community.

**5. Sharing Power:** *"Families and school staff are equal partners in decisions that affect children and families and together inform, influence, and create policies, practices, and programs"*.

District: (1) Ensure that parents are connected to local officials and that those local officials are accessible; (2) Parents and teachers are both involved in the STEM steering committee.

School Level: (1) Module Time (parents are welcome to observe module time to gain a better understanding of their children's learning process), (2) Parents are actively involved on School Site Councils and Magnet Planning Teams.

Household Level: (1) VIP retreats held at school partners' site; (2) Active recruitment of parents from all communities into school through one-to-one contact for specific tasks at the school.

**6. Collaborating with Community:** *"Families and school staff collaborate with community members to connect students, families, and staff to expanded learning opportunities, community services, and civic participation"*.

District: (1) The District magnet website will include a link to family activities and posts to advertise schools' upcoming events. The family events posted can be found for free (e.g., [http://events.kansas.com/wichita\\_kansas](http://events.kansas.com/wichita_kansas)) and is sponsored by the Wichita Eagle newspaper. Branch libraries host free, regularly scheduled family fun nights featuring storytelling for all

ages and craft activities. Postings by churches, Friends University, Butler Community College, and Great Plains Nature Center will certainly appeal to families.

School Level: (1) A District level Family Magnet Facilitator will be charged with building stronger linkages between families and all five schools in scope for this project.

Household / Community Level: (1) Establishment of Parent Liaisons who are trained to do neighborhood outreach, which includes going into the community and encouraging parents of students in low-performing schools to consider choosing a magnet that best fits their child's needs; (2) School facilities are available for community use; (3) Establishment of family resource centers to link families with community resources (e.g., Health and dental clinics, public services, summer programs, etc.)

**Conclusion:** Throughout the course of project implementation and beyond the grant cycle, District and school-level leadership, and all project staff will constantly monitor and evaluate the extent of family engagement to ensure the strongest family-child-school linkages possible.

## **D. Budget and Resources**

Project DISCOVER confirms that all of its five significantly revised magnet schools' facilities, equipment and supplies are adequate for the purposes and plans outlined within this MSAP grant proposal. The funds received for Project DISCOVER will improve WPS' goals of significantly revising curricula to include daily instruction in STEM subjects while reducing minority group isolation and creating school environments that are conducive to integrated project-based learning.

### **D(i) The adequacy of the facilities that the applicant plans to use**

All five magnet school facilities are more than adequate for the purposes of receiving the anticipated increase in enrollment for Project DISCOVER. As the result of a 2008 bond issue

which yielded \$370 million, new teaching and classroom spaces have been constructed and a number of these schools have received significant renovations, all of which have increased the capacities of these schools to receive higher numbers of children at their magnet schools. All proposed magnet schools have ample space within the entryways, hallways and within classrooms, cafeterias and other purpose rooms to be used for “screaming the theme”. As aforementioned, these schools will use large screen monitors, digital technologies, banners, new signs, furnishings, computers and other visual representations to display each respective theme in an exciting way that will present an attractive atmosphere that is conducive to learning.

**D(ii) The adequacy of the equipment and supplies that the applicant plans to use**

As significantly revised schools, whether full-STEM or heavily revised to include specific STEM components that fit within their themes, placing cutting edge digital technologies and other equipment into the hands of students is essential to Project DISCOVER’s success. Though they have attempted to acquire technologies with very limited resources, all five schools have simply lacked the resources to ensure that their curricula reflect their respective themes and 21<sup>st</sup> century education. Thus, current equipment and supplies are largely inadequate for the intended project. In short, newer digital technologies that are aligned to STEM curriculum must be acquired while obsolete and inoperative technologies must be replaced in order for Project DISCOVER to be successful.

Each school will require updated digital technologies including computers, smart pads, cameras and green screens, all of which will improve student-to-technology ratios to create technology rich classrooms and 21<sup>st</sup> century students that are confident in navigating and using these technologies. Supplies that are adequate to implement Project DISCOVER and to conduct necessary activities include those necessary for establishing each school’s respective theme and

for supporting student learning directly with curricula and instructional material. Furthermore, these supplies and equipment will enhance student learning and classroom management indirectly by assisting teachers with enhanced teaching resources, digital record keeping, storing and sharing documents, and for developing a professional learning community.

**D(iii) The adequacy and reasonableness of the budget for the project in relation to the objectives of the project**

The proposed budget contains a request for \$11,999,972 over the three year period to fully implement Project DISCOVER. To fully implement the plan will require considerable resources and the proposed budget will provide the necessary support to implement Project DISCOVER as a unique, ambitious and engaging program that will provide the highest quality 21<sup>st</sup> century education available to elementary and middle school students. This project's aim is not to simply update a few school marquees and continue on with business as usual, but rather to establish Project DISCOVER as a model for all magnet schools in STEM integration across every curriculum and theme and to create a total 21<sup>st</sup> century learning environment for every student.

The funding requested in this proposal will not only support the envisioned transformation of each of Project DISCOVER's magnet schools, but will also make it possible for each magnet school to be a beacon of innovation and success for the magnet school model. Given adequate resources, strong school and District leadership and fully trained teachers, any magnet school can transform the educational paradigm by giving children the highest quality and most diverse educational experience, as Project DISCOVER will. The attached budget contains funding that is both adequate and necessary to fully implement Project DISCOVER.

**1) Establishing an identity and brand** across all Project DISCOVER schools is a unique challenge as each school has a specific theme and identity that reflects its curriculum, though

each school will carry a like appearance. As all Project DISCOVER schools are located in areas of Wichita that are predominately minority populated and are areas plagued by low-income status, it will take a concerted effort to establish a fresh and exciting identity at each school. However, science and technology equipment, visually stimulating “Scream the Theme” wall murals and banners, large-screen television monitors displaying theme-related information in the hall and entryways and other high tech graphic displays both outdoors and indoors will attest to the fact that each school is a unique and exciting learning environment. Various schools will also host plays, musicals and other events that the surrounding community will be invited to, further establishing the identity of Project DISCOVER as an interactive program in the community.

**2) Personnel** are one of the most critical elements to Project DISCOVER’s success as it is important to attract and maintain qualified staff to accomplish the goals of the MSAP grant. Grant funding will place the project under the leadership of staff that are selected as a result of their outstanding ability to implement Project DISCOVER. MSAP funding of the Project Coordinator position, MSAP Recruiter, MSAP STEM Instructional Specialist, GTA positions as well as a number of MSAP Teachers will adequately staff the project at both the District and individual school site level.

**3) Professional development and training** will be key to the success of the Project DISCOVER and are addressed in the budget through professional development activities and coaching by mentors until master of techniques is attained. The attached budget includes funding to provide adequate opportunities for all staff to develop the skills necessary to the successful implementation of Project DISCOVER.

- Summer academies are intensive trainings will provide teachers with practical information on successfully integrating STEM content, project-based-learning and digital technologies into

curricula. Project DISCOVER staff will also attend the Avid Institute.

- Additional training will be provided to staff and teachers throughout the year under Project DISCOVER and, in order to provide trainings to all teachers, the budget makes allowances for substitutes. These trainings will help to create a sense of shared vision and deeper commitment to creating a successful project, and will also feed into the continuous improvement model where continued training on best practices across STEM curricula will lead to higher quality education.
- Project staff's attendance of trainings and conferences is necessary for information and knowledge sharing and for networking with other professionals across the country. Some of these trainings and conferences include: International Society for Technology in Education; MSAP Grant Management; Magnet Schools of America National Conference and specialty conferences for magnet school personnel.
- Staff visits to demonstration sites are included as a means of obtaining information ideas for implementation of successful programs.

**4) Resources** are budgeted to provide adequate support for staff in the implementation of all aspects of Project DISCOVER. Technology is critical in the establishment of full-STEM programs at some schools and STEM component integration in others. Whether maintaining digital and interactive video libraries of historical musicians and artistic performances or acquiring the latest architectural design and scientific modeling software programs, all resources will provide opportunities for students to share equipment and task responsibilities, apply and test concepts learned and to provide stimulating learning experiences for all subjects.

Additionally, curricula across all five schools will be acquired and tailored by teacher-developed lesson plans resulting in professional development activities.

**5) Marketing and recruitment** are necessary for increasing the visibility of each magnet school

in order to increase enrollment and to attract a diverse student population and reduce minority group isolation. The MSAP Recruiter will work with other District and school-level leadership to develop a marketing plan that will inform the community about Project DISCOVER and ensure the support of the larger Wichita community, leading to greater sustainability of the project.

As the initial needs for establishing the project are great, the specifics vary from school to school. Thus, annual budgets between schools will reflect various plans and implementation schedules, though initial equipment acquisition costs will fall primarily under years 1 and 2 while staff development and other trainings will be spread out over all three years.

### **E. Evaluation Plan**

We view the project evaluation to be a critical aspect of our project, not only measuring our progress towards the outcomes identified in the Plan of Operation but, just as importantly, providing ongoing feedback that will guide continuous improvement efforts. To ensure the quality of our evaluation plan, WPS will contract with an experienced evaluation firm, *GrantProse, Inc.*, so as to provide an independent and unbiased perspective on Project DISCOVER. The main objectives for the *GrantProse* evaluation are:

- To measure the fidelity of program implementation as described in this proposal,
- To measure the achievement of intended student, teacher, school, and District outcomes associated with the project,
- To provide ongoing feedback to leadership that will inform continuous improvement, and
- To annually document the formative and summative evaluation effort for dissemination within and without the District, including other interested school districts as well as the U.S. Department of Education. It is through the evaluation that others can learn how to replicate successes, overcome challenges, and avoid failures.

Coordinating with the overall Management Plan described above, the evaluation plan has its own structure, as depicted in the table here, adapted from Brinkerhoff, et al. (1983).

**Table 7. Evaluation Plan for Project DISCOVER**

Evaluation Questions	Information Collection Plan				Continuous Improvement Plan	Outcome & Report Plan
	Methods & Instruments	Type of Data	Data Sources	Data Timelines		

**E(i) Includes methods that are appropriate to the project**

The MSAP grant requires a comprehensive evaluation plan that includes both formative and summative data. The evaluation plan will provide information to assist Project DISCOVER District and school personnel to modify and improve project performance during the 3-year funding cycle of the grant. The evaluation will also assist District personnel in revising other magnet programs and designing future magnet programs, will help parents better understand the WPS choice programs, and will give those interested in magnet schools valuable information that will strengthen projects nationwide. The evaluation plan will produce information needed by the U.S. Department of Education (USDE) to properly determine the effectiveness of Project DISCOVER, and determine the efficacy of the MSAP in general.

The evaluation plan is designed to provide the information needed for the program implementation and to provide a basis for judging program effectiveness. The evaluation design contains formative and summative components that use varied data collection and utilization techniques. Sources for collecting data and the assessments are discussed later in this section. Techniques to be used in the examination of program outcomes include interviews, surveys, document reviews, state and district test score analyses, and inventories.

As indicated in Plan of Operation above, SMART outcomes have been aligned to the six

MSAP purposes, and the six MSAP performance measures are included among these outcomes. Evaluation measures will collect both quantitative and qualitative information to determine the effectiveness of project on the participants being served. Quantitative data will be used in the course of carrying out summative evaluation activities measuring Project DISCOVER's outcomes indicated above in Plan of Operation, and both quantitative and qualitative data will be used in the course of carrying out formative evaluation activities. Interim reports of the formative evaluation will be produced by *GrantProse* at quarterly intervals in order to inform project improvements while the project is ongoing. And, *GrantProse* will produce semi-annual and annual reports of the summative evaluation, showing progress being made towards achieving the desired outcomes. The annual report to USDE will be organized by *GrantProse* and submitted to the Project Coordinator for Project DISCOVER.

Of special interest to this evaluation, *GrantProse* will assess the success of integrating STEM curriculum throughout the school programs and the outcomes that derive from this curriculum. *GrantProse* will adapt a model of "STEM Attributes" that is being developed in North Carolina (e.g., NC STEM Network) and which has antecedents in Ohio (Rowley, 2010) as well as Texas (Texas High School Project T-STEM Initiative, 2010).

STEM Attributes describe a quality STEM education school or program. For each attribute, there are criteria that describe an Early, Developing, Prepared, or Targeted (the highest level of achievement) school or program. At the Prepared level, the rating for an attribute reflects a "Quality program meeting expectation." Examples of the attributes include: Frequency of STEM integration, Adequacy of physical spaces, Common and integrated technology, STEM networking (e.g., with other schools, communities, post-secondary institutions and business/industry experts and resources), Tech support, Frequency of professional development,

Evidence of collaboration and learning communities, and Students working in teams, among other attributes. GrantProse will work closely with each school to train staff on these attributes and to assess how well the schools measure on these attributes.

**E(ii) Will determine how successful the project is in meeting its intended outcomes, including its goals for desegregating its students and increasing student achievement**

The evaluation will assess progress toward the project's underlying goals: 1) to reduce and eliminate minority group isolation, to build staff capacities, and to improve academic achievement for all students. Based on our review of the literature associated with magnet school programs (e.g., *Definitive Studies of Magnet Schools*; *Voices of Public School Choice*, 1999; *Evaluation of the Magnet Schools Assistance Program, 1998 Grantees: Final Report*; Evaluation Toolkit for Magnet School Programs found at [www.evaluationtoolkit.org](http://www.evaluationtoolkit.org)), we have identified evaluation questions that will guide the evaluation effort: ► To what extent will the racial and ethnic balance of the student body change at the magnet schools and feeder schools? ► What combination of lottery and/or redistricting activities are developed to alleviate minority group isolation? ► With the lottery, what marketing, promotion, and recruitment activities prove to be effective? ► How are the magnet programs perceived by students, teachers, and parents? ► What degree of support is provided by partnering agencies? ► What are the professional development and curriculum design needs of staff at the schools? and ► What is the relationship of the school's theme to academic achievement?

Following the Brinkerhoff model depicted above, an information collection plan will be detailed to specify the nature of measurement instrumentation that will be used with different outcomes, the type of data that will be collected, the sources from which data will be collected, and the timeframe(s) for when data are available. Table 6 provides examples of data sources.

**Table 8. Sources for Collecting Data**

Case studies	In-depth investigation with individual staff, students, and/or parents
Interviews	Semi-structured interviews with open-ended questioning
Observation	Checklists of school, classroom, and instructional characteristics
Performance tests	Student achievement on District and State examinations
Records review	Documentation of meetings, expenditures
Surveys	Structured Likert-scale fixed choice, and open-ended questions
Portfolio assessment	Sampling students' work and staff professional development activities
Rating rubrics	Assessing quality of theme-based curriculum and schl STEM Attributes

**E(iii) Includes methods that are objective and that will produce data that are quantifiable**

Objectivity is ensured in part due to the independence of the *GrantProse* evaluation.

Objectively is also ensured in part due to how the outcome measures described in the Plan of Operation will be quantified. And, objectively is due in part to how interim benchmarks are set each year for the outcomes, providing a gauge on progress being achieved. The evaluation will be conducted in all years of the grant. Formative evaluation will be ongoing, beginning once the grant program starts and continuing to the end, and summative evaluation will gather data at no less than annual intervals to assess progress toward desired outcomes. The evaluation methods will quantify all data associated with the desired outcomes using methods such as structured interviews, observation rating protocols, content analysis of archival documents (e.g., partnership commitments, theme-focused curriculum units), Likert-item and multiple choice surveys, analysis of magnet school application and enrollment patterns disaggregated by racial population group, analysis of MSAP per-pupil budgetary expenditures, and the analysis of achievement data produced in the State's testing accountability system.

A set of SMART (Specific, Measurable, Achievable, Realistic and Time-Bound) outcomes has been developed for Project DISCOVER, consistent with the purposes as well as the required MSAP performance measures. Please refer to Table 4 in the Plan of Operation for these detailed outcomes. Annual targets are set for each outcome that will provide guidance to project leadership with respect to how resources should be dedicated to ensure continuous improvement toward meeting goals for the project by the end of the three-year performance period. Data on all outcomes will be disaggregated by students' racial group and other population groups, in order to permit close monitoring of impact on equity of access. Student achievement data, for instance, will be disaggregated by the NCLB population groups (e.g., race, income, disability, limited English) and analyzed to discern if there are reductions in any of the achievement gaps.

Regarding desegregation, outcomes 1.1, 1.2, and 1.3 provide measures of the project's impact on minority group isolation: Outcome 1.1 – How well racial populations at the schools mirror that of the district and surrounding community; Outcome 1.2 – How well the lottery is functioning to attract a diverse population to the schools; and Outcome 1.3 – How well the lottery is functioning to increased numbers of students to the schools.

Regarding increasing student achievement, Outcome 2.2 evaluates if the schools are able to rise above “Low Performing” status, Outcome 4.1 measures students' reading/language arts achievement, and Outcome 4.2 measures students' mathematics achievement.

Within two months of the beginning of the grant, GrantProse will finalize the evaluation plan in coordination with WPS. For data that have baseline measurements available from prior years, comparisons will be made to these years, such as the percentage of schools that meet State achievement standards. During the grant performance period, comparisons will also be made between the five project schools and their feeder schools.

The evaluation plan will be updated at mid-year and again at the end-of-year. Whenever possible, the measurement instrumentation that will be used in Project DISCOVER will be synchronized with instrumentation that WPS is already using with schools across the district, permitting the evaluator to make comparisons between the project schools and other WPS schools. Additionally, WPS conducts its own internal evaluation of the magnet school program in the District, and the school District will identify the five project schools as a subset to compare and contrast with the other magnet schools when it conducts these evaluations.

Visiting the District at least monthly, *GrantProse* staff will conduct no less than three visitations per year to each project school to carry out interviews and observations. Interviews with students will be conducted when permitted by parents, and parents will be contacted to gather information on their impressions of magnet offerings at the school. *GrantProse* will produce quarterly reports of the formative evaluation for the Project Director, Project Coordinator, the advisory council and other key stakeholders. These reports will give feedback on interim progress being made toward achieving desired outcomes and guidance with recommendations for continuous improvement efforts.

*GrantProse* staff leading the evaluation activity includes Dr. William Carruthers and Dr. Eleanor Hasse. Dr. Carruthers has over 30 years experience in public education, getting his start as a school psychologist in Kansas and North Carolina, later serving as an administrator in the Evaluation and Research Department with Wake County Public Schools in North Carolina, then serving as the Senior Director of Grants Administration for Wake County Schools and, following retirement from public education, is now operating *GrantProse* specializing in educational programming and evaluation. Dr. Carruthers' has a B.S. in Engineering, an M.S. in Sociology, and a Ph.D. in Psychology. Dr. Hasse has been a science consultant at the NC Department of

Public Instruction. In that position she coordinated committees charged with developing State standards, developed curriculum support materials, reviewed State assessments for curriculum alignment and scientific accuracy, provided analysis of various student and teacher data, and provided teacher professional development. She has also assisted with management of state math and science partnership grants, and developed partnerships with institutions to promote science education. She has taught high school and middle school math and science in NC and CA, and currently serves on the boards of the NC Science and Engineering Fair and the Environmental Education Fund. Dr. Hasse's Ph.D. is in Science Education.

### **F. Commitment and Capacity**

The Board of Education and the WPS Superintendent are fully committed to providing a revised magnet school program across the five schools, and have supported this by designating the Director of Equity and Accountability on the District Leadership Team (DLT) to oversee magnet schools, and by providing support services. These support services come in the form of the assistant superintendents of elementary and secondary schools, marketing and communication services, as well as technology and transportation support services, to name a few. Additionally, as a result of the modified desegregation plan by WPS leadership in order to monitor the reduction of MGI, two bodies have been established: (1) The Diversity, Equity and Accountability Committee, which does community research, provides recommendations to the BOE, and helps to launch major district initiatives while eliciting feedback from the community (in which Dr. Kimberly Burkhalter acts as the exofficio and staff liaison); and (2) the District's Office of Equity and Accountability (OEA). The OEA works to develop equity and diversity goals across WPS and ensures that these goals are addressed in various areas including curriculum and professional development and resource allocation. WPS is fully committed to

empowering these bodies and supporting their efforts to provide school choice.

**F(i) Is committed to the magnet schools project**

Ever since the first magnet school—Emerson Open Magnet—was established in 1975, WPS has had a substantial history of instituting and operating magnet schools. In 2012-13, WPS is operating a total of 24 magnet schools that span Pre-K through Grade 12. Despite its obvious commitment to establishing and operating magnet schools, WPS has realized that its weakness is found in the fact that there is a significant number of magnet schools that are “magnet” in name only, in which the curriculum, themes and specialties may not be all that different from regular, public schools found elsewhere throughout Wichita. In recognizing this weakness, in 2010 WPS applied, for the first time, to the MSAP program to gain funding to significantly revise one of its magnet schools over a three-year period. Upon being awarded the MSAP grant for Project DREAM, WPS is now successfully revitalizing the Mueller Aerospace and Engineering Discovery Magnet Elementary School program.

In applying once again to the MSAP, WPS will scale up its initial success with Mueller, with a more ambitious goal of significantly revising five more magnet schools that span Kindergarten to Grade 8. If awarded this MSAP, through the process of eliminating MGI and improving low student performance, WPS will set a higher standard of excellence across *all* schools in Wichita, not solely magnet schools, and provide a positive, replicable model for the rest of Kansas. With this in mind, Project DISCOVER has gained the overwhelming support of the District, the staff at all five proposed magnet schools, the student and parent population and local and corporate partners. The District’s commitment to Project DISCOVER includes, but is not limited to:

**1) Leadership and oversight provided by Dr. Burkhalter, who will also be working as Project Director. Reporting directly to Dr. Burkhalter will be the Project Coordinator;**

- 2) The provision of District level leadership from assistant superintendents. Alicia Thompson, Assistant Elementary Superintendent, and Bill Faflick, Secondary Assistant Superintendent both provide this leadership. Please refer to the attached resumes in the appendices;
- 3) Staff and support from the District's Information Services and Technology (IST) Department in obtaining and installing equipment, and training staff on integration of technology. Cathy Barbieri is the Chief Information Officer in the IST Department;
- 4) Assistance from the District's Learning Services office on developing curricula and their alignment to State standards. Dr. Denise Seguire is Chief Academic Officer and is charged with developing curricula and ensuring alignment to State standards;
- 5) Support in networking, forming and maintaining partnerships with key stakeholders in the community and assisting with fundraising as appropriate. Wendy Johnson is the Division Director for Marketing and Communications (Public Relations). Wendy Johnson is part of the District Leadership Team, which is committed to supporting the MSAP grant;
- 6) Transportation services provided to students living more than 2.5 miles from their chosen school. Fabian Armendariz, the Director of the Department of Transportation, will ensure this;
- 7) Support for Family Engagement Teams at each school. Christina Long, Parent Community Resource Specialist will continue to work with family engagement team site contacts to ensure support for family engagement;
- 8) Student Support Services for students identified as needing additional assistance including counseling, social work, assessment, and special education services. Neil Guthrie, Division Director of Student Support Services will ensure that these services are provided;
- 9) Provision of additional cultural proficiency training and ongoing support from the Office of Equity and Accountability. Dr. Burkhalter is the Director of this Office and will also be working

in the capacity of Project Director for Project DISCOVER;

**10)** Making regular reports to District leadership, including the BOE, in order to ensure that successes are recognized and the efficacy of the project is supported and replicated elsewhere in the District as means become available. Dr. Burkhalter will be charged with this task;

**11)** Providing as much as \$9 million of District resources in support of operations for renovations at three of the project schools, transportation of lottery students to the schools, provision of additional FTE positions at the schools, among other costs; and

**12)** Assist with obtaining additional funding, and funding for the continuation of the project after grant funding has elapsed. Dr. Burkhalter and the Project Coordinator are charged with this task.

In recognizing that the District already provides many of these services across all schools as a matter of equity and policy, for the sake of sustainability the District will especially focus its efforts on and support of Project DISCOVER's five schools. As part of Project DISCOVER's accountability structure, an Advisory Council will be developed with membership to include staff and parents from the five schools, along with representatives from the community and industry partners working with these schools. This Advisory Council will report directly to Dr. Burkhalter, the Project Director. The members of the District Leadership Team and the MSAP Implementation Team include assistant superintendents who will exchange information and bring about alignment between departments as specific issues and needs arise.

**F(ii) Has identified other resources to continue support for the magnet school activities when assistance under this program is no longer available**

WPS is committed to the proposed magnet schools and their respective themes throughout the life of the grant, as well as after the funding period has elapsed. To maximize the effectiveness of the magnet school funding, WPS places an emphasis on professional

development activities. WPS has found that professional development is one of the most effective ways to build the capacity of both staff and students, as new knowledge and best practices are shared long after initial funding for professional development has been spent.

Additionally, the curriculum design activities that will occur during the grant will provide the foundation for further curriculum development efforts that will be used for school transformation beyond the proposed five magnet schools. Teachers and all other Project DISCOVER staff are highly qualified educators who have a breadth of experience in classroom leadership, desegregation and curriculum development, as evidenced by the attached resumes.

During the writing of this proposal, WPS held a series of focus groups with District level leadership, as well as principals, staff, parents and guardians, and community members to ensure the highest level of commitment to the respective themes. WPS is aggressively seeking funding to support FTE's within magnet schools inclusive of this grant. As one example, Alicia Thompson, Assistant Superintendent for Elementary Schools, will be advocating on behalf of the project to assign an additional 1-2 FTEs across the proposed elementary schools, which will help with sustainability of Project DISCOVER well after the MSAP project period has elapsed.

Building upon WPS' success in 2010 when it received funding for Project DREAM at Mueller Aerospace and Technology Elementary Magnet School, WPS has identified a number of private and public sources that will help to sustain magnet school activities when assistance under MSAP is no longer available. In terms of local networks, long-term partnerships formed with universities, local businesses, civic groups and other civil society organizations will help to sustain Project DISCOVER. Examples of community groups, businesses, and institutions that will partner with WPS in Project DISCOVER include Wichita State University, Kansas Cosmosphere and Space Center, Exploration Place, Airbus and Arts Partners, among many

others. The commitments of local, regional and international partners who have a presence in Wichita are shown by the letters of support found in the appendices. Collaborating with organizations that are leaders in the fields of science, technology, engineering, mathematics and the performing arts will not only build the capacities of students in preparation for STEM-related careers, but also of teachers who will continue to build upon their pre-existing knowledge as they incorporate learning from the aforementioned partners and provide more effective teaching in the long-term. WPS will continue to seek external funding, and during the MSAP funding period will review how existing funds might be re-allocated to help support the proposed magnet schools. WPS recognizes that much of the professional development that will have been undertaken during the life of the grant will also help to sustain operations beyond the end of the grant cycle. The significantly revised curricula and rubrics across all five schools during the grant cycle will also help to sustain Project DISCOVER.

WPS has been successful in developing Federal, corporate and nonprofit funding proposals and continues to seek public and private funding sources to subsidize key aspects of Project DISCOVER after 2015-16. The process of designing this project has also resulted in staff becoming more knowledgeable of programs and the grant writing process in general.

Beyond professional development as a point of sustainability, WPS has an aggressive initiative to look at magnet schools District-wide to evaluate and support what is required for every school to “scream their theme”. In preparing this proposal, WPS is also looking at magnet schools District-wide, to determine which magnet schools can remain as they are, and which ones will require additional funding to fully integrate their themes and curriculums.

WPS is fully committed to, and has the capacity to manage Project DISCOVER. Budget cuts at all levels of education make the scope of significantly revising the five proposed magnet

schools virtually impossible without MSAP funding at this time. By securing MSAP funding for the 2013 - 2016 performance period, WPS will be given a jump-start in bringing about transformation and lasting change across the proposed schools and the larger WPS District.

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