

School District Five of Lexington and Richland Counties

Discover Five

Project Narrative Table of Contents

Competitive Preference Priorities

Priority 1: Need for Assistance... 1

Priority 2: New or Revised Magnet Schools and Strength of Evidence... 12

Priority 3: Selection of Students... 19

Priority 4: Increasing Racial Integration and Socioeconomic Diversity... 21

Selection Criteria

(a) Desegregation... 26

(b) Quality of Project Design... 42

(c) Quality of Management Plan... 96

(d) Quality of Personnel... 116

(e) Quality of Project Evaluation... 129

Table of Tables

Table 1. Student Demographics by Attendance Cluster... 2

Table 2. Student Demographics by MSAP Schools as compared to Attendance Cluster and District... 3

Table 3. Magnet School Capacity... 6

Table 4. Discover Five Project Budget... 7

Table 5. Discover Five Student Selection Process... 20

Table 6. District Student Demographics... 22

Table 7. Annual Professional Development Framework... 82

Table 8. Discover Five Project Objectives and Performance Measures... 96

Table 9. Central Magnet Office... 103

Table 10. Magnet School Leadership Team ... 104

Table 11. Other Key Personnel... 105

Table 12. Discover Five Project Milestones... 106

Table 13. Evaluation Reports Provided Annually to District and School Project Staff..... 148

Table of Figures

Figure 1. 2015-16 End-of-Course Examination Program (EOCEP) passing rate for Algebra 1.....4

Figure 2. 2015-16 End-of-Course Examination Program (EOCEP) passing rate for English 1.....4

Figure 3. Percentage of students who scored Met or Exceed on SC READY Spring 2016 – ELA at H.E. Corley Elementary School as compared to attendance cluster, district, and state.....5

Figure 4. Percentage of students who scored Met or Exceed on SC READY Spring 2016 – ELA at Leaphart Elementary School as compared to Attendance cluster, district, and state.....5

Figure 5. Percentage of students who scored Met or Exceed on SC READY Spring 2016 – ELA at Nursery Road Elementary School as compared to attendance cluster, district, and state.....6

Figure 6. Share of the poor population living in a neighborhood with a 20%+ poverty rate. Multi-year estimate, 2010–14... ..21

Figure 7. 2017 Per Capita Income 21

Figure 8. Four-step Design Process... .. 53

Figure 9. District Organizational Structure..... 106

Figure 10. Fixsen et al.'s Implementation Drivers..... 130

COMPETITIVE PREFERENCE PRIORITY #1: NEED FOR ASSISTANCE

School District Five of Lexington and Richland Counties (commonly referred to as District Five) serves approximately 17,000 students in grades PK-12 across 23 schools. Student enrollment figures reflect an increasingly diverse community of professional and working class families who are predominantly Caucasian (61%), followed by African American (28%), Hispanic (3%) and those who identify as more than one race (8%). What was once a primarily affluent suburb northwest of the City of Columbia, the state's capital, has now transitioned into a vibrant multi-cultural and ethnic community of varying socioeconomic levels. With this demographic shift has come significant isolation of race and socioeconomic levels within the district's three established attendance clusters in which schools are grouped: Chapin, Dutch Fork, and Irmo. Changes in housing policies in efforts to desegregate some of the City of Columbia's poorest neighborhoods, have contributed to this isolation by triggering white flight to newer outlying suburban neighborhoods located most predominantly within the Chapin attendance cluster. This coupled with an increase of Section 8 housing and other low-income apartment complexes in the Irmo attendance cluster (and most recently into Dutch Fork) has created a racial and socioeconomic imbalance that is projected to widen and requires immediate attention. In response, District Five has strategically chosen to desegregate schools experiencing the highest rate of minority group isolation and socioeconomic isolation through the introduction of magnet schools and school choice, rather than re-zoning.

In 2013, District Five was both a novice applicant and grantee in the FY13 MSAP cohort. With federal grant funds, District Five was able to create five new magnet programs, one of which, Spring Hill High School Careers Pathway Magnet was recently recognized as a 2017 Magnet School of Distinction by Magnet Schools of America. Today, the district is poised to

build from this success, while also implementing three key lessons learned as a FY13 MSAP grant recipient: (1) the need for a dedicated Recruitment Specialist, (2) the need for a student selection process that includes weighted factors; and (3) the need to provide student transportation to/from magnet programs; all of which are absolutely critical to meet minority group isolation (MGI) targets.

The concept for the Discover Five project began with an intentional selection of sites for new magnet programs at schools that met four criteria: (1) minority group isolation and socioeconomic isolation that exceeds district averages, (2) a student achievement gap that exceeds district averages, (3) declining student enrollment and availability of physical space; and (4) local support for school transformation. The schools selected for the Discover Five project include: H.E. Corley Elementary, Leaphart Elementary, Nursery Road Elementary, and Irmo High. Descriptions of how these schools met each of the four criteria are presented as follows:

(1) Minority Group Isolation and/or Socioeconomic Isolation that Exceeds District Averages. Of the four schools proposed in this project, three are located in the Irmo attendance cluster and one is located in the Dutch Fork attendance cluster. As Table 1 shows, the Irmo attendance cluster is experiencing the highest rate of minority and socioeconomic isolation, as compared to the district and other attendance clusters; the Dutch Fork attendance cluster is following a similar trend.

Table 1. Student Demographics by Attendance Cluster. Data compiled from the 2016 135th day report.

	District	Chapin Attendance Cluster	Dutch Fork Attendance Cluster	Irmo Attendance Cluster
African American	28%	4%	30%	46%
Caucasian	61%	88%	59%	41%
Subsidized Meals	35%	17%	34%	56%
Poverty Index	37%	18%	36%	56%

District Five defines minority group isolation in which enrollment of African American students at a particular school exceeds the district demographic average. District Five defines socioeconomic isolation by poverty index, which the SC Department of Education calculates through a combination of the following data elements: SNAP, TANF, Foster, Medicaid, Migrant and Homeless. This is a recently developed calculation adopted in 2015 by the SC Department of Education, in cooperation with the Office of Revenue and Fiscal Affairs (RFA), as a result of the implementation of USDA’s Community Eligibility Program (CEP). The new calculation provides a more accurate reflection of student socioeconomic status than eligibility for free/reduced lunch alone. Student demographics at each of the schools selected for this project reveal an even greater disparity when compared to the demographics of their attendance cluster, as depicted in Table 2.

Table 2. Student Demographics by MSAP Schools as Compared to Attendance Cluster and District. Data compiled from the 2016 135th day report and 2016 SCDE Poverty Index.

	District	Dutch Fork Attendance Cluster		Irmo Attendance Cluster			
		% of Dutch Fork schools	H.E. Corley Elementary	% of Irmo	Leaphart	Nursery	Irmo High
African American	28%	30%	44%	46%	50%	46%	45%
Caucasian	61%	59%	42%	41%	34%	46%	43%
Subsidized Meals	35%	34%	62%	56%	63%	56%	54%
Poverty Index	37%	36%	63%	56%	66%	61%	52%

(2) Achievement Gap that Exceeds District Averages. Each of the four schools proposed in this project is experiencing an achievement gap between African American and Caucasian students that exceeds district averages. Figures 1 and 2 show passing rates for End-of-Course examinations in Algebra 1 and English 1, respectively, for students attending Irmo High, as compared to the district and state. Figure 1 shows that African American students are passing

Algebra 1 at a rate of 20.4 percentage points below their Caucasian peers, and nearly 10 percentage points below their African American peers district wide.

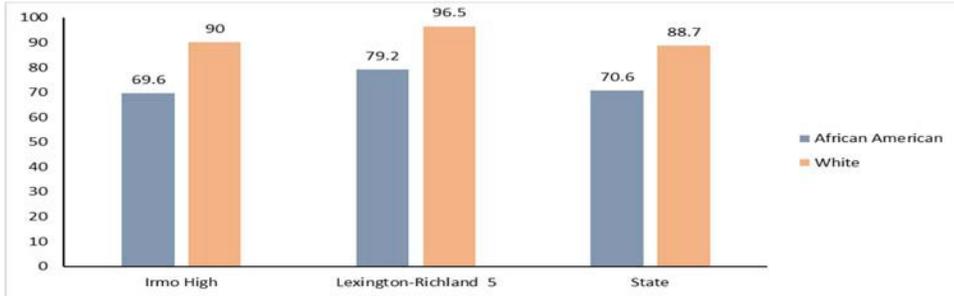


Figure 1. 2015-16 End-of-Course Examination Program (EOCEP) passing rate for Algebra 1

Figure 2 shows a 17.3 percentage point disparity in passing rates between African American and Caucasian students at Irmo High School in English 1, and 7.3 percentage points below their African American peers district wide.

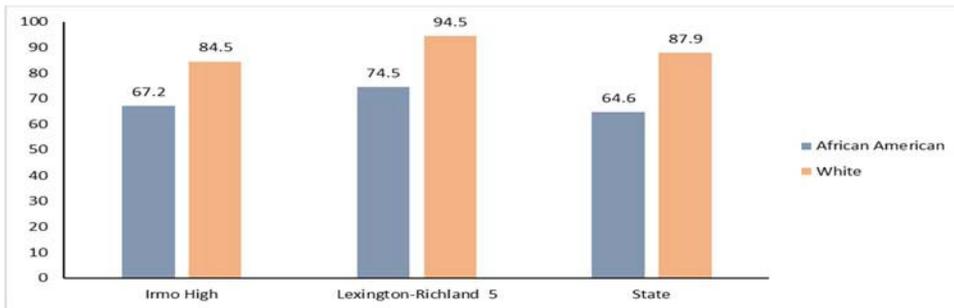


Figure 2. 2015-16 End-of-Course Examination Program (EOCEP) passing rate for English 1

The achievement gap between African American students and their Caucasian peers is pronounced at the elementary level in English language arts as shown in Figures 3 through 5.

Figure 3 shows that 26% of African American students at H.E. Corley scored Met or Exceed on the SC READY state assessment for English language arts. This is 26 percentage points lower than their Caucasian peers at H.E. Corley and 8.1 percentage points lower than their African American peers district wide.

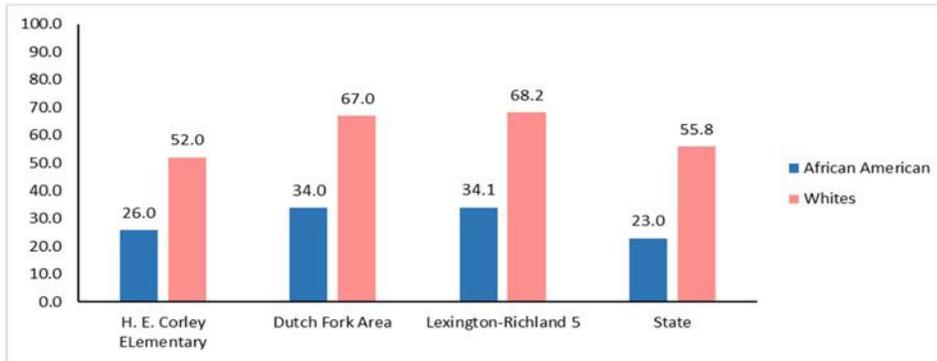


Figure 3. Percentage of students who scored Met or Exceed on SC READY Spring 2016 – ELA at H.E. Corley Elementary School as compared to attendance cluster, district, and state.

Figure 4 shows that only 27% of African American students at Leaphart Elementary School scored Met or Exceed on the SC READY state assessment for English language arts. This is 24 percentage points lower than their Caucasian peers and 7 percentage points lower than their African American peers district wide. This achievement gap is even more pronounced when looking at the total number of African American students who took the test. Of these 129 students, 95 (or 74%) did NOT meet expectations.

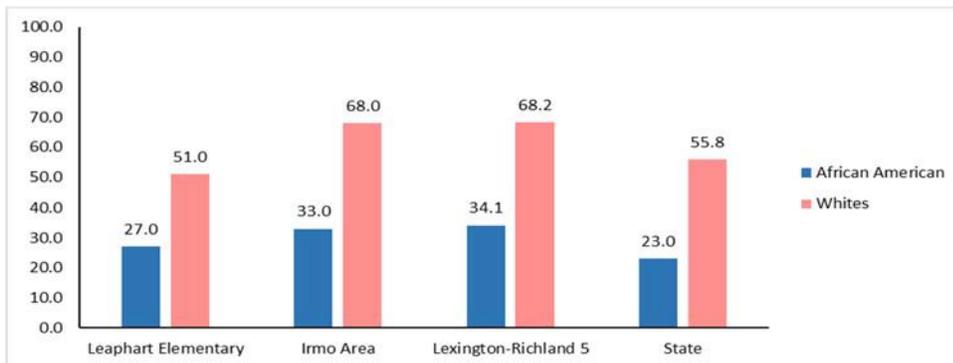


Figure 4. Percentage of students who scored Met or Exceed on SC READY Spring 2016 – ELA at Leaphart Elementary School as compared to attendance cluster, district and state.

Figure 5 shows that only 32% of African American students at Nursery Road Elementary scored Met or Exceed on the SC READY state assessment for English language arts. While this is slightly higher than the other Discover Five elementary schools listed in Figures 3 and 4, and the

state, there is a 34 percentage point difference in performance between African American and Caucasian students at Nursery Road Elementary School. This is the largest achievement gap in the district, and as such contributes to the school’s designation as a Title One Focus School.

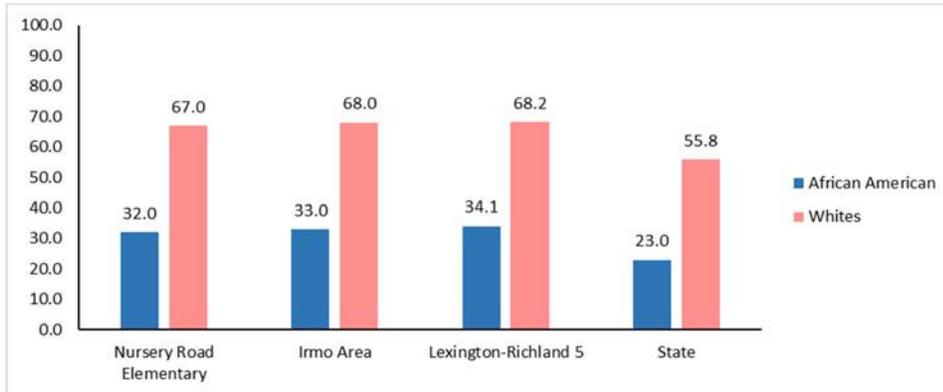


Figure 5. Percentage of students who scored Met or Exceed on SC READY Spring 2016 – ELA at Nursery Road Elementary School as compared to attendance cluster, district, and state.

(3) Declining Enrollment/Availability of Space. Each of the Discover Five schools has experienced declining enrollment, and as such, there is ample space to accommodate additional students, as shown in Table 3.

Table 3. Magnet School Capacity

School	Current School	Capacity for Magnet	Total Projected
<i>H.E. Corley Elementary School</i> <i>Montessori Magnet</i>	589	168	168
<i>Leaphart Elementary</i>	464	100	564
<i>Nursery Road Elementary School</i> <i>Arts Magnet</i>	446	100	546
<i>Irmo High School IB-</i>	1,446	400	400
			1,678

(4) Local Support for School Transformation. Schools that met the first three criteria were given the opportunity to choose to become a magnet school or develop a magnet program

within their school within the parameters of the district’s established K-12 academic pathways (Appendix A). Four schools chose to be part of the FY17 MSAP grant, following a series of meetings with teachers and parents to determine the level of interest and local support for school transformation to address the concerns of low enrollment, low student academic achievement, and the growing isolation of minority students and those in poverty at their schools. This support is documented with the signatures of teaching staff, as well as letters from the Parent Teacher Organizations and School Improvement Councils (Appendix B).

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

The total cost to fully implement the proposed project is \$13,711,835, as shown in Table 4. This is a cost of \$1,634 per pupil, per project year.

Table 4. Discover Five Project Budget

Funding Request by Site						
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
<i>Central Magnet Office</i>	\$ 989,335	\$ 1,030,019	\$ 1,040,862	\$ 1,040,530	\$ 1,048,533	\$ 5,149,278
<i>H.E. Corley Elementary School Montessori Magnet</i>	\$ 370,361	\$ 272,390	\$ 249,138	\$ 252,896	\$ 354,342	\$ 1,499,128
<i>Leaphart Elementary School STEAM Magnet</i>	\$ 477,720	\$ 413,234	\$ 680,775	\$ 337,577	\$ 342,877	\$ 2,252,183
<i>Nursery Road Elementary School Arts Magnet</i>	\$ 732,400	\$ 785,182	\$ 767,253	\$ 570,495	\$ 551,097	\$ 3,406,427
<i>Irmo High School IB-CP Magnet</i>	\$ 369,836	\$ 273,760	\$ 234,338	\$ 262,117	\$ 264,767	\$ 1,404,818
Totals	\$ 2,939,652	\$ 2,774,585	\$ 2,972,366	\$ 2,463,615	\$ 2,561,617	\$ 13,711,835

The costs associated with the **Central Magnet Office** are critical to ensure effective grant management that complies with all federal guidelines and provide programmatic support to the magnet schools, as they implement theme-based curriculum and desegregation strategies essential to achieving the project’s stated objectives. **Central Magnet Office** costs center on personnel (fringe and salary) to provide effective grant management (Project Director and

Program Assistant/Bookkeeper), recruitment and outreach to ensure a diverse applicant pool (Recruitment Specialist), and on-site support for magnet schools in desegregation strategies (Cooperative Learning Coach); travel and equipment to attend national magnet-related conferences and provide student transportation to/from magnet schools; supplies and materials for recruitment activities, project team and district magnet advisory council meetings; contractual services for professional development services to build magnet school leader and teacher capacity to implement evidence-based desegregation strategies and teach curriculum aligned with systemic and site-based reforms, project evaluation costs to conduct a rigorous impact evaluation, and data analytics to build capacity of magnet school leaders and teachers in data literacy to monitor student academic achievement and progress towards MSAP objectives.

Each school has developed a five-year budget that outlines costs in the same categories listed: personnel, travel and equipment, supplies and materials, and contractual services, that are necessary to effectively implement their magnet programs as proposed. Full budget details are provided in the Budget Narrative in Appendix C. The Budget Narrative illustrates all project costs to be reasonable and justifiable to carry out the project as proposed.

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

District Five is a fiscally conservative school district serving a community that demands excellence with less financial resources than neighboring districts. The district's 2016-17 per pupil budget is \$14,475 as compared to \$17,558 (Richland 1) and \$14,962 (Richland 2), as reported by the SC Revenue and Fiscal Affairs Office; SC Department of Education, Statement of Revenues and 135-day average daily membership count. The cost to carry out this project is an additional \$1,623 per pupil, per project year – a cost the district is unable to incur. Year one,

alone, as shown in Table 4 is a **\$2,939,652** investment of start-up funds. Without federal funding, the district will not be able to launch the magnet programs as proposed.

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

The challenge for adequate financial support in District Five extends far beyond what is needed to launch new magnet programs. South Carolina has one of the most complex funding formulas for education in the nation. In 2006, the General Assembly radically changed revenue structures with the creation of Act 388 which eliminated property taxes for owner-occupied homes and replaced that revenue stream with a one-cent sales tax imposed by the state. Initially, Act 388 was viewed favorably because it minimized local tax burdens. However, now almost a decade later, Act 388 has compounded significant financial challenges on districts, including District Five. Expenses related to inflation and other state laws, including the Annual Step increase (raises in pay for teachers based on number of years' experience plus education levels) and increased employer contributions to the SC Retirement System have outpaced the revenues local districts receive from the State. Much of the burden to "fix" the underfunded pension system is being placed on local school districts. A proposal in the State Legislature will increase the employer obligation from a current rate of 11.6% to 18.6% by 2022 (Cope, 2017). For the 2017-18 fiscal year, the proposed 2% increase will cost the district an additional \$2.25 million.

Funding complications were surmounted in 2014, when after a 21-year legal battle the SC Supreme Court ruled in *Abbeville County School District vs. the State of South Carolina* that the State failed in its duty to provide the resources necessary to meet the standards of "a minimally adequate" education in the state's poorest districts. The SC Supreme Court opinion found that the State's current funding formula is "fractured" and charged the Legislature with creating a new formula. In a temporary effort to address the inequity in resources, rather than increasing the

base student cost schools receive, the General Assembly redistributed funds from districts with a lower poverty rate to districts with a higher poverty rate. This action, combined with Act 388, severely hurt District Five even though the poverty rate at some schools exceeds 75%. The result is that expenses are compounding at a rate that exceeds projected revenues.

For the coming 2017-18 budget, the State Superintendent has requested to the State Legislature an increase in base per-pupil funding from \$2,350 to \$2,400; however, it is doubtful this will even be approved. Even so, the proposed increase remains lower than the per-pupil spending prior to the Great Recession of 2009 (\$2,578 per-pupil) and at that amount was still below what the SC State Supreme Court ruled as not meeting requirements for a “minimally adequate education.” The bottom line is that District Five does not have the financial resources required for school transformation of this scope.

(d) The difficulty of effectively carrying out the approved plan and the project for which assistance is sought...

The proposed magnet programs are complex and will require a substantial investment of finances to effectively carry out a rigorous academic program with targeted results to reduce minority group isolation and socioeconomic isolation, while also increasing student academic achievement. In order to fully implement the systemic and site-based reforms as proposed, external financial assistance is critical. Systemic reforms focusing on building teacher capacity to teach in a magnet program with a diverse student population will bring coherence and alignment to district initiatives, while site-based reforms focusing on building capacity of teachers to develop and implement theme-based curriculum will ensure a rigorous academic program is being delivered. Systemic reforms in the areas of desegregation strategies and cooperative learning practices, which are the basis of this project’s theory of action, are an investment of

\$1,010,000 over the five-year grant period, an amount the district simply cannot provide with existing resources. Without this critical element to build teacher capacity in desegregation strategies and cooperative learning practices, the project will not succeed. Notwithstanding, the investments needed at the schools to launch the magnet programs as proposed total \$8,460,056.

Equally critical is the need to provide student transportation to/from magnet programs. The district cannot make a significant impact on increasing racial and socioeconomic diversity in its schools without providing transportation—a key lesson learned from the FY13 MSAP grant, in which the only school to meet its minority group isolation goal was, in fact, the only one to offer district-provided transportation (Spring Hill High School – an all-choice school without an established attendance zone). The Office of Student Transportation has projected an additional five routes will be needed to transport students to/from the new Discover Five elementary magnet programs. The State of South Carolina has a complex student transportation system, in which the state owns and maintains the fleet of school buses, and districts assume costs for personnel/benefits. While districts, including District Five, can independently own and operate a fleet of activity buses, under State law, these cannot be used for regular student transportation to/from school. District Five is fortunate to have three “yellow” school buses, independent from the state, that can be used to support the increased routes necessary to transport students to/from the new magnet programs. However, to operate the magnet programs as proposed in the Discover Five project design and accommodate the increased number of students attending these programs who require transportation, without disrupting the entire system, an additional two medium-sized buses are required. The up-front, one-time investment of \$130,000 to purchase these buses exceeds the financial resources of the district. Without MSAP funding, District Five would not have a feasible option to transport students to/from the magnet programs within the

parameters of State law. The district has committed to funding transportation with general funds post-MSAP funding at an annual cost of approximately \$288,525 which includes salaries and fringe for bus drivers, fuel, maintenance, and insurance. The total five-year transportation costs (i.e. salaries, fringe, fuel costs, insurance) presented in the Budget Narrative are reasonable and represent less than 10% of the total project budget. The bottom line remains that without external financial assistance, Discover Five will not be able to create results-based viable magnet programs that meet the MSAP goals *and* are sustainable beyond MSAP funding.

COMPETITIVE PREFERENCE PRIORITY # 2: NEW OR REVISED MAGNET
SCHOOLS PROJECTS AND STRENGTH OF EVIDENCE TO SUPPORT PROPOSED
PROJECTS

Discover Five includes the launch of three new, and one significantly revised, magnet programs. The programs were developed using evidence-based best practices for improving student academic achievement.

H.E. Corley Elementary School Montessori Magnet will operate as a program within a school. The Montessori Magnet will have the **capacity to serve 168 students** when at full maturity with two Primary classrooms, three Lower Elementary classrooms, and two Upper Elementary classrooms. H.E. Corley Elementary School Montessori Magnet will be the only public school Montessori option in District Five and the surrounding region; there is one private Montessori option in this 25-mile radius, which currently has a waiting list for enrollment. Emboldened by the research that has shown “superior outcomes” for children who attend Montessori schools—including better performance on standardized tests of reading and math, more positive interaction with peers and more advanced social cognition and executive control (Lillard, A. & Else-Quest, 2006)—there is an emphasis for public school Montessori, spearheaded by State Superintendent of Education, Molly Spearman. Under Ms. Spearman’s

leadership, the South Carolina Department of Education has created an Office of School Choice and Innovation with a dedicated Montessori Consultant to support existing and new Montessori Programs.

With the emphasis to increase public school Montessori programs, comes a need to ensure access for minority and low income students. According to an ongoing research study of the 42 public Montessori schools in South Carolina, being conducted by The Riley Institute at Furman University, only 32% of Montessori students in the state are African American. When compared to non-Montessori students in South Carolina, white students are overrepresented in Montessori programs and minority students are underrepresented (The Riley Institute, 2013). Discrepancy also exists in the percentage of Montessori students who are low-income (50% versus 59% who are designated low-income, non-Montessori students). These demographics reveal inequitable opportunities for students who are minority and/or low income to participate in public Montessori in South Carolina, serving as a call to action by District Five to: (1) create a public Montessori option at the Elementary School Level; and (2) ensure that the Montessori program reflects a racially and socioeconomically diverse student population.

Nursery Road Elementary School Arts Magnet will operate as a whole-school magnet with the **capacity to serve 546 students**. Nursery Road Elementary School Arts Magnet will be the only elementary school in the district to offer students an arts-infused curriculum with an extended related arts rotation that touches all aspects of a student's learning experience. The foundation for the educational philosophy behind the Nursery Road Elementary School Arts Magnet is based on The Kennedy Center's definition of arts integration: "Arts integration is an approach to teaching, in which students construct and demonstrate understanding through an art

form. Students engage in a creative process which connects an art form and another subject area and meets evolving objectives in both.” Student achievement, engagement, and peer interactions will be enhanced through regular opportunities for cooperative learning, reflection, and authentic learning experiences that connect students to the real-world through artist-residencies, field experiences, school wide performances, and 21st century technologies. A wide body of evidence supports that instruction in the arts enhances student learning, increases student engagement, and helps students make connections across the curriculum (Hanover, 2014). The arts have been found to engage students who are not typically reached through traditional teaching methods, including those from economically disadvantaged backgrounds, reluctant learners, and those with learning disabilities (Deasy, 2002; Fiske, 1999). As a neighborhood school whose existing enrollment is 61% of students in poverty and nearly 29% of students with special needs, Nursery Road Elementary School Arts Magnet is poised to raise student academic achievement across all subgroups and meet the district’s desegregation goals with a rigorous arts-infused curriculum.

Leaphart Elementary School STEAM Magnet will operate as a whole-school magnet with the **capacity to serve 564 students**. Leaphart Elementary School STEAM Magnet will be a significant change from the school’s current Engineering Program Magnet which launched in 2011 with district support. Despite laudable efforts in themed curriculum development, Leaphart has not been successful in attracting students outside its attendance zone; nor has it produced gains in student academic achievement. Leaphart’s student achievement scores in Science are the lowest in the district, with 49% of grade 5 students scoring Not Met on the 2016 SCPASS; more than double the district average of 20%. The new STEAM Magnet will re-envision science instruction and learning through the lens of the arts to inspire, challenge, and empower all students. A rigorous problem-solving curriculum that is grounded in authentic learning and

design thinking will be visibly integrated across all disciplines. Project Lead The Way (PLTW) will be implemented school wide along with new inter-disciplinary STEAM curriculum units that will stimulate learning and student engagement through an exploration of an integrated curriculum of science, technology, engineering, arts and mathematics that provides real-world relevance and meaning. PLTW is a research-based instructional strategy that uses project-based learning to increase student engagement and academic achievement. Research has found that students who have taken two or more PLTW courses have scored significantly higher on state assessments in mathematics and English language arts than their non-PLTW peers; enroll in higher education institutions at a higher rate than their non-PLTW peers; and those who are non-college bound PLTW students earned higher wages than their non-PLTW peers (Van Overschelde, J. P., 2013).

Irmo High School International Baccalaureate Career-Related Programme (IB-CP) Magnet will operate as a magnet program within a school, with the **capacity to serve 400 students**. The new IB-CP Magnet was selected for Irmo High School because of the school's current designation as an authorized IB World School. Irmo High School has offered the IB Diploma Programme since 2010, which has been funded with district support. The IB-CP Magnet is critical to expand opportunities for under-represented students (women and minorities) in an academically rigorous program that offers authentic Career and Technical Education (CATE) opportunities in high-demand careers in South Carolina including: Aerospace Engineering, Biomedical Science, Culinary Arts, Media Technology and Film, and Veterinary Sciences. Of the three districts in South Carolina that currently offer the IB-CP, District Five will be the only one that offers this depth of academic rigor and STEM-content. Two of the five programs (Aerospace Engineering and Biomedical Science) combine the academic rigor of the

IB Programme with the Project Lead The Way (PLTW) curriculum. Research on the impact of IB-Diploma Programmes has shown positive results in academic and non-academic college readiness with regards to levels of student persistence, adjustment to university coursework, critical thinking, time management skills and research skills (Conley, McGaughy, Davis-Molin, Farka and Fukuda, 2014). IB students also show a stronger knowledge of civic-mindedness and citizenship than their non-IB peers (Saavedra, 2014).

The IB-CP Magnet will be offered in a collaboration with the Center for Advanced Technical Studies—the district’s stand-alone Career and Technology Center recently recognized with the prestigious “High Schools That Work” Platinum Award from the Southern Regional Education Board. The educational philosophy of the Center is based on four essential factors: (1) innovative programs of study that align with high-wage, competitive jobs in South Carolina, (2) the use of instructional strategies where ownership of learning is transferred from teacher to student, and “failure is embraced” through trial and error, (3) a world-class facility that supports the technology needs for a 21st century education; and (4) external partnerships with two and four year colleges as well as local and global industry experts.

In addition to the research-based themes selected, each of the proposed magnet programs within the Discover Five project will incorporate two evidence-based educational interventions to ensure efficacy in achieving MSAP priorities. The project design is supported by evidence in two distinct ways: (1) the structure and intensity of professional development **to improve teacher effectiveness**; and (2) the implementation of cooperative learning practices as a desegregation tool **to improve social interactions and raise student academic achievement.** The project’s theory of action reasons that **if** (1) teachers receive sustained high-quality

professional development in systemic and site-based reform strategies **and** (2) implement cooperative learning practices in their schools, **then** student academic achievement will improve. This theory of action is presented in the project’s Logic Model (See Section (b) Quality of Project Design) with relevant outcomes that align with MSAP priorities. The effectiveness of the educational interventions proposed in the Discover Five project will be evaluated using a quasi-experimental design study conducted by the South Carolina Educational Policy Center (See Section (e) Quality of Project Evaluation).

Improving Teacher Effectiveness. In a study by Garet et al, 2001, researchers examined the level of effectiveness of professional development by their structural and core features and teacher outcomes. Structural features were identified as the **format** in which professional development activities take place, i.e. traditional (workshops outside of the school day) or reform (small group study, mentoring, coaching that occurs during the school day), **duration**, and **collective participation**. Core features were identified as **content focus**, **active learning**, and **coherence** (i.e. connection to teacher goals, state standards, assessments). Results of the study show that the structural features have a substantial positive influence on the core features and ultimately teacher outcomes.

<p>Citation #1: Michael S. Garet, et al (2001). What makes professional development effective? Results from a national sample of teachers. <i>American Education Research Association Journal</i>, 38(4), 915-945. Consistent with WWC Group Design Standards for “Meets with Reservation” although the study has not been reviewed by WWC. (Appendix D)</p>

Citation Outcomes:

- The study found statistical significance ($p < .05$ level) for the following elements: sponsor, type, span, contact hours, collective participation, focus on content knowledge, active learning, coherence, resulting in enhanced knowledge and skills and change in teaching practice.

Relevance to Proposed Project:

- The professional development framework in the proposed project will be delivered through a combination of workshops, extended small group learning, job-embedded professional learning, coaching, mentoring, and reflection, which addresses the study’s research outcomes of sponsor, type, collective participation, active learning.
- The framework is designed to work in conjunction with existing district initiatives so that time requirements and professional learning is cohesive and aligns with teacher priorities and goals, which addresses the study’s research outcomes of coherence.
- The framework provides a minimum of 90 hours of professional development annually per teacher, which addresses the study’s research outcomes of span, contact hours.
- The framework provides professional learning in systemic and site-based reforms, which addresses the study’s research outcomes of enhanced knowledge and skills.
- The framework provides opportunities for teachers to reflect and analyze on their practice, which addresses the study’s research outcomes of change in teaching practice.

Improving social interactions and raising student academic achievement. Cooperative

learning will be implemented in all proposed magnet programs to promote improved social interactions and raise student academic achievement. The study selected looks at the impact of cooperative learning on academic achievement among diverse student populations. The integration of cooperative learning practices in the classroom will promote improved social interactions and increased academic achievement for all participants enrolled in the Discover Five magnet programs.

Citation #2: Stevens, R. J., & Slavin, R. E. (1995). The cooperative elementary school: Effects on students’ achievement, attitudes, and social relations. *American Educational Research Journal*, 32(2), 321-351. Consistent with WWC Group Design Standards for “Meets with Reservation” although the study has not been reviewed by WWC. (Appendix E)

Citation Outcomes:

- The study found that after the first two years of implementation, students in cooperative elementary schools had significantly higher achievement in reading vocabulary, reading comprehension, language expressions, and math computation when compared to a matched sample of peers in traditional schools ($p < .01$); these results were consistent across all groups

of students considered in the study, including special education and gifted students. In addition, there were better social relations in cooperative elementary schools than in the comparison schools ($p < .01$, $ES = .42$); these results were also consistent for all groups of students considered, with both special education students ($p < .01$, $ES = .86$) and gifted students ($p < .01$, $ES = .46$) being more accepted socially by their non-handicapped peers; and gifted students in heterogeneous cooperative learning classes had significantly higher achievement than their peers in enrichment programs without cooperative learning.

Relevance to Proposed Project:

- The cooperative elementary school model described by Stevens and Slavin uses cooperation as a philosophical and practical approach to changing classroom and school organization, classroom processes, and learning activities to provide students with more active learning experiences, equal access to learning by all students, and a more supportive social environment for students and teachers.
- The study methods included (1) widespread cooperative learning in academic classes, (2) mainstreaming learning disabled students in regular education, (3) teachers coaching one another, (4) teachers collaborating in instructional planning, (5) principal and teachers collaborating on school planning and decision making; and (6) principal and teachers encouraging active involvement of parents. The proposed project will include all methods cited in the study.
- The study sample consisted of 1,012 students in second through sixth grades in five elementary schools of a suburban Maryland school district. The schools were all located in predominantly working-class neighborhoods. Student populations of each school ranged from 4%-15% minority students, and 2%-20% disadvantaged students. 9.3% of the student population at the schools were identified as learning disabled.
- The proposed project is located in School District Five of Lexington and Richland Counties which is a suburban district like the study sample. The specific schools in the proposed project are located in primarily working-class neighborhoods. The student demographics at the proposed schools are 44%-50% minority (African American) and 52%-66% disadvantaged (poverty index) and 2%-7 % Learning Disabled.

COMPETITIVE PREFERENCE PRIORITY # 3: SELECTION OF STUDENTS

The process for the selection of students in the Discover Five magnet programs is depicted in Table 5. The selection process will be **race-neutral** and use **controlled choice** as a diversity strategy. In Phase I absolute (or automatic) preference will be given to students residing in the attendance zone of a school that offers a magnet program; these students will not have to complete an application for enrollment, but will be asked to complete a letter of intent to enroll.

The number of seats available at the magnet school will be determined by each school’s building capacity, less than the projected enrollment of zoned students. In Phase II, the application period will open for any student interested in enrolling in a magnet program outside of their attendance zone, with preference given to siblings of students currently enrolled in the magnet program. After determining the number of remaining seats available for Phase III, the remaining applicant pool will be analyzed to determine the weight of the lottery by geographic regions (attendance clusters) in order to achieve a student composition that reflects the diversity targets needed to achieve a reduction in minority group isolation and socioeconomic isolation at each school that offers a magnet program. Using the attendance clusters as the weighted factor is in direct response to the demographics cited in Table 1. A step-by-step description for each magnet program is provided in the attached application package Additional Table 5.

Table 5. Discover Five Student Selection Process

Discover Five Student Selection Process		
Phase	Process	Selection
I	Attendance Zone <i>Preference</i>	Students residing in the attendance zone of a school that offers a magnet program will be asked to complete a Letter of Intent to Enroll.
<i>The number of available seats at each magnet program will be determined by each school's building capacity, less than the school's projected enrollment in Phase I.</i>		
II	Magnet Application <i>Preference</i>	Application period opens to any student who resides in the district and seeks to enroll in a magnet program. Preference will be given to siblings of current magnet students who reside in the district, but outside of the school attendance zone of a magnet program.
<i>Remaining Seats will be determined by:</i>		
III	Magnet Application <i>Weighted Lottery</i>	The remaining applicant pool will be analyzed to determine the weight of the lottery by geographic regions (attendance clusters) in order to achieve a student composition that reflects the diversity targets needed to achieve a reduction in minority group isolation and socioeconomic isolation at each school that offers a magnet program.

COMPETITIVE PREFERENCE PRIORITY # 4: INCREASING RACIAL INTEGRATION AND SOCIOECONOMIC DIVERSITY

School District Five of Lexington and Richland Counties is the only district in the state with a landmass equally split between two counties, and as such serves residents of both counties. All other school districts serve either a portion of, or the entirety of, the county in which they are located. This factor gives residents a unique choice of schools not otherwise available in South Carolina. These two counties exhibit stark differences in their demographics which is amplified most clearly along the county border lines in which District Five coalesces. The most striking difference is in the racial makeup of residents, in which 80% of the population in Lexington County is white, as compared to 47% in Richland County (2010 U.S. Census Bureau). While the 2015 median household income in each county is relatively similar (\$53,857 in Lexington County and \$49,131 in Richland County), there are several pockets of concentrated poverty and high wealth that have resulted in homogenous schools and attendance clusters within the district. A 2016 report from The Brookings Institute “U.S. Concentrated Poverty in the Wake of the Great Recession” identified Columbia, SC as one of the cities with a share of the poor population living in a neighborhood with a 20%+ poverty rate. Figure 6 identifies Columbia, SC as a city with 50% of its poor population living in concentrated poverty.

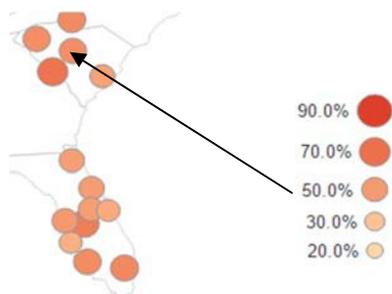


Figure 6. Share of the poor population living in a neighborhood with a 20%+ poverty rate. Multi-year estimate, 2010–14.

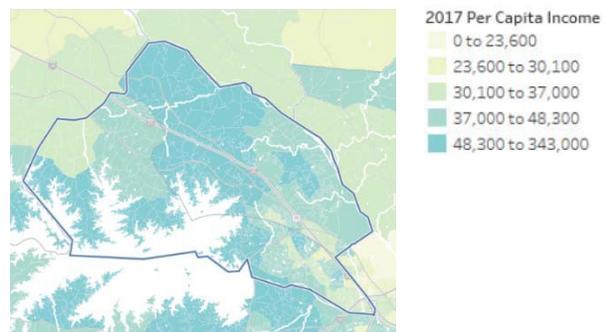


Figure 7. 2017 Per Capita Income. Data compiled from Open Street Map.

The data compiled from Open Street Map in Figure 7 shows per capita income levels within the District Five boundary, as identified by the outer line in purple. The district’s most southern border which includes portions of both Lexington and Richland counties shows greater disproportionality of poverty, as compared to the northern portions of the district. This is the same geographical area that makes up the Irmo attendance cluster, which has the highest rate of minority group isolation than the district’s other two attendance clusters.

Unlike many districts faced with racial and socioeconomic isolation that do not have a large enough applicant pool to affect significant change, District Five has an unprecedented opportunity with a diverse applicant pool from which to draw to balance racial and socioeconomic diversity among its schools through the use of magnet programs. The stark contrast in student demographics among the district’s attendance clusters is noted in Table 6. Schools identified in the proposed project are highlighted in yellow.

Table 6. District Student Demographics. Data retrieved from District Accountability Office 2016 Spring 135th Day ADM and 2016 SC Poverty Index.

Attendance Cluster	School	Total	Ethnicity								Lunch		Poverty Index
			Black		Hisp.		White		Other		F/R		
			N	%	N	%	N	%	N	%	N	%	
Chapin	CES	755	37	5	29	4	632	84	57	8	200	26	37
	LMES	911	22	2	28	3	820	90	41	5	101	11	15
	CIS	719	22	3	30	4	628	87	39	5	127	18	20
	CMS	806	36	4	25	3	701	87	44	5	128	16	19
	CHS	1235	55	4	35	3	1109	90	36	3	155	13	17
Dutch Fork	BES	687	87	13	6	1	538	78	56	8	106	15	21
	DFES	542	280	52	16	3	199	37	47	9	300	55	55
	HECE	589	257	44	20	3	250	42	62	11	363	62	63
	OPES	658	125	19	32	5	441	67	60	9	153	23	29
	RSES	583	112	19	7	1	434	74	30	5	123	21	25
	DFMS	1065	335	31	35	3	612	57	83	8	337	32	32
	DFHS	1753	609	35	47	3	978	56	119	7	536	31	28
Irmo	HWES	646	323	50	26	4	218	34	79	12	396	61	62
	IES	527	114	22	25	5	334	63	54	10	181	34	38

	LES	464	230	50	23	5	157	34	54	12	290	63	66
	NRES	446	205	46	8	2	204	46	29	7	249	56	61
	SOES	645	397	62	39	6	126	20	83	13	502	78	76
	IMS	921	416	45	33	4	394	43	78	8	498	54	54
	IHS	1446	747	52	53	4	525	36	121	8	841	58	52
None	CRIS	798	298	37	35	4	401	50	64	8	341	43	43
	SHHS	972	120	12	21	2	775	80	56	6	146	15	19
District		17168	4827	28	573	3	10476	61	1292	8	6073	35	37

Increasing racial integration and socioeconomic diversity. In 2013, under the leadership of Superintendent Dr. Stephen Hefner, District Five set into motion a series of bold actions to reduce and prevent further racial and socioeconomic isolation within the district's 23 schools. First, the district enacted a district wide school choice option that allows parents and students to choose enrollment in any school that has available seats. Today, 17 out of 23 schools are open to school choice. Second, the district introduced the concept of no-zone schools for new construction of schools. In 2014, in efforts to reduce overcrowding in the Chapin attendance cluster, Spring Hill High School opened as the first no-zone school (and was also included in the FY13 MSAP cohort). This school was the only school in the district's FY13 MSAP grant to achieve its minority group isolation (MGI) goals and continues on this path. The concept of no-zone has been well-received by parents and students, and has instilled a sense of choice that is not inherent to traditional compulsory attendance zones. Going forward, with the success of Spring Hill High School, the district will continue to explore no-zone schools for any new construction of schools as a result of over-crowding. Finally, the district's commitment to creating rigorous magnet programs has resulted in an additional five options from which parents and students can choose, bringing the total number of magnet programs to 10.

Building from this foundation and lessons learned from the FY13 MSAP grant, the Discover Five project will propel racial integration and socioeconomic diversity to the forefront

with a **socioeconomic integration plan** that includes three vital strategies: (1) an intentional site selection and choice of themes for new magnet programs, (2) a race-neutral, controlled choice student selection process; and (3) district transportation provided to/from schools for students.

Together, these three strategies will ensure that students from all racial, ethnic and socioeconomic backgrounds have equal access to participate in the magnet programs.

(1) Site selection and choice of themes for new magnet programs. The site selection of magnet programs was intentional to provide a high-quality academic program to students traditionally underrepresented in Montessori, STEAM, Arts, and IB by maximizing the potential diversity of the school given the schools' zoned population and surrounding community. Each of the selected sites are experiencing the highest rate of minority group isolation and socioeconomic isolation in the district, as was depicted in Table 2. Magnet themes were selected to complement the district's established K-12 academic pathways.

(2) Student selection. As described in CPP #3, student selection will be determined by a race-neutral, controlled choice lottery. The decision to move to a controlled choice lottery system lies chiefly in the fact that diversity targets at other district magnet schools funded by MSAP have not been met by the use of a random lottery alone – a key lesson learned from the FY13 MSAP grant. In order to rectify this, Discover Five, will implement a three-phase student selection process that uses a weighted lottery to meet demographic targets at each magnet program, using geography as a proxy for socioeconomic status, as was shown in Figure 1.

(3) Transportation. Finally, transportation continues to be one of the largest barriers for parents to enrolling their child in a magnet program. As noted in CPP#1, district leaders have recognized that in order to maximize racial integration and socioeconomic diversity in its schools

and meet MGI targets, it must offer transportation to/from magnet schools. In order to provide this option to parents, the office of Student Transportation projected an additional five bus routes are needed; however, the district only has three buses available under State law to transport students. With MSAP funding, District Five will be able to purchase the two additional school buses required to accommodate the transportation needs of students to attend magnet programs. These buses will also be used throughout the school day to support magnet-themed field experiences that are a critical component of each magnet program's project design. The average bus route to/from a magnet program will be approximately 45 minutes. The district has committed funds to sustain the operation and maintenance of these buses, including salaries and fringe benefits for the additional drivers' post-grant funding. By extending transportation options, the district anticipates higher participation rates in magnet programs measured by an increase in applications and enrollment.

District Five has engaged Richard D. Kahlenberg, Senior Fellow at The Century Foundation, to guide implementation of this plan. Mr. Kahlenberg has been called "the intellectual father of the economic integration movement" in K-12 schooling and "arguably the nation's chief proponent of class-based affirmative action in higher education admissions." He is also an authority on teachers' unions, private school vouchers, charter schools, turnaround school efforts, labor organizing and inequality in higher education. In the recent publication from The Century Foundation "School Integration in Practice: Lessons from Nine Districts" Kahlenberg found the following common themes among districts that implemented a socioeconomic integration plan:

- a. When socioeconomic diversity policies are well implemented, they appear to produce strong academic outcomes for students and better prepare them for living in a diverse society.
- b. While school integration is often politically challenging, key steps—such as the use of choice and incentives—can smooth the path to community support.
- c. Setting clear system-wide goals for integration increases the likelihood of achieving success.
- d. Policies that break down artificial walls between city and suburb can have greater impact than those limited to existing district lines.
- e. Socioeconomic diversity policies can often lead to racial diversity.
- f. Districts have grown more sophisticated in defining disadvantage.
- g. Districts are more likely to be successful when they ensure integration not only in school buildings but also in school classrooms. (Kahlenberg, 2016)

The above themes will lay the groundwork for Mr. Kahlenberg’s work with District Five.

His work will begin with the preparation of a background report tailored to the community in which District Five is located and the people it serves that provides research that supports the benefits of diversity in public education. Through the development of this report, Mr.

Kahlenberg will interview community members, parents, and district and school leaders *to assess local conditions as they relate to perceptions and challenges to socioeconomic integration and racial diversity*. This report will provide a foundation from which district leaders can begin to implement and communicate plans for socioeconomic integration in partnership with the community. Mr. Kahlenberg will be contracted for 25 days (on- and off-site) over the five-year grant period. The bulk of his work will be concentrated in the first three years as the plan is implemented, with the latter years of the grant focusing on guidance and support to ensure progress continues to be made towards achieving minority group isolation (MGI) targets.

(a) DESEGREGATION

The Secretary reviews each application to determine the quality of the desegregation-related activities and determines the extent to which the applicant demonstrates—

(1) The effectiveness of its plan to recruit students from different social, economic, ethnic, and racial backgrounds into the magnet schools.

Discover Five builds from the momentum and success of the district's strategic efforts to create new magnet programs to promote intra-district school choice for the 17,000 PK-12 students enrolled in its system. In 2013, District Five was both a novice applicant and recipient of MSAP funding for Project ACCESS which resulted in new magnets programs at two elementary schools, one middle school, and two high schools. In a district that until 2013 had been largely segregated by attendance clusters, the concept of intra-district school choice that is without academic requirements, was an unconventional idea that quickly became embraced by its community. In just three years of the open-choice application and lottery process, nearly 10% of the student population submitted applications to attend a school outside of their zoned school. In 2017, an additional 60 students opted to "choice in" to the district from private, charter and/or on-line schools, demonstrating that the district is making progress in bringing families back to public education.

The district has identified five targeted audiences for Discover Five in its recruitment plan to meet the diversity objectives of MSAP to reduce minority group isolation. These targeted audiences include: (1) families with preschool aged children, (2) families with students enrolled in homeschool, virtual, or charter schools, (3) families with students who attend private schools, (4) families with students currently served in District Five who may be interested in magnet themes and opportunities outside their zoned-attendance school; and (5) families with students seeking to relocate to District Five.

Discover Five will execute a robust recruitment campaign focused on four milestones designed to attract students from different social, economic, ethnic, and racial backgrounds, while also creating opportunities for family and community engagement. Implementation of the

recruitment campaign will be led by a Recruitment Specialist. This newly added position will report directly to the MSAP Project Director and is critical to the success of meeting recruitment benchmarks to reduce minority group isolation (MGI) in the magnet schools—a key lesson learned from the FY13 MSAP grant.

Milestone 1. Educate community on benefits of socioeconomic and racial diversity.

Benchmarks ♦Prepare background report and community profile to assess perceptions of diversity. ♦Present report to Board of Trustees. ♦Present report to Magnet Advisory Councils (district and school levels) and School Improvement Councils. ♦Communicate the benefits of socioeconomic and racial diversity at all outreach and recruitment events.

Milestone 2. Create a district wide marketing and outreach campaign to profile each magnet school. Benchmarks ♦Develop logo and branding for each magnet school. ♦Develop print and electronic marketing materials for each magnet school. ♦Create new signage to “scream the theme” inside and outside of each magnet school (external marquee, banners, hallway and lobby enhancements, etc.). ♦Produce school choice catalogue that highlights uniqueness of each magnet school. ♦Provide training to all school staff to ensure consistency of messaging throughout the learning environment and to targeted audiences. ♦Provide training specific to elementary and secondary guidance and placement staff to ensure understanding of magnet schools in order to provide equal access to magnet programs for all students. ♦Produce a 3-5-minute video with student, teacher and parent testimonials that can be posted on the school and district websites and shown during recruitment events.

Milestone 3. Build relationships with target audiences. Benchmarks: ♦Promote the Central Magnet Office as the go-to Parent Information Resource Center. ♦Purchase mailing lists

to recruit target audiences (families with preschool aged children, families with students enrolled in homeschool, virtual or charter schools, families with students enrolled in private schools, families with students currently enrolled in district schools who may be interested in attending magnet schools, and families seeking to relocate to the district). ♦Produce consistent communications that reflect each magnet school theme and push out to targeted audiences through direct mail, targeted mailings, electronic and web-based communications and advertisements. ♦Participate in district recruitment events (annual magnet fairs). ♦Participate in school recruitment events (open houses, parent information sessions, student shadowing experiences, etc.). ♦Participate in community recruitment events (community festivals, faith-based events, speaking engagements at local civic and/or business groups, etc.).

Milestone 4. Build awareness and enthusiasm within each magnet school.

Benchmarks: ♦Communicate vision, mission and culture of magnet school at all school meetings and events. ♦Create a team of magnet school ambassadors at each school comprised of early adopters and change agents who can rally support of their peers through every day school meetings and special events. ♦Promote leadership opportunities for magnet school ambassadors at recruitment events and parent engagement events. ♦Promote magnet theme, testimonials, and personal stories in monthly school newsletter and video vignettes posted to school website. ♦Create opportunities for staff to visit other schools in (and outside) of district to share and learn best practices for magnet-theme content and implementation.

Removing barriers to choice for parents and students is essential to recruit students from different social, economic, ethnic, and racial backgrounds into the magnet schools. Research by the Center for Reinventing Public Education identified top barriers for parents considering

school choice as “getting information about schools, understanding which schools they are eligible to enroll in, filling out multiple applications, submitting multiple applications on time, confusing paperwork, and getting their child to and from school every day” (DeArmond, Jochim, and Lake, 2014). District Five has the following plans in place to address these barriers:

Getting accurate information about schools to prospective students and parents will mitigate confusion about academic programs, eligibility, and the application and student selection process. The district wide marketing and outreach campaign and relationship building activities described in Milestones 1 through 3, identifies the multiple avenues and methods of communication to get information to prospective students and parents and build strong family-school relationships from the beginning. In efforts to reach families with diverse needs, translation services for English Language Learners and interpretative services for individuals with hearing loss will be available at all district and school level recruitment events, as well as bi-lingual brochures and applications. The Central Magnet Office will operate year round as the Parent Information Center for all magnet-related information and is available to provide individualized assistance to any family in- and out-side of the district who seeks to enroll in a magnet school.

A streamlined application process has simplified the school choice process. There is a two-week application window that opens each January. Only one application is required and there are no academic requirements for enrollment in the Discover Five magnet programs. Students will be selected via a race-neutral, controlled choice lottery and notified by letter (email and/or hard copy sent to their address of residence). A one-week window will follow for students to confirm their acceptance. Once a student confirms acceptance, the magnet school will add the

student to their communications roster to receive all school-related information regarding activities to maintain interest and enthusiasm in choosing the school. During the summer, each magnet school will host a student and family orientation to assist with the transition, establish core relationships with school leaders and teachers, and connect students to peers.

Transportation to/from a magnet school is a barrier for parents, particularly those from lower socioeconomic levels, that prevents enrollment in a magnet school. Parents (and students) regularly cite transportation as a barrier to choosing a school outside of their attendance zone. In a 2016 district wide survey to parents about Magnet Programs, the top three obstacles to enrolling their child in a magnet program were cited as: location of the magnet (49%), availability of extracurricular and athletic opportunities (48%), and transportation (38%). Similarly, in a 2016 Focus Group of 8th grade students on High School Choice conducted by the South Carolina Educational Policy Center as part of the FY13 MSAP grant project evaluation, students were asked to quantify the degree of consideration among certain factors when choosing a high school. With regards to transportation, students responded 25% (considered transportation a lot), 30% (considered transportation), and 23% (considered transportation a little) as a factor when choosing a high school. Results of these surveys can be found in Appendix F and Appendix G, respectively. As stated previously, one of the key lessons learned in the FY13 MSAP Grant was that *if* the district is committed to reducing minority group isolation (MGI) and socioeconomic isolation, *then* it must provide transportation to/from the magnet programs. The Discover Five project design and Multi-year Financial and Operating Model with an accompany Plan (Appendix H) lays out a reasonable and justifiable plan for launching (and sustaining) student transportation to/from the magnet programs.

(2) How it will foster interaction among students of different social, economic, ethnic, and racial backgrounds in classroom activities, extracurricular activities, or other activities...

The proposed Discover Five project is designed to ensure that all participating schools build capacity and maximize resources to intentionally promote interaction among students of different social, economic, ethnic and racial backgrounds. Once students are recruited, it is essential that frequent and meaningful opportunities are available for students to interact with their peers of all backgrounds. This will be achieved through a combination **systemic** and **site-based reforms** implemented at the proposed magnet programs.

Systemic Reforms. The Discover Five project design outlines critical elements to achieve desegregation goals that are common across all proposed magnet programs. These common elements—or **systemic reforms**—provide magnet school administrators and teachers with professional learning opportunities to achieve a growth mindset and skill set that will enable students from diverse backgrounds equal access and opportunity to participate (and be successful) in academically rigorous curriculum and increase social interactions with peers and adults from various social, economic, racial, and ethnic backgrounds. A successive 5-year professional development plan is detailed in Section (b) Quality of Project Design. The plan (1) provides magnet school leaders and teachers with desegregation and equity strategies, (2) counters implicit biases, (3) prevents re-segregation within schools and classrooms, (4) facilitates positive interactions between students and staff, and staff and parents; and (5) provides a strategy to ensure academic rigor for all students in the integrated setting. The plan combines **cultural leadership** (understanding the cultural backgrounds and experiences of students), **effective leadership** (addressing the achievement and instructional gaps), and **equity** (leveraging social justice) (Agosto, et al, 2013) that will assist teachers to apply **desegregation and equity strategies to support racial and socioeconomic integration.**

Concurrently, school leaders and teachers will receive training to apply **cooperative learning** practices in their schools and classrooms through a practical exploration of social interdependence theory. Researchers, D.W. Johnson and R. Johnson have done extensive work in this field and modified and extended this theory to validate the effectiveness of cooperation among three broad categories: effort to achieve, positive interpersonal relationships, and psychological health (Johnson & Johnson, 2009). Cooperative learning has been linked to gains in interpersonal skills and positive academic outcomes for students of all abilities. In cooperative learning settings, higher performing students will serve as a guide and orient their peers to a group goal, whereas students of lower skills not only benefit from this help but also get to share in the group success; something that may have not been achievable on their own (Hedrich & Vega 2015). School administrators and teachers at each of the proposed magnet programs will receive training to implement three types of cooperative learning in their schools and classrooms: formal, informal, and base groups, under extended coaching provided by the Institute for Cooperative Learning, founded by D.W. Johnson and R. Johnson and an on-site Cooperative Learning Coach (details provided in Section (b) Quality of Project Design).

Site-based Reforms. Each of the Discover Five magnet programs has selected its own site-based reform strategy focused on specific thematic content. These themes will be embedded throughout the schools, classrooms and extracurricular activities, and utilized to their full extent to foster interactions among students of diverse backgrounds through **inquiry-based learning environments** and **authentic learning experiences**.

Inquiry-based learning environments are at the core of each magnet program's design. Flexible seating to allow for collaborative learning, new lab spaces, and technology enhanced

classrooms will offer students and teachers a dynamic, inter-disciplinary learning experience where new concepts can be explored and tested.

Leaphart Elementary School STEAM Magnet will add three STEAM Inquiry Labs (Makerspace, Science and Math) where inquiry and student-led investigations will **inspire**, **challenge**, and **empower** all students to take ownership in the learning process. The STEAM Inquiry Labs will encourage students to take risks, experience failure, and try again. Students enrolled in the H.E. Corley Elementary School Montessori Magnet will use Montessori-endorsed instructional materials and practices that rely heavily on student-led investigation and inquiry. Working within parameters set by their teachers, students are active participants in deciding what their focus of learning will be for each day. Students work at their own pace and advance through prescribed curriculum as they are ready, with guidance from their teacher. At Nursery Road Elementary School Arts Magnet related arts classrooms will be transformed into vibrant studios that incite creativity and collaboration. Three new studios (Dance, Theater Arts, and Instrumental Music) along with enhancements in the Media Arts and Visual Arts Studios will provide a foundation for the inquiry-based and cooperative learning that will drive the school's transformation into an arts integrated magnet. Students enrolled in the Irmo High School IB-CP Magnet will have access to a new Distance Learning Studio operated by students in the Media Technology and Film program of study. The Distance Learning Studio will offer students a first-hand environment to communicate regularly with peers, researchers and professionals across the globe as part of their IB-CP curriculum.

Each magnet program will incorporate one-to-one technology to extend learning in different modalities and guide students at differing skill levels to work independently at their

own pace or through shared experiences with their peers. Under the district's i5 Technology Initiative, district-issued devices are distributed to all students in grades 6-12 to strengthen the growth of curriculum and competencies for work, citizenship and life-long learning. Discover Five will equip students in the elementary levels with personal devices to access 21st century technology to support classroom instruction, student-led investigations, personalized learning and collaborative group projects. District resources will support the transition to personal devices and support teachers with digital application selection to use technology to enhance instruction and learning.

Authentic learning experiences at each Discover Five magnet program will be driven by engaging theme-based curriculum that encourages a deep personal connection with learning to meet students' various needs and backgrounds. Relevant and meaningful content is essential to maintaining student interest at high levels that will translate into increased academic achievement. Magnet-themed curricula will connect students to the real-world and foster student-led investigations and learning. Field studies and residencies by professionals will extend learning and provide positive adult role models. Cooperative learning through shared experiences and student-led investigations will yield greater interest and enthusiasm where students will assume a greater ownership in their learning. Project-based Learning (PBL) will encourage students to work collaboratively over an extended period of time to investigate and respond to a real-world problem or situation and has been repeatedly proven effective at increasing academic achievement, improving content learning, and creating higher levels of engagement and more positive perceptions of the subject matter (Holm, 2011). The tie-in between cooperative learning and project-based learning will help foster interactions among students of different social, economic, ethnic, and racial backgrounds, as students must get to know and trust each other,

communicate accurately and unambiguously, accept and support each other and resolve conflicts constructively (D. W. Johnson, 2009; D. W. Johnson & F. Johnson, 2009). Project Lead The Way (PLTW) curriculum will be implemented at Leaphart Elementary School STEAM Magnet and Irmo High School IB-CP Magnet, providing students with authentic, project-based learning. Extracurricular activities at each school will draw on elements of cooperative learning and project-based learning by offering extended opportunities for students to interact with peers of diverse backgrounds on enrichment activities that support diverse interests, such as African drumming, robotics leagues, computer coding, gardening, and dance.

(3) How it will ensure equal access and treatment for eligible project participants...

School district policy combined with the intentional selection and criteria of new magnet programs, as detailed in CPP #1, sets an unequivocal foundation for equal access and treatment for all students seeking to enroll, and enrolled, in the new magnet programs. Three specific policies guide the work of district leaders and teachers to ensure equal access and treatment of students:

School district policy IHA Basic Instructional Program, in compliance with federal statutes Title VI of the Civil Rights Act of 1964 and Title IX of the Educational Amendments of 1972 states: “The district will provide and implement an appropriate curriculum for children.... In compliance with state and federal regulations, the district will not exclude, deny benefits to or prohibit students from course offerings on the basis of sex, race, religion, color, immigrant status or English-speaking status, or national origin.”

School district policy JB Equal Educational Opportunity/Nondiscrimination, in compliance with federal statutes Title VI of the Civil Rights Act of 1964 and Title IX of the Educational Amendments of 1972 states: “Every student of this school district will have equal

educational opportunities regardless of ethnic or racial background, religious beliefs, sex, disability, immigrant status or English-speaking status, and economic or social conditions. The district schools will not refuse to admit or exclude any person based on these criteria. The district will advertise this nondiscrimination policy.”

School district policy IIA Grouping for Instruction, in compliance with federal statutes Homeless Assistance Act (also known as the McKinney Act) and Title VI of the Civil Rights Act of 1964 states: “Grouping will never create or support a system of discrimination on the basis of race, religion, immigrant status or English-speaking status, sex or socioeconomic status.” This policy will provide critical guidance as schools begin to implement cooperative learning as a key instructional strategy to promote desegregation.

Beyond school district policy, equal access and treatment for students traditionally underrepresented in courses offered in the magnet programs will be achieved in the following ways:

Equal access and treatment for students with disabilities. Students will have access to enroll in the magnet program of choice, provided their Individual Education Program (IEP) or Section 504 Plan needs can be met. The district’s Department of Special Services provides supervision and coordination of academic accommodations, related support services, and psychological services to ensure that students with disabilities receive an equal education to their non-disabled peers. Currently, 18.7% of the district’s total student enrollment receives services via an IEP or Section 504 Plan. Percentages at the proposed magnet schools vary from 17% to 28.6% which confirms *these schools have the supports in place to serve students requiring additional academic, health, behavioral, physical, emotional, or sensory supports.* Many of the

students at the proposed schools are mainstreamed in the general classroom and receive pull-out resources from special education teachers in the areas of math, English language arts, and/or behavior/learning strategies. These supports will continue to be made available in the proposed Discover Five magnet programs.

Equal access and treatment for English Language Learners (ELL). Students identified as speaking a language at home other than English are served through the district's Office of Instruction. Services begin immediately upon student registration if a family indicates that a language other than English is spoken at home. Students are then screened to determine what, if any, level of service or intervention is needed to assist students to achieve proficiency in the domains of reading, writing, speaking, and listening. Currently, 863 students (5% of district enrollment) receive services through the district's English to Speakers of Other Languages (ESOL) program. Based on the student's needs, they may receive pull-out or push-in services provided by the school's ESOL teacher. The district employs 7.5 FTE ESOL teachers who travel between the schools depending on the needs of students. Support is also provided to parents of ELL students through the district's Adult and Community Education program which provides ESL classes at no-cost. Coordination between the ELL program and Adult and Community Education program allows for streamlined communication about events and activities to support both student ELL and their families.

Equal access and treatment for women and girls in mathematics, science, or technology courses and African American students in IB and CATE programs. Both Irmo High School and the Center for Advanced Technical Studies have made a concerted effort to increase the number of female students in CATE programs and the number of non-white students in the IB-Diploma

Programme. Of the 82 students currently enrolled in the IB-Diploma Programme, 49% are non-white—a significant increase of 29% in 2014. A focus on targeted recruitment to underrepresented students by guidance counselors and teachers has resulted in a student enrollment that is more representative of the student body as a whole. Strategies such as the elimination of academic criteria in favor of using informal interviews and transcript evaluation to identify and recruit students have similarly proven beneficial. The implementation of structural changes to the IB-Diploma Programme has contributed to this increase as well, including structured supports for the Extended Essay completion, a summer writing workshop, and the creation of a duty period for teacher management of Creativity, Activity and Service (CAS) requirements and deadlines. These strategies have not only boosted recruitment, but also student retention by creating an environment of collegiality and mutual support among the IB student cohort that has fostered student interactions and peer support.

Similarly, recruitment strategies have boosted enrollment at the Center for Advanced Technical Studies for students underrepresented in STEM and CATE. Of the 1,014 students currently enrolled, 36% are female and 21% are African American. While this is only a 2% overall increase from when the Center for Advanced Technical Studies opened in 2012, enrollment by females is strongly represented among the programs of study selected for the IB-CP Magnet: 10% Aerospace Engineering, 72% Biomedical Sciences, 67% Culinary Arts, 22% Media Technology and Film, and 73% Veterinary Sciences. Special recruitment activities including STEM camps for rising 7th and 8th grade students located at the Center for Advanced Technical Studies have also increased student exposure to STEM and provided meaningful connections to secondary teachers and peers who serve as volunteers during the camps, as well

as student shadowing experiences and tours of the Center for Advanced Technical Studies which are provided to every 8th grade student districtwide.

Notwithstanding, the new magnet programs themselves are designed to be culturally-relevant to reflect the diverse backgrounds of students and instill respect and appreciation of differences in culture, race, ethnicity, language, and socioeconomic backgrounds which translates to equity of access and treatment for all students. Detailed program descriptions are provided in Section (b) Quality of Project Design.

(4) The effectiveness of all other desegregation strategies proposed by the applicant...

As a novice applicant and recipient of MSAP funding in the FY13 cohort, District Five has made exceptional progress in bringing the concept of magnets and intra-district school choice to a community that was initially wary of choice and preferential to the concept of compulsory attendance zones. While there is growing interest in choice by District Five students and parents, now is a pivotal moment to build from this momentum by offering more choice while also communicating the value of racial and socioeconomic diversity in the district's schools. While there is significant research that conveys this value compiled by The Century Foundation (2014), a growing field of research is emerging that investigates the reasons why parents enroll their children in certain schools. Amy Stuart Wells and Allison Roda of Columbia University, Teachers College have done extensive research in this area. Their 2013 article published in the *American Journal of Education* 119, School Choice: Policies and Racial Segregation: Where White Parents' Good Intentions, Anxiety, and Privilege Collide, brings to the forefront the juxtaposition of parents who are "bothered by the segregation but...are concerned that their children gain access to the "best" (mostly white) schools" (p. 261). This is a fascinating study that peels away the contradictions of belief and actions and underscores the

absolute necessity for District Five leaders to better understand community perceptions and fears that may impact the success of the district's socioeconomic diversity plan, as defined in CPP #4. As such, the district's work with Richard Kahlenberg to "assess local conditions" and compile a report that cites the research behind the benefits of socioeconomic and racial diversity in public education is critical to this project's success to reduce, prevent, and eliminate minority group isolation.

Similarly, District Five has made extraordinary progress building teacher capacity in cultural competence to work with students of diverse backgrounds under the FY13 MSAP grant. Dr. Donna Elam, a key partner in the FY13 MSAP grant, will once again provide intensive training to magnet school leaders and teachers in the broader scope of desegregation and equity strategies (as described in Question #2 of this section, and detailed in full in (b) Quality of Project Design). Following the success of Dr. Elam's work with the magnet schools in the FY13 MSAP grant cohort, the district adapted its current Lead5 professional development model to add cultural competence/desegregation and equity strategies as a permanent option available to ALL teachers, not just those teaching in a magnet school environment. In this model, teachers are able to concentrate their professional learning over a one-year period, with in-depth workshops, personal reflection, small group learning, and job-embedded assignments. The following reflections were captured from teachers who participated in Dr. Elam's training in 2016 and set the stage for continued systemic impact:

"I will be more mindful of my students and families' experiences, perspectives, and needs; putting aside my own assumptions." –Sarah Ramsey

"How reflective am I when I think about my lessons? Do I truly consider not only how diverse my resources are, but also how do I meet the needs of my diverse students?" –Laura Duncan

“I have learned to look at my lessons through the eyes of the children.... Do they all feel and have ample opportunities to participate and to be successful?”

–Sandra Brandt

“I plan to share this idea with my team: It is important to help students develop a growth mindset, but we as teachers must be willing to change our mindset.”

– Emily Mack

Without exception, District Five is dedicated to reducing, preventing, and eliminating minority group isolation in its schools with a sustained, system wide commitment to desegregation, that will be propelled with Discover Five.

(b) QUALITY OF PROJECT DESIGN

The Secretary reviews each application to determine the quality of the project design. In determining the quality of the design of the proposed project, the Secretary considers the following factors:

(1) The manner and extent to which the magnet school program will improve student academic achievement ...

The Discover Five project will incorporate two evidence-based educational interventions that when combined will improve student academic achievement. These interventions include:

(1) the structure and intensity of professional development to improve teacher effectiveness; and

(2) the implementation of cooperative learning practices as a desegregation tool to improve social interactions and raise student academic achievement. The project’s **theory of action**

reasons that **if** (1) teachers receive sustained high-quality professional development in systemic

and site-based reform strategies **and** (2) implement cooperative learning practices in their

schools, **then** student academic achievement will improve. Notwithstanding, all magnet

programs will adhere to the following protocols and interventions that are currently implemented

district wide:

Data-driven instruction. Meeting the academic needs of a diverse student population is the driving force behind every data-driven decision made at the district and school level. District

Five uses a comprehensive assessment system that includes high quality summative, interim, and formative assessments to generate a range of data to guide continuous improvement efforts in instruction and learning. Additional information elements (e.g. student behavior, attendance) are also used to enhance the picture of student progress and the effectiveness of teaching and instructional programs. The use of data guides instructional practices across the district and is supported at all levels of district leadership starting with the Superintendent and extending to each school.

Data Teaming is a practice embedded in each of the district's 23 schools adopted from the research-based model by Doug Reeves. Data Teaming is a collaborative process among teachers designed to inform the instructional cycle by making data-driven decisions. The process includes collaborating to examine student formative assessment data, developing short-cycle assessments, monitoring and analyzing data, establishing learning goals, selecting common instructional strategies for groups of students, and developing result indicators to measure and monitor the learning. Data Teams are comprised of grade-level teachers at the elementary level and content areas at the secondary level, who meet bi-weekly at minimum during established Common Planning Times. Each school has two certified trainers who received external training by the Leadership and Learning Institute. Each Data Team within a school is led by a facilitator who received training by a certified trainer.

A key focus of the Data Teaming process is the reflection of teacher behavior in the cycle of a student's learning with the intentional selection of instructional strategies that have an influence and effect size related to student achievement. Much of this process surrounds the work of John Hattie. In his book, Visible Learning, Hattie provides a synthesis of meta-analyses

that ranks in order of influence the effectiveness of various instructional strategies (Hattie, 2009). As teachers collaborate to analyze student data and set measurable goals for achievement, they select an instructional strategy within their domain to meet the needs of their students in gaining mastery over a topic/curriculum standard. Teachers are encouraged to select a strategy with an effect size > than 0.40 (the average effect size where real change is evident). Strategies used consistently across the district include self-reported grades (1.44), providing formative evaluation (0.9) and direct instruction (0.59).

Technology to support data literacy is provided district wide to all schools. Multi-year longitudinal data on all students is available to all instructional staff via the district's data warehouse (Enrich). This system provides teachers and administrators a static platform that includes summative and interim assessments, teacher's grades, reading interventions, discipline, course history, and transcripts. The district is currently developing a new online data distribution system (D5 Dashboard) which will enable administrators to view and analyze student data from multiple data sources in a dynamic platform to better inform the Data Teaming process. MSAP funds will be used to extend implementation of this system to the Discover Five schools. By doing so, the Discover Five schools will have access to customized reports and dashboards to meet the specific needs of administrators and teachers as they are monitoring student achievement and progress towards MSAP performance measures from a variety of data points.

Support for students with diverse learning needs is provided through various instructional approaches to meet the needs of all learners through research-based practices including Differentiated Instruction, Response to Intervention (RtI), Math Intervention, and Positive Behavioral Interventions and Supports (PBIS).

Differentiated Instruction is used across the district at all grade levels. In this approach, teachers analyze, plan, and deliver instruction based on the individual needs of their students. Instructional strategies and environment are individualized to reach students at the level at which they are currently performing, in order to move towards (or maintain) proficiency in various content areas.

Response to Intervention (RtI) has been adopted district wide to support students struggling in English language arts. This research-based, multi-tiered approach to early identification and support of students with learning needs has been in place district wide since 2012 and positions the district to meet the requirements of the 2015 State of South Carolina Act 284 (Read to Succeed) legislation. Read to Succeed was created to address literacy performance in South Carolina by putting into place a comprehensive system of supports to ensure students graduate on time with the literacy skills they need to be successful in college, careers and citizenship. Read to Succeed provides for a strong assessment and intervention system for students in kindergarten through 12th grade with a goal of all students becoming proficient readers by the end of third grade. Most significant is that, beginning with the 2017-2018 school year, a student must be retained in the third grade if the student fails to demonstrate reading proficiency at the end of third grade as indicated by scoring at the lowest achievement level on the state summative reading assessment that equated to Not Met on the Palmetto Assessment of State Standards.

Students at the elementary level are identified for RtI through the combined efforts of school administrators, teachers, and reading coaches. Tier 1 support occurs in the classroom through differentiated instruction. Tier 2 provides more targeted support for small groups of

students through push-in and pull-out instruction. Tier 3 is the most intensive level of individualized instruction where a replacement program and curriculum is used to accelerate a student's rate of learning. Title One funding is allocated for Reading Coaches and Interventionists who provide RtI supports for students and teachers. These services are essential for students to achieve mastery in the ELA curriculum and are available at all schools district wide. Secondary students are identified for intensive literacy support using an index composed of multiple data sets including course grades, previous intervention, and universal screening test results.

Math Intervention is provided to students experiencing academic challenges in mathematical concepts. The District's Title One schools (including the elementary schools named in Discover Five) have at least one Math Coach and one Math Interventionist to support students struggling in mathematics.

Positive Behavioral Interventions and Support (PBIS) is endorsed district wide and each school is given the autonomy to customize implementation at their school. PBIS Teams have been established at each school to create plans to outline the implementation, assessment, and evaluation of the initiative. These plans are continually monitored by school and district leadership and updated regularly based on review of the information sources. This systematic approach is utilized to prevent and respond to classroom and school wide discipline problems to create and maintain a safe learning environment where teachers are able to teach and students are able to learn.

The following section provides a synopsis of the site-based reforms that each of the Discover Five magnet programs will implement in order to improve student academic

achievement. Each magnet program has been designed with five essential factors to produce relevant outcomes to meet MSAP priorities: inquiry-based learning environments, authentic learning experiences, extracurricular activities, collaborations/partnerships, and strategies for parent involvement.

H.E. Corley Elementary School Montessori Magnet	
Seats Available	Current Enrollment
168	489

The Montessori Magnet will operate as a program within a school that ties in seamlessly with H.E. Corley’s existing *Leader in Me* and *Responsive Classroom* approaches to teaching and learning. The program will be launched with two cohorts of Primary Classes (4K-5K) and incrementally scaffold up to serve 168 students between two Primary classrooms, three Lower Elementary (1st-3rd grade) classrooms and two Upper Elementary (4th-5th grade) classrooms. H.E. Corley Elementary School Montessori Magnet will follow the Montessori Method introduced by Dr. Maria Montessori in 1907 as a “child-centered educational approach based on scientific observations of children from birth to adulthood” (American Montessori Society, 2016).

The Montessori method has been lauded as beneficial for all students, including gifted and talented students, special education students, and low-income and/or minority students, which can be attributed to the self-paced nature of the learning and mixed-age classrooms, which allow students of different abilities to work together in the same classroom (Hanover, 2015) – all of which reinforce the desegregation and equity strategies introduced in the Discover Five systemic reforms to produce relevant outcomes in increasing student academic achievement and reducing minority group isolation. A growing body of research has supported the Montessori

method in achieving these relevant outcomes, as compiled by the American Montessori Society in “Overview of Research on Montessori Education: An Evidence-Based Curriculum” that cites several studies linked to improved student academic outcomes and social interactions (American Montessori Society, 2010).

Academic supports for diverse learners will be available in the Montessori Magnet Program, including RtI, SPED/504 plans, ELL, and Math Intervention. Students attending the Montessori Magnet Program will have equal access to all H.E. Corley programs and extracurricular activities. Montessori students and teachers will participate in all leadership programs, training, education, activities, and opportunities associated with the *Leader in Me* and *Responsive Classroom* to provide a seamless integration of leadership and social-emotional learning for all students attending H.E. Corley.

Inquiry-based Environments. The Montessori classrooms will be a place of inquiry and student-led discovery made available through the prepared environment. The classroom is designed to be a beautiful and inviting space with open shelving where learning materials are easily accessible and work spaces that foster independent and group activities. Each classroom will have a full complement of Montessori-designed instructional materials and furniture that will allow students to work independently or with peers in uninterrupted blocks of work time. The classroom design follows guidance from the American Montessori Society to “encourage independence, freedom within limits, and a sense of order.” Through this design, students make individual choices within the environment and interact with the teacher for support as needed. Working within parameters set by their teachers, students are active participants in deciding what

their focus of learning will be for each day. Students work at their own pace and advance through prescribed curriculum as they are ready, with guidance from their teacher.

Authentic Learning Experiences. Student participants in the Montessori program will have daily exposure to authentic learning experiences in- and out-side of the classroom. The very nature of the Montessori environment lays this foundation with multi-age (and skill) groupings that reflect the real world and are the basis for cooperative learning practices that are positively linked to achievement, interpersonal skills, social supports and self-esteem (Johnson & Johnson, 2009). Montessori instructional materials are designed from an array of natural materials and textures that invite all a child's senses in the learning process to provide an authentic experience. Many objects found in nature are incorporated into the classroom design and instructional materials, such as plants, bird nests, shells, rocks, etc. Children are taught at the earliest age to treat the materials with respect—a lesson that extends throughout the classroom, school, community, and world. Additionally, students are taught to use real-world items in the classroom to authenticate learning. For example, students as early as age four are learning to use knives, dinnerware and glassware to prepare and serve snacks during break times. These real-world connections are reinforced daily in the classroom to prepare students to be successful in their world. Authentic learning experiences will also be provided through the integration of 21st century technologies, including interactive smartboard tables, computer workstations, and one-to-one devices. Smartboard tables will allow up to eight students to work together at the same time, encouraging small group collaboration and social and academic development. Teachers will be able to create their own activities with the assistance of Digital Integration Specialists, or select ready-made activities for the K-3 grade levels. Computer workstations will be uploaded with software from LEGO Education such as LEGO We-Do 2.0 to engage students in different

modalities of learning. One-to-one devices will support independent learning geared to student interests and blended learning activities.

Additionally, Montessori students will participate in a variety of off-site field experiences to augment classroom learning. The region is home to several nationally-recognized museums that offer standards-based educational programs. **EdVenture Children’s Museum** offers hands-on, interactive standards-based field experiences to students in grades PK-12. Field experiences are created and led by educators with a focus on providing inquiry-based experiences to ignite a passion for science. Primary students will participate in a health sciences unit, followed by a facilitated tour of the museum. **Riverbanks Zoo and Gardens** is a 170-acre site comprised of a zoo and botanical garden. Riverbanks offers education programs based on the South Carolina Science Academic Standards. Lower Elementary students will participate in a life science program, followed by a facilitated tour of the zoo and gardens. **South Carolina State Museum** offers students in grades K-12 standards-based education programs that highlight South Carolina’s contributions in art, history, natural history, science and technology. Upper Elementary students will participate in a physical sciences unit that includes participation in the museum’s observatory and planetarium.

Extracurricular Activities. Students attending H.E. Corley Elementary School Montessori Magnet will have equal access and opportunity to participate in the school’s many extracurricular clubs at no cost. Clubs are designed to appeal to a variety of student interests and include: Cooking, Arts/Crafts, Cheerleading, Coding, Football, Gardening, Calligraphy and more. Clubs are led through the combined efforts of teachers, support staff, and community volunteers and offered after school.

Collaborations/Partnerships. H.E. Corley Elementary School has partnered with the **South Carolina Department of Education Office of School Choice and Innovation** and **Sandhills Montessori Institute** to provide professional development and guidance throughout the implementation of the Montessori Magnet Program. The South Carolina Department of Education Office of School Choice and Innovation has a full time Montessori Consultant, Dr. Ginny Riga, who provides customized training and support for district and school administrators and teachers. Dr. Riga will provide three days of on-site training and coaching per project year focused on Montessori philosophy and methods, instructional approaches to serving students with diverse learning needs, and integrating technology into the Montessori classroom. Sandhills Montessori Institute will provide training for teachers to gain their Montessori credentials, if they do not already have them. Sandhills operates out of nearby Lexington County School District Four and offers credentialing that meets Montessori Accreditation Council for Teacher Education (MACTE) requirements. Because District Five is committed to launching its Montessori Program with complete fidelity to the method, all teachers will complete the curriculum portion of their training prior to teaching in the Montessori program. The required supervised practicum will be completed in the Montessori classroom that is furnished and supplied with Montessori materials.

“Community” is a guiding principle of the Montessori philosophy that will be instilled throughout the H.E. Corley Elementary School Montessori Magnet through strong bonds between students and adults, as well as the neighborhood that surrounds the school. H.E. Corley is proud to have an active Parent Teacher Organization (PTO) that organizes two key neighborhood events that strengthen connections, build trust, and establish a bridge between the school and surrounding neighborhood. Within walking distance of the school is a community

park that serves as a centerpiece of the neighborhood. Each fall, the PTO hosts a Bingo Event that attracts over 500 people. In the spring, the PTO hosts a Spring Carnival with games and food trucks that attracts hundreds of current and former students and community members. Each of these events helps to establish a community base for the school from which to draw volunteers and advocates for H.E. Corley. In the fall, H.E. Corley also hosts a Leadership Day in which local civic leaders, district and school leaders are welcomed by the students as they showcase their leadership skills developed through the *Leader in Me* program.

Parent Involvement. H.E. Corley's parent involvement strategy begins with Parent Education Sessions as part of the recruitment process of parents and students to the Montessori Magnet. While there will not be any entrance criteria for students, these sessions will be a critical component for parents to promote understanding of the Montessori method. Once students are enrolled in the Montessori Magnet, there will be several opportunities to remain engaged and committed to their student's educational program including content-focused nights (Science Night, Literacy Night, Math Night) with activities and games to promote positive adult-child interaction and build core knowledge of academic focus areas. Take-home activities that encourage extended learning during periods of out-of-school-time will help build parent awareness and confidence to make everyday moments opportunities for learning. Family Movie Nights, held bi-annually, are another way to bring parents and children together in a relaxed and fun environment at the school. Student-led conferences are another way to strengthen parent engagement and will be used as an alternative to the traditional parent-teacher conference model. This model has been recognized for encouraging greater parent engagement and propels a student to the forefront of their learning, by encouraging student ownership as an active

participant in the learning process by evaluating their own progress and communicating this to others.

Leaphart Elementary School STEAM Magnet	
Seats Available	Current Enrollment
100	421

Leaphart Elementary School STEAM Magnet will offer students a rigorous interdisciplinary curriculum of science, technology, engineering, arts and mathematics that is grounded in authentic, project-based learning and design thinking to **inspire, challenge,** and **empower** all students. This inquiry-based approach will rely heavily on student-led investigations where students are encouraged to take risks, experience failure, and try again through a purposeful integration of subject matter.

The four-step Design Process shown in Figure 8 will be integrated across disciplines so that students **plan** (define problem and brainstorm solutions), **design** (create the best solution based on predictions), **test** (observe and test the solution and identify modifications) and **communicate** (share and explain what was learned).

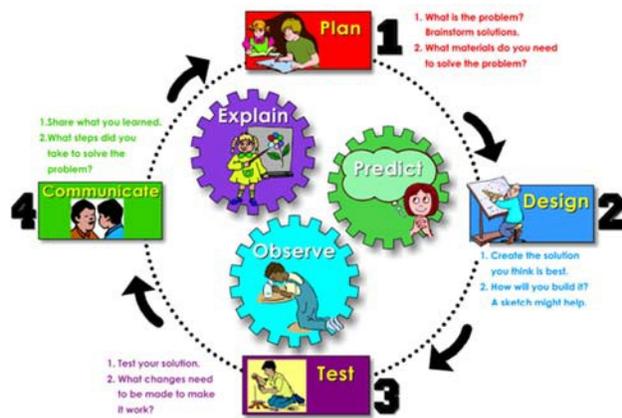


Figure 8. Four-step Design Process

Classrooms will be transformed into studios where the Design Process comes to life, as students are encouraged to incorporate creativity and innovation through an exchange of ideas to promote a deeper understanding of subject matter. Leaphart’s philosophical approach to STEAM reflects federal policy in *House Resolution 51 - 113th*

Congress (2013-2014) that added art and design into federal programs that target Science, Technology, Engineering, and Math (STEM) fields and encourages innovation and economic growth in the United States, recognizing the integral role of art and design in society.

A newly created **STEAM Coach** position will be vital to supporting teachers to develop and implement interdisciplinary curriculum in their classroom studios, while also facilitating activities in the STEAM Inquiry Labs to build teacher capacity and confidence to structure purposeful interdisciplinary units of study that inspire, challenge, and empower all students in the learning process.

Inquiry-based Learning Environments. Three new STEAM Inquiry Labs will be created that offer students the opportunity to experiment with materials and inter-disciplinary concepts learned in the classroom to deepen understanding and ownership of learning. These experimental environments will promote inquiry-based learning through student-led investigations that will serve as a core academic extension of the learning happening in the classrooms studios. The **Makerspace** will be a flexible learning environment where students at all grade levels can apply design thinking to their inter-disciplinary STEAM units and design challenges. For example, 5th grade students studying a science unit on the Rube Goldberg Machine can explore a wide range of physical materials in the Makerspace as they use their inquiry skills to plan, design, test, and communicate their own machine. Similarly, students in 2nd grade will use the Makerspace to design and build three-dimensional robots from an array of recycled materials as they apply mathematical standards to their designs. A 3-D printer will enhance the functionality of the Makerspace by allowing students to create prototypes of designs in three-dimensional forms to augment learning about spatial reasoning and design. The **Science**

Lab will be an authentic environment where students will use scientific processes to explore and understand the natural world. If students are learning about plant and animal life cycles in their classroom studios, then they can grow plants from seeds or raise crawfish or worms to make learning more authentic. A purposeful integration of the arts would involve students maintaining visual journals of the life cycle of these plants or animals to deepen understanding of the biological life cycles. The Science Lab will be a flexible learning space with laptop computers and collaborative seating options so students can participate in a variety of inquiry-based activities, including *FOSS Modules* and *Pitsco STEM Missions*. The *FOSS Modules* provide multi-stage investigations over a period of time for students to develop a deep appreciation and learning for life sciences, earth sciences, and physical sciences. The Science Lab will be a dedicated environment for exploring life cycles of plants and animals, conducting experiments about simple machines, electronics, or learning about weather through *FOSS Modules* and *Pitsco STEM Missions*. The **Math Lab** will be a place where students can explore symbols and mathematical concepts that explain the natural world. Here, students can use manipulatives to gain a greater understanding of the values of numbers or use project-based learning to solve real-world scenarios using *Project M³* and *MyMath* curriculum. The *Project M³* series is designed to give students opportunities to explore simulated or real-world problems using their “Mathematician’s Journals” as a purposeful integration of the arts to solve problems by thinking, writing, and acting like a real-world mathematician. The *My Math* curriculum and manipulative kits provide hands-on learning opportunities that align with real-life scenarios.

STEAM learning will extend outdoors with additions to the playground including a new sound wall built from reclaimed and recycled materials such as pipes, chimes, and buckets where students can explore sounds and music. “Big Blue Blocks” from Imagination Playground will be

incorporated into recess and physical education to encourage students to actively design and create free standing structures from various sized shaped blocks, offering students yet another way to extend learning from the classroom and apply STEAM learning.

Authentic Learning Experiences. Project Lead The Way (PLTW) Launch will be integrated school wide into all grade levels. Currently, Leaphart Elementary has two modules per grade level, but these have not yet been integrated into the curriculum. MSAP funds will support training from SC PLTW at the University of South Carolina College of Engineering and Computing, and an additional two modules per grade level, completing the full PLTW Launch curriculum. PLTW curriculum uses hands-on activities to engage students in problem-based learning, offering an in-depth exploration of thematic content and concepts.

STEAM interdisciplinary units will be created through collaborative planning time among grade level teachers, related arts teachers and the STEAM Coach to provide real-world connections to thematic content through the lens of the arts. These units present a “design challenge” in which all classrooms in a grade level participate in the common challenge over a 9-week unit. The units are created around a problem that students need to solve using the Design Process. At the end of the unit, each classroom’s designs will be presented at a Family STEAM Night. An example of a 3rd grade STEAM interdisciplinary unit that incorporates the Design Process will draw on a community partnership with ZVerse—a local 3-D printing company that uses three dimensional printing as an educational tool to help solve a defined problem. The **problem:** A film company is working on an upcoming movie and needs students to create a new, imaginary “villain” animal. The **approach:** Students will work collaboratively to consider traits of existing animals to be combined into their imaginary villain animal (Step 1: Plan). Through

this process, students will research various habitats and ecosystems their villain animal needs for survival, and compile their research visually through a narrative with diagrams, photos, and sketches (Step 2: Design). Students will then submit their research and sketches to the artists at ZVerse for review and feedback to determine what changes might be needed prior to 3-D printing (Step 3: Test). After necessary changes are made, students will present their final research to ZVerse that explains what they learned through their research into creating their villain animal and why they made the decisions they did in the design (Step 4: Communicate). At the end of the unit, ZVerse provides each student with a 3-D print out of the animal which will be used in additional creative writing curriculum activities. Interdisciplinary STEAM units such as this, will offer students at every grade level on-going opportunities to participate in independent and collaborative work that results in meaningful learning across all disciplines.

A new STEAM Related Arts Rotation will be added as an exploratory for students in grades 3-5. Four 9-week sessions will be added to the rotation and make full use of the new Makerspace. **Media Productions** will offer students opportunities to create commercials and videos that will be projected throughout the school on digital monitors in the hallways and used in magnet recruitment efforts. Students will gain practical skills using 21st century technologies, while also extending learning in writing and communications. In **Garage Band**, students will experiment with reclaimed and upcycled materials to design instruments. Once instruments are designed, students will create musical compositions that are performed before an audience of their peers, teachers, family and/or community members, such as during the Family STEAM Nights. **Genius Hour** is a research class where students will research topics of interest and use various formats such as Prezi, PowerPoint, and Aurasma to showcase their learning. **LEGO**

Robotics will teach coding skills so that students can build, test, and program robots to complete missions on demand.

Artist Residency. In Year 3, Leaphart Elementary will host a special artist residency with a local/regional artist to complete a collaborative art project that embodies the STEAM Magnet. Students at every grade level will participate, as well as their parents during a Family STEAM Night, to create a three-dimensional work of art that integrates science, technology, engineering, arts, and mathematics. The final work of art will be installed on school grounds upon the entrance of the building to provide visitors with a visual representation of the Leapheart Elementary School STEAM Magnet.

Field Experiences will be an important tool to provide students with opportunities for on- and off-site authentic learning. All students at every grade level will work on a collaborative project with students at the district's **Center for Advanced Technical Studies**. For example, students in each grade level will create a design for a new school logo that can be printed onto sheet metal during a visit to the Center with guidance from high school students in the Machine Tool Technology program. The high school students will work with Leaphart students prior to their field studies to offer feedback on the designs. Each year will focus on a different type of experience and program of study available at the Center to provide regular exposure to various STEAM careers. **Roper Mountain Science Center's Science on Wheels** will provide interactive, hands-on science lessons based on SC State-adopted standards to all grade levels for an on-site field experience. Students in grade 5 will also participate in an extended on-site field experience **Crime Scene Investigation** where they do the work of investigators to solve a crime. This standards-based interdisciplinary experience relies on collaborative teamwork reinforcing

the principles of cooperative and project-based learning that is linked to improved student academic performance.

Extracurricular Activities. Leaphart Elementary School STEAM Magnet will expand its current extracurricular activities with new STEAM-focused clubs to include: Photography Club, Sound Explorations Club, and Maker Club which empowers students to take their arts/crafts design to market through the introduction of entrepreneurial education. Additional clubs include: LEGO Robotics League, Coding Club, and SchoolsNEXT which challenges students to design a school of the future taking into account various design options, budget and sustainability. All students will have access to these and other clubs at no-cost.

Collaborations/Partnerships. Leaphart Elementary School STEAM Magnet has created an extensive network of community partners who have been essential in the planning, implementation and future sustainability of its magnet program. **SC Project Lead The Way (PLTW) at the University of South Carolina College of Engineering and Computing** and **Dr. Merrie Koester of the University of South Carolina Center for Science Education** will provide extended professional development and support throughout the five-year grant as teachers implement the PLTW Launch curriculum and STEAM interdisciplinary units that are inclusive of all standards in a unique and engaging way to promote student interest, engagement, and achievement. **Professionals** representing a variety of STEAM disciplines including city planners, civil engineers, and architects are regular volunteers in the classroom to help connect students to real-world learning. These professionals assist with student projects, serve as mentors for the LEGO Robotics League, and expose students to a wide array of career opportunities. **Civic groups and businesses** such as Wells Fargo, Lake Murray Rotary, St. Andrews Rotary

Club, and State Farm Insurance provide financial and in-kind support to student clubs. Evidence of this support is documented in selected letters of support provided in Appendix I.

Parent Involvement. Leaphart Elementary School STEAM Magnet offers many formal and informal ways for parents to stay connected and engaged to their child’s school and educational program. The **Parent Teacher Organization (PTO)** is an active force in building school/home connections. The PTO organizes volunteers and fundraisers to support school-based activities and family engagement nights. The PTO also sponsors educational programs for parents including **Parent Power**—a four session series that connects families to community resources and offers parenting support and guidance on topics ranging from cyber-security, bullying prevention, healthy snacks, and free summer literacy activities. Similarly, the **School Improvement Council (SIC)** is an elected body of individuals, voted on by parents, that provides parents with opportunities to provide guidance and oversight to the school’s educational program. Lastly, **Family STEAM Nights** will be hosted four times per year that provide an opportunity for families to participate in collaborative activities that extend learning from the school day, such as the STEAM design challenges where students can share and communicate what they have learned.

Nursery Road Elementary School Arts Magnet	
Seats Available	Current Enrollment
100	412

Nursery Road Elementary School Arts Magnet will offer students an arts-infused curriculum that extends into all aspects of a student’s learning experience. **Classrooms** will be transformed into kinesthetic environments where learning incorporates movement, problem-

solving, and collaborative and cooperative teamwork, as teachers integrate various art forms into core content areas. **Classroom management strategies** will be based in the elements of acting, such as concentration, cooperation, and collaboration, to empower students to take ownership of and be responsible for their own behavior. Students will learn to establish a sense of self-control, accountability, and team building skills, all of which will contribute to improved academic achievement and promote opportunities to positively interact with peers of different backgrounds. The **related arts rotation** will expand to include new programs in Instrumental Music (strings, guitar and world percussion), Theater Arts, and Dance. Nursery Road will be the only elementary school in the district to offer this extended rotation. This rotation will provide equitable, no-cost opportunities for all students, including those in special education, to participate during the school day in what are now considered fee-based extracurricular activities. **Three new positions**—a Performing Arts Instructor, Media Arts Instructor, and Instrumental Music Instructor will be added to the school’s faculty. These positions will be vital to provide high-quality instruction in the arts during the regular school day for all students, while also building capacity of the entire school faculty to effectively integrate the arts into core curriculum content areas. The **visual arts and media arts curriculum will be deeply enhanced** to include learning experiences in the 3-D visual arts and multimedia arts. Students will document their learning journeys with a **portfolio** that culminates their experiences in the media, visual and performing arts while at Nursery Road Elementary School Arts Magnet. Together, these unique experiences students will provide students with an unparalleled foundation that will set the stage for future opportunities in the district’s K-12 academic pathway for the arts.

Inquiry-based Learning Environments. Related arts classrooms will be transformed into vibrant studios that incite creativity and collaboration in the teaching and learning process.

The studios will set the foundation for the whole school integration of the arts, and be a physical representation of Nursery Road's commitment to the arts. Each studio will accommodate a full classroom of up to 25 students as well as instructional aides who support students with special needs or language barriers.

Dance Studio - A vacant classroom will be transformed into a dance studio where students can explore various dance forms such as modern dance, ballet, jazz, and Latin American dance. A spring-form floor, full length ballet bar, wall mirrors, and digital screens to project choreography will provide a three-dimensional experience for students to practice technique, choreography, nonverbal communication, movement and form in alignment with the SC Visual and Performing Arts Standards and SC Physical Education Standards.

Theater Arts Studio - A vacant classroom will be transformed into a theater arts studio where students will explore elements of drama and theater, costuming, and set construction. The studio will be filled with culturally-relevant costumes, risers, and platforms to support active dramatic instruction. Students will receive instruction in costuming and set construction, and will work collaboratively to design costumes and sets for the two annual school wide performances that feature all students in every grade level to perform before an audience of their peers, teachers, families, and community members.

Instrumental Music Studio - A vacant classroom will be transformed into an instrumental music studio where students will be exposed to instruments used by various cultures across the globe. Students will learn how to play the violin, electric guitar, and world percussion instruments such as the djembe, djun-djun, and cajon. Units of study will connect to core content areas of social studies, English language arts, math, and science. For example, in a unit of study

on African drumming, students may learn about the cultures of the people who invented these instruments, including cultural traditions and food ways. Students will also learn to read music to strengthen math skills and learn about the properties of sound and how different materials can produce different sounds. Exploration and instruction in these instruments will also provide unique opportunities for students to perform alongside high school students, perform for community members at assisted living facilities, as well as the two annual school wide performances.

Media Arts Studio - The current computer lab will be transformed into a multimedia studio, complete with a classroom set of iMac computers where students can explore music composition, graphic design, and animation. Students will have access to graphic design software and composition software to create music, videos, animation, and other 3-D works of design and art.

Visual Arts Studio - The current visual arts classroom will be repurposed into an expanded studio with spaces dedicated to 2-D and 3-D visual artworks. Students will be able to explore 3-dimensional art forms inclusive of length, width, and depth through sculpture, pottery, assemblages, jewelry-making, and fabric arts. The 2-dimensional visual arts program will challenge students to explore visual art using a variety of mediums inclusive of length and width. Examples include, but are not limited to: acrylic painting, watercolors, charcoal, pencil, collages, printmaking, oil pastels, and chalk pastels.

The experiences students gain in the Studios will culminate in the **Performing Arts Arena** - the school's 550-person capacity recessed auditorium that will be enhanced with new audio, theatrical lighting, and control booth systems to support student-driven productions. These

enhancements will provide opportunities for students to learn and operate equipment, while also enhancing the level of quality of school wide productions.

Authentic Learning Experiences. An **artist residency program** will be a critical addition to the school curriculum to bring authentic learning experiences to students. Nursery Road will invite local/regional artists to spend a two-day residency at the school. Three residencies per year (one each in the media, visual and performing arts disciplines) will be scheduled, and students at all grade levels will have daily opportunities to work alongside the artist on a culminating project that will be unveiled at Family Engagement Nights. Projects may include a musical performance, sculpture, or mural that all students help to create, giving students an opportunity to interact with artists in a variety of art forms. In Year 4, a special artist residency will focus on creating a collaborative project that results in a large 3-D outdoor sculpture at the entrance of the school that will visually represent the school as an Arts Magnet to the entire community.

Students will have opportunities to experience professional-level performances through off-site **field experiences**. These experiences will begin in Year 2 and connect students to the wealth of local, regional, and state cultural resources. Field experiences will be scheduled by grade level and correspond to SC State-adopted standards and will include: Piccolo Spoleto Festival in Charleston, SC (grade 5), SC Philharmonic (grade 4), SC State Museum (grade 3), Koger Center for the Arts/Columbia City Ballet, (grade 2), Columbia Marionette Theater (grade 1); and Columbia Children's Theater (grade 5K).

All students, regardless of academic level or background, will participate in two **school wide performances**. The holiday performance in December features holiday traditions

celebrated from cultures around the world, and the spring performance in March follows the SC State Social Studies Standards so that each grade level features a song/dance/theatrical performance based on US and/or South Carolina History. These performances are a way for students to connect academic content to art forms, and to strengthen understanding and mastery of content. For example, for the holiday performance, third grade students studying Las Posadas will don Latin American clothing, provided by families of students, while singing in Spanish and performing Latin American dance.

In the spring, the school will host a **Cultural Arts Festival** inviting local and regional cultural organizations such as the University of South Carolina African Dance Team, Carolina Shag Company, Columbia City Jazz Company, and Irmo Cloggers; artisans will include local potters, flute makers, visual artists and muralists. The festival will be open to the community and is an opportunity for students to showcase their work, connect with real-world artists, and experience the arts through the lens of their fellow community members who represent many cultures.

Opportunities for multi-generational learning will be made possible through **community-based performances**. For example, students will perform at local faith-based organizations, assisted living centers, as well as other schools in the district. These opportunities will sharpen students' skills and exposure to working with people of different ages and backgrounds.

Authentic learning experiences will also be provided through the integration of **21st century technologies** with the introduction of one-to-one devices in Year 3. The one-to-one technology ratio will allow students to apply the skills acquired in the Media Arts Studio into

other subjects while in the regular education classroom and create their digital portfolios that document their overall learning experience at Nursery Road.

Collaborations/Partnerships. Nursery Road has an extensive cadre of community partners that has helped paved the way in its planning to becoming an Arts Magnet School. These partners will remain vital in implementing and sustaining the thematic-curriculum and opportunities that will set Nursery Road apart from other elementary schools in the district. Focus5 Arts Integration Consultants will provide extended professional development over the five-year grant period that will equip teachers with instructional strategies and tools to support the transition to school wide arts-infused curriculum. Local Arts Groups such as Columbia City Jazz, Irmo High School Percussion and Dance Groups, Columbia Marionette Theater, Emerald Ballroom Dancers, Capital City Shag Club and more, are regular volunteers at the Cultural Arts Festival and school wide performances. Local Civic Groups such as the Irmo Rotary Club provide financial support for student clubs. Local Faith-based Organizations including Riverland Hills Baptist Church, Fellowship Bible, and Palmetto Church of Christ provide volunteers and financial support to students in need of homework assistance, school supplies, and food assistance. Local Businesses and Community Volunteers including ACS Sound and Lighting and Musicians Supply provide in-kind support in the form of donated musical instruments, lighting equipment, and current and former Nursery Road Elementary School parents playing instruments for the current music program. Evidence of this support is documented in selected letters of support provided in Appendix I.

Extracurricular Activities. Nursery Road Elementary School Arts Magnet will expand its extracurricular offerings in clubs that meet before and/or after school. Clubs will be available

to all students at no-cost and include new offerings such as Set Design and Construction, Dulcimer, Zumba, African Drumming, Ballroom Dancing, and Costume and Prop Construction. Clubs will be led by the Related Arts Teachers and community volunteers, and offer students an opportunity to extend learning outside of the classroom.

Parent Involvement. Nursery Road offers a variety of opportunities to engage parents in their child's education and support school activities. The school's Parent Teacher Organization (PTO) is a voluntary organization that coordinates volunteers and fundraising activities to support the learning environment at Nursery Road and family engagement activities. The School Improvement Council (SIC) is an elected body of individuals, voted on by parents, that is required by SC State law to provide guidance and oversight to the school's educational program. The SIC participates in the development and implementation of the five-year school improvement plan, assists in monitoring and evaluating the school's success in reaching the plan's goals and objectives, assists with the annual report to parents about the school's progress, assists with the narrative for the annual School Report Card, and advises on the use of school incentive awards and provides assistance as requested by the principal.

In addition to these organizations, Nursery Road welcomes fathers, and father figures, in the community to volunteer for a full day through the Watch D.O.G.S. (Dads of Great Students) Program. Watch D.O.G.S. begin at the start of the school day welcoming students with high fives for a good day as they come off the bus. They can then be spotted in the cafeteria opening milk cartons and other packages for students. Throughout the school day they are in and out of classes and in the hallways assisting students with daily tasks and learning. Nursery Road will host four

theme-based Family Engagement Nights annually as a strategy to build connections to support positive school/family relationships and extend arts curriculum from the school day.

Irmo High School International Baccalaureate Career-related Programme Magnet	
Seats Available	Current Enrollment
400	1446

Irmo High School International Baccalaureate Career-related Programme (IB-CP) Magnet will connect students to the 21st century global workplace and provide authentic STEM learning opportunities. The IB-CP embraces the core tenants of the traditional IB-Diploma Programme by developing students who are internationally-minded and globally aware. IB Americas describes the CP as a “comprehensive educational framework that combines highly regarded and internationally recognized courses from the IB-Diploma Programme (DP) with a unique CP core and an approved career-related study.” Students enrolled in the IB-CP are required to complete two IB-Diploma Programme courses, the CP core, and career-related studies.

As a current IB World School, Irmo High offers a wide variety of IB-Diploma Programme courses taught by highly-qualified, IB trained instructors, ranging from the sciences to the visual and performing arts. The CP core will include the four required and interrelated components of: Personal and Professional Skills (or Approaches to Learning), Service Learning, Reflective Project, and Language Development. **Approaches to Learning (ATL)** will be a timetabled course (minimum 90 hours) that focuses on critical and ethical thinking, intercultural understanding and the ability to communicate effectively. **Service Learning** provides students with opportunities to develop new skills and knowledge in real-life situations by working with

(and in) the community to undertake a service activity, devoting 50 hours outside of class time. The **Reflective Project** is an estimated 40 hours of work in which students identify, analyze, critically discuss and evaluate an ethical dilemma associated with an issue taken from the student's career-related studies. **Language Development** provides students with exposure to a second language to increase their understanding of the world, with a minimum of 50 hours expected. Students enrolled in the IB-CP Magnet will take their required IB-Diplomma Programme courses and the CP core at Irmo High School.

The career-related studies portion of the program requires students to take a series of four courses to complete a career pathway recognized by a government or professional body. These courses will be taught at the Center for Advanced Technical Studies—the district's stand-alone facility that offers a highly technical, inquiry-based learning environment. Transportation to/from the Center is provided using district resources. Students will choose their career-related studies from the following programs: **Aerospace Engineering, Biomedical Sciences, Culinary Arts, Media Technology and Film, and Veterinary Sciences.**

Inquiry-based Learning Environments. In addition to the inquiry-based learning environment that the Center provides, students will also have access to a new Distance Learning Studio where they can connect internationally to professionals, researchers, business partners, and peers. For example, students in the Culinary Arts Program may connect with culinary institutes in France and Italy for culinary demonstrations, virtual tours of restaurants, and interviews with chefs to learn about international cuisine and culture. Similarly, students in the Biomedical Sciences and Aerospace Engineering Programs will have the ability to connect with global companies that have a major presence in South Carolina, such as Boeing or Michelin

through the assistance of the South Carolina Chamber of Commerce and the Columbia World Affairs Council. The Distance Learning Studio will be operated by students in the IB-CP Media Technology and Film Program, extending authentic learning and real-world applications.

Authentic Learning Experiences. Students in the IB-CP Magnet will apply their knowledge to real-world scenarios and situations through authentic learning experiences in the CP core and career-related studies. Teachers are facilitators of learning, who guide the students to learn through discovery while embracing failure as a means to solving a problem with multiple options being considered. Scientific theories and concepts are explored in contextualized learning environments through student-based and project-based learning. Students are able to enjoy learning as they engage in real-world problems and create solutions. Through these learning experiences, students are able to connect their academic and technical knowledge together which creates relevance to their learning. Each career-related program of study will offer students authentic learning experiences that prepares them to be career- and/or college-ready.

The **Aerospace Engineering** program of study follows the research-based Project Lead The Way (PLTW) curriculum and relies heavily on local and regional partnerships as a way to connect student learning to practical real-world applications and aligns to the workforce needs in South Carolina's aerospace industry. South Carolina has one of the largest aircraft manufactures in the world in Boeing and dozens of suppliers across the state that employ individuals with engineering and mechanical backgrounds. Class projects will provide students hands-on, project-based learning to create rockets, build robots, and compete in engineering and science fairs and competitions held at the University of South Carolina.

As part of the classroom experience, students participate in an aircraft simulator where they can select an aircraft and airport anywhere in the world, and fly virtually to that airport and to where they will safely land their aircraft. This activity provides students with an authentic learning experience where they can apply the principles of physics that they have learned in class such as drag and forces of wind and resistance. Outside of the classroom, students will participate in a field experience at the Jim Hamilton-L.B. Owens Airport—a Richland County-owned facility, where students will help build a plane and test rockets and robots that they designed and built in the classroom. As part of the program, students complete a Capstone Project where they define a real-world problem, research a solution, design and develop the materials, create the solution, test the prototype, create the product, and test the market by presenting their research and design to professional engineers and businesses.

The **Biomedical Sciences** program of study also follows the Project Lead The Way (PLTW) curriculum and prepares students to meet the needs of South Carolina's growing healthcare and research fields. Students are introduced to all medical careers and medical pathways such as a surgeon, pharmacist, nurse, medical researcher and other medical paths that lead to post-secondary education. The program is designed to have students master the biomedical sciences content to successfully complete national exams and to apply core content in project-based learning. As part of the program, students examine human body systems, explore science in action, build organs and tissues on a skeletal Manikin, use data acquisition to monitor body systems, and take on roles of biomedical professionals to solve real-world medical cases. Using project-based learning, students explore the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease, and screen and evaluate the code in human DNA. Through the PLTW courses, students are exposed to a range of interventions related to

immunology, surgery, genetics, pharmacology, medical devices and diagnostics, and engage in rigorous research with mentors at the University of South Carolina.

In the second year, students build on all of the knowledge and research skills developed to pursue a medical problem that will become their Capstone Project for the program. The purpose is for students to pursue their bio-medical interest in conducting the research that may be worthy of further research at the university level as they matriculate to post-secondary education. Students will select problems ranging from public health, biomedical engineering to clinical medicine and physiology, and will have the opportunity to work independently to design the study with a mentor advisor from a university, medical facility, or research institution. Students follow a research template that uses research methods of graduate research to frame the study, and findings are presented and defended in a public venue among experts in the field.

The **Culinary Arts** program of study is designed to offer students the opportunity to pursue a career as a chef or in a related career within the food industry. The program teaches student food preparation skills, kitchen and restaurant management, and hospitality, and is affiliated with the National Restaurant Association (AFC), Culinary Institute of America, and the South Carolina Hospitality Association, along with many local restaurants that provide internship opportunities for students as part of their Capstone Project. The program operates from a state-of-the-art Culinary Lab complete with industry standard equipment to provide students with the highest level of instruction and hands-on experience that prepares them to be career- and/or college- ready. In the Culinary Lab, students are introduced to international cuisine through an in-depth exploration of food and cultures from around the globe. As part of the program, students are able to gain real-world experience by participating in over 100 on-site culinary events each

year, with approximately 4,000 meals prepared and banquet service for these events. Upon completion of the program, students will be eligible to earn the ServSafe Food Protection Manager Certification, accredited by the American National Standards Institute (ANSI)-Conference for Food Protection (CFP), and awarded an industry-recognized credential – the ProStart National Certificate of Achievement (COA).

The **Media Technology and Film** program of study introduces students to all aspects (both creative and technical) of the media and film industry, and provides students with the content knowledge and the technical skill development for students to graduate with the required skill set to continue in the industry or choose to enter college for further study. As part of the program, students learn to operate various cameras and other technical equipment to enable a film to be safely and successfully completed. Students gain real-world knowledge by operating the technical equipment throughout the Center for Advanced Technical Studies to support the Center's conferences and network of state and global visitors. This knowledge will be extended to the new Distance Learning Studio, in which students of all IB-CP programs of study will be able to connect to mentors and peers around the globe.

As part of the program, students are required to complete a Capstone Project with a team of their peers. This Capstone Project challenges students to create a short film that will be presented publicly. Beyond the showcased public screening, the best work is curated and nominated for program awards. These nominated works are juried by professionals in the local media industry and recognized at an awards ceremony modeled after the Hollywood Foreign Press' Golden Globes and the Academy of Motion Pictures Art and Sciences' Oscars. The semi-formal event is organized and presented by the students of the Media Technology and Film

Program and the evening features a multi-course dinner, prepared by students enrolled in the Culinary Arts Program at the Center for Advanced Technical Studies. Additionally, students throughout the program are afforded the opportunity to compete in state, regional and national film and video contests through career and technical student organizations (CTSOs) such as SkillsUSA and the Technology Student Association. The Media Technology and Film Program has garnered much success at the state and national level of these organizations including finishing second in the nation in the On Demand Video competition, as well as finishing first in the nation in the Digital Video Production contest at the Technology Student Association National Conference held in the summer of 2016 in Nashville, Tennessee.

The **Veterinary Sciences** program of study prepares students for employment in the various career fields of veterinary science and animal care and post-secondary education in veterinary medicine. The curriculum is designed for students to learn about the physical and emotional care of small and large animals, through examination of animal anatomy and the illnesses and treatment of all animals. The program utilizes two inquiry-based and authentic environments including a large laboratory and six-stall animal barn. The laboratory offers students real-world experiences in bathing and grooming, and small animal examination, where students are able to handle animals and interact with dogs, rabbits, cats, goats, and chickens. The six-stall animal barn allows students to work closer with large animals such as horses and cattle, and observe Veterinarians conducting exams and treating animals. Through these activities, students apply their studies of anatomy, nutrition, behavior, medical terminology, parasitology, principles of disease, and introduction to surgery. Students regularly engage in authentic learning opportunities such as restraining an animal, performing physical exams, drawing blood sample, reading fecal material, administering injections, and proper cleaning of surgical instruments.

As part of the program, students complete a Capstone Project, in which they conduct scientific research around a medical topic relating to small animals, complete an extensive paper on the findings, and present the findings before veterinary medical professionals. Students also participate in shadowing and/or other school-to-work experiences with local veterinary practices. Upon completion of the program, students are prepared to enter a 2- or 4- year college program in veterinary and/or animal sciences or enter the workforce with relevant experience in animal care.

Extracurricular Activities. All students enrolled in the IB-CP Magnet will have access to the extracurricular activities available at Irmo High School ranging from athletics and the arts, to more than 30 clubs. The many offerings reflect the diversity of interests among the student body. Students also will have opportunities to participate in extracurricular activities at the Center for Advanced Technical Studies that align with their career-related studies, such as **Inven Team**—an after-school club where students work on creative projects and learn team building skills, and **Piranha Tank**—a competition where students present independent research ideas to a panel of experts to get their ideas vetted and approved for further study as part of their Capstone Projects.

Collaborations/Partnerships. The IB-CP Magnet has been carefully planned with an extensive network of education and industry partners, committed to ensuring students are career- and/or college-ready. All programs of study are aligned for continued post-secondary education at 2- or 4-year colleges, and students will receive intensive support from their guidance counselors and IB-CP magnet teachers to access these options. All students in the IB-CP Magnet will have access to mentors in either the CP core requirements and/or career-related studies

components of their study, including the Service Learning and Reflective Project. Mentors will be selected from a variety of established avenues including the district's CATE Advisory Council, the individual Advisory Councils affiliated with each career-related area of study, and other regional and state organizations committed to the education and workforce needs of South Carolina. Members of the Advisory Councils (Appendix J) represent a variety of professional affiliations that include: SC Aeronautics Commission, SC Hospitality Association, SC Works, SC Department of Commerce, Midlands Technical College, Clemson University, and Lexington Medical Center. Other external partners critical to implementing the IB-CP Magnet have signed letters of support and include organizations such as: South Carolina Chamber of Commerce, Columbia World Affairs Council, and the Midlands Education and Business Alliance (Appendix I).

Parent Involvement. As with all schools in the district, Irmo High offers numerous opportunities for parents to remain engaged in their child's education, including the **Parent Teacher Organization (PTO)** and **School Improvement Council (SIC)**. At the high school level, regular opportunities for parent involvement is critical to a student's success, particularly in academically-rigorous programs such as the IB-CP Magnet. While the IB-CP Magnet will not have academic criteria associated with enrollment, the program will require an investment of time in academics and career-related studies that may include internships or work experiences. As such, Irmo High will host introductory sessions for rising 9th graders to develop a network of support both for students and their families. The IB-CP cohort will have opportunities for regular engagement to (1) retain students' interest and participation in the program, (2) offer a supportive environment and peer networks for students and families; and (3) offer meaningful opportunities for students to showcase their work and extend learning. Irmo High will also offer

four theme-based family engagement activities annually to build strong school/family relationships.

(2) The extent to which the applicant demonstrates that it has the resources to operate the project beyond the length of the grant...

District Five has taken steps to ensure that new magnet programs will not only be implemented with fidelity, but also sustained into viable academically rigorous programs that will continue to attract a diverse student body post-grant funding. With the hiring of Superintendent, Dr. Stephen W. Hefner in 2011, the board of trustees has shown an unwavering commitment for increasing school choice and diversity through magnet programs, while recognizing the significant costs that are incurred with start-up (and sustainability). In less than six years, the district has grown its magnet programs from two programs (both of which restricted enrollment to academic criteria) to ten magnet programs; all during the same time when state revenues for local school funding was being cut to pre-recession levels. It should be noted that the eight new magnet programs were designed without any academic criteria. This remarkable growth required bold decision making and risk taking from a board of trustees and community in an uncertain economic time to invest what limited resources it had, fueled with competitive federal grants, into viable magnet programs.

Today, District Five's commitment remains steadfast. The Board of Trustees has approved the district's plans as proposed in this grant application and has committed the resources necessary to sustain these programs post-grant funding. The district's leadership consisting of the Superintendent, Chief Finance Officer, Chief Human Resources Officer, Chief Instructional Office, Chief Student Services Officer, and Director of Accountability have also reviewed and approved the Discover Five project as proposed in this grant application.

Additionally, each school's Parent Teacher Organization and School Improvement Council have

been intimately involved in the conceptual design and development of each magnet program and has pledged commitment to the implementation and sustainability post-grant funding. All of these individuals and entities recognize that in order to create, implement, and sustain viable magnet programs, external funds are critical for start-up, with the majority of funding needs incurred in the first five years of implementation. These start-up funds are focused on key areas to build capacity of magnet school leaders and teachers to teach a rigorous theme-based curriculum in the context of systemic reforms in desegregation through a sustained professional development model, purchase supplies and materials to support a theme-based curriculum, provide student transportation to/from magnet programs in order to meet diversity goals, and other items critical to recruiting and retaining a diverse population such as student fees for student-led field investigations, IB-CP candidate registrations and exams, recruitment activities, and school enhancements to “scream the theme.”

The district has created a **multi-year financial and operating model and plan** that demonstrates how MSAP funds will be spent at the district and school levels to support the effective implementation of the magnet programs across the five-year grant period. This plan also details the costs required on an annual basis (post-MSAP funding) with the identified sources of funding to cover these costs, such as district General Funds, Title I, Title II, Grants, and School Funds (PTO). This plan can be found in the Appendix H and details how MSAP funds will be spent in the following categories: Personnel, Fringe Benefits, Travel, Supplies, Equipment, Contractual, Other, and Indirect. Indirect costs are calculated at the district’s state-approved rate of 5% less equipment and allowable contractual costs. The annual projected cost to sustain the magnet programs post-MSAP funding is \$893,396. By category, these costs are

projected at \$392,466 (Personnel), \$156,986 (Benefits), \$178,125 (Travel), \$13,200 (Supplies), \$0 (Equipment), \$39,500 (Contractual), and \$113,119 (Other).

The largest costs that will need to be sustained are Personnel and Benefits, at a combined projected annual cost of \$549,452. The district has committed to sustaining the Central Magnet Office with General Funds to support its key duties which are essential to operating magnet programs that are effective in reaching academic and desegregation goals including: oversight of the application and lottery process, support to prospective and current parents/students, coordination of district wide recruitment events, and support to magnet school leaders and instructional staff. Other personnel in the schools critical to sustaining the theme-based curriculum, such as the Arts Instructor positions at Nursery Road Elementary Arts Magnet and the STEAM Coach at Leaphart Elementary STEAM Magnet, will be funded through reallocations of Title I funds and General Funds. Personnel to support student transportation is included in this category and will be additionally funded through a reallocation of General Funds.

Travel costs for student transportation will be the next most significant outlay of district resources at \$178,125 for gas and mileage. The district's Office of Student Transportation anticipates some of these funds may be reimbursed by the state by using the buses to transport students with disabilities when not in use for the magnet programs. Supplies costs are nominal at \$13,200 annually and are projected to be covered through a combination of Title II and local School Funds (PTO). Contractual costs of \$39,500 to sustain software licenses related to the student selection lottery system and data management system will be covered by a reallocation of district General Funds. Additional contractual costs to sustain the artist residency program at

Nursery Road Elementary School Arts Magnet will be covered by competitive state grants (SC Department of Education Arts Curricular grants, and the SC Arts Commission Arts in Basic Curriculum grants). Other costs, annually projected at \$113,119, include items critical to sustaining the magnet programs such as licensing fees related to one-to-one digital devices, student fees for field investigations, and fees related to the IB-CP Magnet (annual program candidacy fees, student candidacy fees, subject fees, and postage for examination materials). Items in this category will be offset through a combination of district General Funds, Grants, and School Funds.

Beyond the financial resources, each magnet program has the demonstrated commitment from partners and stakeholders to ensure sustainability of the theme-based curriculum through a diverse network of community partners and stakeholders. Additionally, each school will be required to complete the Sustainability Tool provided by the MSAP Center. Schools will be required to write their sustainability plan in year 1, and this plan will be revisited annually to ensure the magnet programs remain on track to meet their sustainability benchmarks and goals throughout the five-year grant period. The **demonstrated commitment of partners** is documented in letters of support which can be found in Appendix I. **Evidence of broad support from stakeholders critical to the project's long-term success** can be found in Appendix B which documents local support for school transformation.

(3) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration...

All Discover Five magnet school administrators and teachers will participate in professional development in systemic and site-based reforms that will be sustained over the five-year grant period. All magnet school administrators will complete a minimum of 42 hours of professional development annually. All magnet school teachers will complete a minimum of 90 hours of professional development annually. The Discover Five Professional Development Framework, as depicted in Table 7, will be delivered through a combination of workshops, extended small group learning, job-embedded assignments, coaching, and reflection. The framework is designed to work in conjunction with existing district initiatives so that time requirements and professional learning is cohesive and aligns with teacher priorities and goals. For example, designated school level professional development days will be allocated towards site-based reforms in magnet themed content and instructional strategies. Job-embedded professional learning will align with district initiatives in data-driven instruction, so that teachers will integrate learning into Data Teams and established Common Planning Times. Research shows that teachers who “experience professional development that is coherent—that is, connected to their other professional development experiences, aligned with standards and assessments, and fosters professional communication—are more likely to change their practice.” (Garet, et al, 2001, p. 934). Cohesiveness of time and content are critical factors in developing teacher capacity during this time of transformation from teaching in a traditional school to a magnet school.

Table 7. Annual Professional Development Framework

Content	Presenter	Format	Participants	Quantity
Systemic Reforms				
Desegregation and Equity Strategies	Elam Leadership Institute – Dr. Donna Elam Cooperative Learning Institute – Dr. David W. Johnson	Summer Institute	Magnet School Administrators and Teachers	24 hours (4 days)
Cooperative Learning Practices	Elam Leadership Institute – Dr. Donna Elam Cooperative Learning Institute – Dr. David W. Johnson Cooperative Learning Coach – tbd	Job-embedded assignments, extended small group learning, coaching, and reflection	Magnet School Teachers	36 hours
Site-Based Reforms				
Thematic Content	<i>H.E. Corley Elementary Montessori Magnet:</i> SC Department of Education – Dr. Ginny Riga, Montessori Consultant	Workshops	Magnet School Administrators and Teachers	18 hours (3 days)
	<i>Leaphart Elementary STEAM Magnet:</i> University of South Carolina College of Engineering and Computing – PLTW and University of South Carolina – Center for Science Education - STEAM	Workshops	Magnet School Administrators and Teachers	
	<i>Nursery Road Elementary Arts Magnet:</i> Focus5 Arts Integration Consultants	Workshops	Magnet School Administrators and Teachers	
	<i>Irmo High School IB-CP Magnet:</i> IB Americas	Workshops and on-line trainings	Magnet School Administrators and Teachers	
Thematic Integration with Curriculum Mapping and Unit Development	District Instructional Coordinators and Specialists	Job-embedded coaching during common planning times	Magnet School Teachers	12 hours

Systemic reforms will focus on building teacher capacity to teach in a magnet school with a diverse student population grounded in desegregation and equity strategies and cooperative learning theory and practices. Teachers will participate in a 4-day (24 hours) Summer Institute, followed by 36 hours of combined on-site coaching, job-embedded assignments, and reflection, for a total of 60 hours annually; magnet school administrators will participate in the 4-day (24 hours) Summer Institute, for a total of 24 hours annually. Professional development in systemic reforms meets standards for *quality, intensity, and duration* and will be led by the following consultants:

Elam Leadership Institute (ELI) is a network of leading national research and development professionals and organizations working to seek excellence and equity in educational leadership, teaching, and learning through research, policy and practice. ELI 's work is based on the theoretical framework espoused by Elam et al (2007) which is the alignment of culturally competent leadership, effective leadership (related to academic achievement), and social justice (related to the concept of equity). **Dr. Donna Elam** is President of Elam Leadership Institute and a nationally recognized authority in diversity, equity, and desegregation training for governmental, business, community, and educational agencies. She served as the Director of the New York University's Equity Assistance Center and Associate Director of the Southeastern Equity Assistance Center (both federally-funded Desegregation Assistance Centers), and Director of the Tampa Bay Educational Partnership housed in the Office of the Provost at the University of South Florida. Dr. Elam sits on the board of Magnet Schools of America as a Specialized Director and is currently a vetted consultant on desegregation strategies for the Magnet School Assistance Program (MSAP) Center.

Cooperative Learning Institute **Dr. David W. Johnson** is Co-Director of the Cooperative Learning Institute and a Professor of Educational Psychology at the University of Minnesota. He is a past-editor of the American Educational Research Journal and the recipient of several awards including: the American Psychological Association's 2003 Award for Distinguished Contributions of Applications of Psychology to Education and Practice, the 2007 Brock International Prize in Education administered by the College of Liberal Studies at the University of Oklahoma, and the 2008 Distinguished Contributions to Research in Education Award from the American Education Research Association. For the past 40 years Dr. Johnson has served as an organizational consultant to schools and businesses throughout the world.

Together, the Elam Leadership Institute and Cooperative Learning Institute will provide the context for systemic reforms to improve teaching and learning among diverse student learners using desegregation and equity strategies and intensive training in the use of cooperative learning practices in the classroom. The context for systemic reforms includes five inter-related components designed to: (1) provide magnet school leaders and teachers with desegregation and equity strategies, (2) counter implicit biases, (3) prevents re-segregation within schools and classrooms, (4) facilitate positive interactions between students and staff, and staff and parents; and (5) provide a strategy to ensure academic rigor for all students in the integrated settings. Key learning outcomes for each component are described as follows:

(1) Provide magnet school leaders and teachers with desegregation and equity strategies

- Comprehending how the historical context of desegregation (e.g. The Green Decision of 1968) to inform current magnet schools' policies and practice
- Understanding how desegregation impacts teaching and learning
- Understanding the intent of cooperative learning for desegregation and achievement
- Operationalizing equity in instructional structures and processes to ensure that rigorous academic content is delivered to all groups of students

- Understanding educational equity—the inputs necessary to achieve equitable academic results for all groups of students
- Understanding how expectations influence student achievement
- Knowing how confirmation bias relates to student achievement
- Knowing how “equity of effort” relates to improving student achievement

(2) Counters implicit biases

- Ensuring that implicit bias does not have a negative impact on the delivery of academic content
- Ensuring that all students are held to high expectations for academic achievement without bias

(3) Prevents re-segregation within schools and classrooms

- Ensuring rigorous academic content delivery to all groups of students
- Bridging the gap between student experience and curriculum content delivery
- Ensuring that desegregating the student body does not result in inequitable academic content delivery i.e. tracking
- Ensuring that cooperative learning does not inadvertently re-segregate the curriculum or students
- Ensuring that all students are held to high expectations for academic achievement

(4) Facilitates positive interactions between students and staff, and staff and parents

- Understanding how expectations influence student achievement

(5) Provides a strategy to ensure academic rigor for all students in the integrated settings

- Using Assignment Alignment™ (AA) as a process for teachers to reflect on their instructional practice through data and assessing student work to increase rigorous content and standard alignment
- Aligning the Assignment Alignment™ (AA) process with the cooperative learning practices so that the AA becomes a value added to ensure content rigor

Year 1 will provide an orientation to desegregation and equity strategies, as well as research that addresses the barriers to effective instruction within the context of the MSAP grant as a desegregation tool. Exploration of the achievement gap, including *why* these gaps exists and *how* they will be addressed through the MSAP grant activities will be covered. Year 2 will introduce schools to research on best practices with an explicit focus on instructional strategies and how teacher influences affect student achievement, including awareness and avoidance of implicit bias based on race, gender, socioeconomic status that may impede high expectations for

all students. A major focus in Year 2 is an introduction to Assignment Alignment™ - a four step process that provides a framework for reflecting on education practice for the express purpose of improving instruction. The process is designed to provide education professionals a habit of mind about teaching that accepts responsibility for students' academic outcomes and identifies gaps in instructional practices that have an impact on student achievement. Assignment Alignment™ guides teachers to (1) look at what is being taught in the classroom currently, (2) identify the gaps between what is being taught, (3) identify what needs to be taught in order for students to be successful on state assessments; and (4) replace the assignments with rigorous, standards-aligned work and the instructional strategies necessary for all students to learn the challenging work. This process challenges and equips teachers to make changes to their instructional practices based on student achievement data compiled through Data Teams. This reflection of teacher impact and effectiveness, combined with reflection of student learning that is occurring regularly in Data Teams at each magnet school, is a powerful practice that will yield aggressive results in student achievement.

During Years 1 and 2, teachers will also learn the theory and application of cooperative learning models (formal, informal, and base groups), based on social interdependence theory introduced by David W. Johnson & Robert Johnson (D.W. Johnson & R. Johnson, 1989). Teacher training will focus on the conceptual understanding of the nature of cooperative learning and the basic elements that make it work (D.W. Johnson & R. Johnson, 2009).

Years 3-5 will focus on translating research to practice. Magnet school administrators and teachers will be challenged to integrate the research-based theories and applications into the classrooms and schools, including conflict resolution as an essential aspect of cooperative

learning and peer mediation program that empowers students to manage their own conflicts without involving teachers and administrators. During Years 3-5, consultants from both Elam Leadership Institute and Cooperative Learning Institute, and an on-site Cooperative Learning Coach will provide intensive coaching with the magnet school leadership team at each school to embed these strategies in the classroom and develop a school wide culture of cooperation. Teachers will keep digital journals to facilitate teacher reflection on their practice regarding discoveries and challenges to their instructional practices in order to build on successes. The reflection journals will provide teachers a format to document their professional learning journeys to be shared anonymously with school leaders. The reflection journals will become the base of successive on-site visits to inform the type and intensity of content and discover patterns of implementation. Consultants will participate in annual on-site visits to each magnet school that will include the following elements: briefings with School Magnet Leadership Team (Principal, Assistant Principal, Site Coordinator, and Lead Teacher) and observation of teachers within the infrastructure of each school (Data Teams, Common Planning Times, and teachers implementing curriculum and assignments in the classroom) to ensure fidelity of implementation. At the conclusion of the observation, consultants will meet again with the School Magnet Leadership Team to reflect on discoveries and challenges to implementation and outline next steps in job-embedded assignments. During the time between the on-site visits by consultants, principals will integrate time in their faculty meetings to discuss teacher reflections to help identify trends and patterns to effective implementation that will be shared with consultants to inform the next month's focus.

Administrator and teacher effectiveness and capacity will be enhanced further through site-based reforms to develop the magnet-themed curriculum in the Discover Five schools and

increase knowledge and skills in the magnet theme, necessary to lead to improvements in teacher practices and student academic outcomes. Each school will use their three allotted school-level professional days (18 hours annually) to work with consultants who are recognized experts in their field. Teachers will participate in an additional 12 hours of job-embedded assignments and coaching with district staff in curriculum development and integration, for a total of 30 hours' annually. Professional development in site-based reforms meets standards for *quality, intensity, and duration* and will be led by the following consultants and district staff:

Dr. Ginny Riga, Montessori Consultant, SC Department of Education will provide on-site professional development and technical assistance to the instructional and administrative staff at H.E. Corley Elementary School Montessori Magnet. Dr. Riga has dedicated her career to teaching and directing Montessori programs in the public schools, as a teacher, principal, assistant principal, and district coordinator. In her current position with the SC Department of Education, Dr. Riga supports public schools throughout the state to implement and sustain high quality Montessori programs.

SC Project Lead The Way (SC PLTW) at the University of South Carolina, College of Engineering and Design will provide extended professional development and support to the teaching faculty at Leaphart Elementary School STEAM Magnet. Certified PLTW trainers will provide on-site workshops annually throughout the duration of the five-year grant. Trainers will walk-through the PLTW Launch modules and teachers will break out into grade level planning teams for further exploration and training that is self-paced. **Dr. Merrie Koester** of the **University of South Carolina, Center for Science Education** will provide extended professional development and support throughout the five-year grant as teachers develop theme-

based curriculum that is inclusive of all standards in a unique and engaging way to promote student interest, engagement, and achievement. Dr. Koester's STEAM Clinics will build capacity of magnet teachers to purposefully integrate the arts into the PLTW Launch curriculum and STEAM interdisciplinary units. Dr. Koester is the author of Science Teachers Who Draw which emerged from a collaborative action research initiative at the Center for Science Education. The study is ongoing, with participating teachers learning to employ drawing practices to deepen their content knowledge and make science visible and meaningful to all students, resulting in improved teacher knowledge and instruction and improved student academic performance.

Focus5 is a nationally-recognized leader in arts integration that has helped schools across the country develop high-quality arts programs that infuse the arts across all disciplines. The Focus5 Consulting Staff consists of National Board Certified Teachers, professional artists, teaching artists, arts integration specialists, a technology integration specialist, and a reading specialist. Focus5 will deliver three days of on-site workshops per grant year to Nursery Road Elementary School Arts Magnet. Workshop topics will include: Laying a Foundation: Defining Arts Integration, Academic Conversations in the Arts Integrated Classroom, Acting Right: Establishing the Cooperative, Kinesthetic Classroom, and Instructional Strategies using Drama, Visual Arts and Technology.

IB Americas will be the primary provider of professional development for teachers in the IB-CP Magnet. This IB-authorized training will include a combination of on-site workshops, on-line courses, and conferences, that will begin with an on-site workshop "Launching the CP" in Year 1. This introductory workshop will provide a consistent knowledge base to all staff, which will be particularly important to the career-related studies teachers who do not have prior

knowledge of the IB philosophy, but whom will play a role in facilitating their students' CP core. This same cohort of five career-related studies teachers and five current IB-Diploma teachers will participate in self-paced on-line trainings in Category 1 through 3, provided by IB Americas. Each year, the cohort will have the opportunity to attend the national IB Americas conference for continuing education.

In addition to external consultants providing professional development in systemic and site-based reform, all Discover Five schools will be supported with high-quality district-level resources to align these reforms into established district instructional practices, including Data Teams and Common Planning Times. MSAP funds will support a Cooperative Learning Coach who will work on-site at all schools to support teachers in creating diverse, heterogeneous learning activities within the classroom, while also supporting school administrators through the transformation of the school's culture into a cooperative learning environment. The Cooperative Learning Coach will be instrumental in assisting magnet school leaders and teachers as they translate theory to practice in their schools and classrooms. District funds will be used for Instructional Coordinators, Instructional Specialists, and Digital Integration Specialists who support teachers in magnet-themed unit development, curriculum mapping and thematic integration, and integration of one-to-one digital devices at the elementary schools. The Coordinators and Specialists will participate in relevant professional development opportunities needed to sustain theme-based curriculum, after grant funding has ended.

In addition to the professional development in systemic and site-based reforms described in detail, each Discover Five school has included funds for participation in national magnet-related conferences in their budgets. Participation in conferences will support teachers to expand

their peer network, gain insight and ideas into what is happening on the national level, and learn strategies for implementation and sustainability of their own programs.

Finally, to support the effective launch, operations and sustainability of the Discover Five magnet programs, the magnet school leadership team and district administrators will participate in professional development opportunities specific to their roles in leading school transformation. On-site training will be provided by the National Institute for Magnet School Leadership (NIMSL) in year one. Workshops will include: 101 Pillars of Magnet Schools, 201 Leadership in Magnets, 301 Advanced Coaching for Theme-based Education, and 302 Sustaining your Magnet. As part of the NIMSL training, the Discover Five school leaders will also have access to a national peer network of other school/district leaders at magnet schools.

(5) The extent to which the proposed project is supported by strong theory...

The Discover Five project design is framed by strong theory, which is outlined in the district and school logic models. The district logic model is included at the end of this section. The school logic models can be found in Appendix K. Each of the magnet programs was designed using research-based strategies and interventions to improve student achievement. The core logic model activities are grouped under six key areas necessary to achieve MSAP priorities and the objectives established in the project's evaluation plan: Recruitment, Student Selection, Capacity Building and Professional Development, Implementation of Magnet Programs and Curriculum, Sustainability; and Evaluation. The evaluation plan includes a rigorous quasi-experimental research design to study the interventions proposed in the theory of action that **if** (1) teachers receive sustained high-quality professional development in systemic and site-based reform strategies **and** (2) implement cooperative learning practices in their schools, **then** student academic achievement will improve.

The professional development framework implemented in the Discover Five project design meets the level of evidence supported in Citation #1 described in detail in CPP #2: Michael S. Garet, et al (2001). What makes professional development effective? Results from a national sample of teachers. *American Education Research Association Journal*, 38(4), 915-945. **Results of the study show that the structural features of a professional development framework have a substantial positive influence on the core features and ultimately teacher outcomes.** The Discover Five professional development framework will be delivered through a combination of workshops, extended small group learning, job-embedded professional learning, coaching, mentoring, and reflection; and works in conjunction with existing district initiatives so that time requirements and professional learning is cohesive and aligns with teacher priorities and goals; provides a minimum of 90 hours of professional development annually per teacher; provides context in systemic and site-based reforms to enhance knowledge and skills; and provides opportunities for teachers to reflect and analyze on their practice.

The educational intervention implemented in the Discover Five project design meets the level of evidence supported in Citation #2 described in detail in CPP#2: Stevens, R. J., & Slavin, R. E. (1995). The Cooperative Elementary School: Effects on students' achievement, attitudes, and social relations. *American Educational Research Journal*, 32(2), 321-351. **Results of the study found that after the first two years of implementation, students in cooperative elementary schools had significantly higher achievement in reading vocabulary, reading comprehension, language expressions, and math computation when compared to a matched sample of peers in traditional schools. Students also had better social relations.** The Discover Five magnet programs will implement cooperative learning practices as presented in the study methods including: (1) widespread cooperative learning in academic classes, (2)

mainstreaming learning disabled students in regular education, (3) teachers coaching one another, (4) teachers collaborating in instructional planning, (5) principal and teachers collaborating on school planning and decision making; and (6) principal and teachers encouraging active involvement of parents. The proposed project will include all methods cited in the study as follows:

(1) Widespread use of cooperative learning in academic classes. Each Discover Five magnet program will implement cooperative learning (formal, informal, and base groups) in the classrooms. The Cooperative Learning Coach will provide on-site support to magnet school teachers to implement the widespread use of cooperative learning within the context of desegregation.

(2) Mainstreaming students with learning disabilities in regular education (when appropriate with the student's Individualized Education Program). At each of the Discover Five schools where magnet programs are proposed, enrollment of students identified as Learning Disabled ranges from 2-7%. District policy states that students with disabilities will be placed in the Least Restrictive Environment. Of the students identified as Learning Disabled currently at Discover Five schools, 67% are mainstreamed in regular education classes and activities for 80% or more of their day; and 26% of students spend 40-79% of their day in regular education classes and activities. For the time that students are not mainstreamed in regular classes, they are participating in resource classes to support specialized instruction based on their IEP goals.

(3) Teachers coaching one another. As depicted in Table 7, time is built in to the professional development framework for peer coaching related to the implementation of systemic and site-based reforms.

(4) Teachers collaborating in instructional planning. As depicted in Table 7, time is built in to the professional development framework for curriculum development and instructional planning. Additionally, as a system, the district already has dedicated days established for grade level planning and data teaming in which teachers collaborate to develop, implement, and reflect on curriculum and instruction planning.

(5) Principal and teachers collaborating on school planning and decision making. Each magnet program will establish a School Magnet Leadership Team that includes the principal, assistant principal, lead teacher, and site coordinator. This team will collaborate on school planning and decision making related to the implementation of the magnet program.

(6) Principal and teachers encourage active involvement of partners (and community). Each magnet program will establish a Magnet Advisory Council that includes representatives from the school's Parent Teacher Organization, School Improvement Council, local businesses and community members, parents, teachers, students, and the School Magnet Leadership Team. This group will meet quarterly to guide the vision and operations of the magnet program to ensure active involvement of partners.

The **district logic model** provides a framework of the resources, activities, outputs necessary to achieve project outcomes, in relation to strong theory. The **context** for the logic model is based on: minority group isolation and socioeconomic isolation that exceeds district averages, achievement gap that exceeds district and/or state averages, declining enrollment and availability of space, and local support for school transformation.

Discover Five Project Logic Model

Resources	Activities	Outputs	Short-term Outcomes	Medium-term Outcomes	Long-term Outcomes
<p>Central Magnet Office</p> <p>School Magnet Leadership Team</p> <p>Magnet Teachers</p> <p>Students</p> <p>Parents</p> <p>Community</p> <p>District Staff</p> <p>Board of Trustees</p> <p>MSAP funding</p> <p>MSAP Center</p> <p>National Institute for Magnet School Leadership (NIMSL)</p> <p>Elam Leadership Institute</p> <p>The Century Foundation</p> <p>Cooperative Learning Institute</p> <p>USC Educational Policy Center</p>	<p>Recruitment (educate community on benefits of diversity, outreach campaign, build relationships w/community & parents, build awareness/enthusiasm within each school)</p> <p>Student Selection (accept applications, conduct weighted lottery, enroll and retain students in new magnet programs)</p> <p>Capacity Building and Professional Development (hire qualified staff, provide PD to teachers in evidence-based systemic and site-based reforms (Citation #1), provide PD to school leaders in systemic and site-based reforms and magnet operations and best practices)</p> <p>Implementation of Magnet Programs (create 5-yr implementation rubrics, purchase supplies/materials to teach theme-based curriculum, develop/implement/refine theme-based curriculum, implement cooperative learning practices in schools and classrooms (Citation #2); create opportunities for parent engagement)</p> <p>Evaluation (create data collection tools, collect data, analyze data, conduct impact study with virtual comparison group, report on findings)</p> <p>Sustainability (establish <u>Magnet Advisory Councils</u> at schools and district, complete sustainability self-assessment tool, develop plan for sustainability for each magnet program, create platform to share best practices).</p>	<p>Diversity report completed; marketing materials and branding created; # of recruitment activities completed; school ambassadors in place</p> <p># of student applications received; # of students enrolled; school orientations completed; # of students retained</p> <p>Project staff hired; teachers receive 90 hours PD annually; magnet administrators complete 42 hours PD annually and NIMSL training</p> <p>Implementation rubrics completed; materials/supplies purchased; <u>theme-based curriculum</u> developed and implemented; cooperative learning practices embedded in schools and classrooms; theme-based <u>parent engagement</u> activities at each magnet program.</p> <p>Data collection tools created; data collected; data analyzed with comparison group; <u>impact study</u> completed; reports produced</p> <p>Magnet Advisory Councils meet regularly; sustainability self-assessment completed; sustainability plans created; best practices shared across schools and district.</p>	<p>Increased opportunity for community and parent engagement</p> <p>Increased diversity in applicant pool</p> <p>Increased administrator and teacher capacity in desegregation strategies and cooperative learning; increased teacher capacity to deliver theme-based curriculum</p> <p>Increased student engagement</p> <p>Formative evaluation results completed annually and provided to project team</p> <p>Magnet programs meet annual sustainability benchmarks</p>	<p>Improved relationships with community, parents, & schools</p> <p>Increased diversity at schools</p> <p>Changes in leadership and instructional practices that support desegregation</p> <p>Increased student academic achievement and career readiness</p> <p>Summative evaluation results completed and provided to project team</p> <p>Magnet programs will be sustainable post-funding</p>	<p>Increased community and parent engagement</p> <p>Increased student interactions with diverse peers</p> <p>Increased student academic achievement</p> <p>Increased student career readiness</p> <p>Increased graduation rates</p> <p>Reduction in achievement gap between critical student subgroups (minority/non-minority, and high/low SES)</p> <p>Compliance to MSAP; Objectives and PMs met</p> <p>Magnet programs will be operating three years post-funding</p>

(c) QUALITY OF MANAGEMENT PLAN

The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan for the proposed project, the Secretary considers the following factors:

(1) The adequacy of the management plan to achieve the objectives of the proposed project ...

The Discover Five Project’s six outcomes and 48 performance measures depicted in Table 8 are aligned with the district and schools’ logic models, MSAP purposes, and GPRA reporting requirements.

Table 8. Discover Five Project Objectives and Performance Measures

MSAP Purpose 1: the elimination, reduction, or prevention of minority group isolation in elementary schools and secondary schools with substantial proportions of minority students, which shall include assisting in the efforts of the United States to achieve voluntary desegregation in public schools.			
Discover Five Objective 1: To promote diversity by reducing and preventing minority group isolation and increasing socioeconomic diversity.			
Discover Five Performance Measures		Targets	Timeline
1.1	By October 1 of each project year, each magnet school will reduce African American enrollment every year <u>by 2 percentage points from the October 1, 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	October 1, 2018 October 1, 2019 October 1, 2020 October 1, 2021 October 1, 2022
1.2	By October 1 of each project year, each magnet school will increase socioeconomic diversity by reducing the school’s poverty index <u>by 2 percentage points each year from the October 1, 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	October 1, 2018 October 1, 2019 October 1, 2020 October 1, 2021 October 1, 2022
1.3	By June 30 of each project year, each magnet school will participate in a minimum of six recruitment and marketing activities.	4 schools 4 schools 4 schools 4 schools 4 schools	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
1.4	The District Recruitment Specialist will promote awareness and build relationships with target audiences by speaking to at least 40 civic groups and community events annually to promote Discover Five magnet program.	40 events 40 events 40 events 40 events 40 events	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
1.5	Each of the four Discover Five magnet schools will increase the number of applications received <u>annually by 5% each year from the 2018 baseline.</u>	NA 5% points 10% points 15% points 20% points	August 15, 2018 August 15, 2019 August 15, 2020 August 15, 2021 August 15, 2022

1.6	For each year of the project, the percentage increase in African American student enrollment at district feeder schools will not exceed the district overall percentage increase.	11 schools 11 schools 11 schools 11 schools 11 schools	October 1, 2018 October 1, 2019 October 1, 2020 October 1, 2021 October 1, 2022
MSAP Purpose 2: the development, implementation, and expansion of magnet school programs that will assist local educational agencies in achieving systemic reforms and providing all students the opportunity to meet challenging State academic standards.			
Discover Five Objective 2: To increase student achievement by implementing rigorous, focused programs of study that provide personalized, innovative, theme-based instruction to provide all students the opportunity to meet challenging core content standards and academic achievement standards.			
Discover Five Performance Measures		Targets	Timeline
2.1	The percentage of kindergarten students at H.E. Corley Elementary School who score at the independent reading level on the Developmental Reading Assessment (2 nd edition plus) <u>will increase two percentage points each year above the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
2.2	The percentage of students at the three Discover Five elementary schools who meet or exceed expectations on SC READY for English language arts <u>will increase by two percentage points each year above the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
2.3	The percentage of students at the three Discover Five elementary schools who meet or exceed expectations on SC READY for mathematics <u>will increase by two percentage points each year above the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
2.4	The percentage of students at the three Discover Five elementary schools who meet or exceed their Measures of Academic Progress growth target from fall to spring in reading <u>will increase by two percentage points each year above the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
2.5	The percentage of students at the three Discover Five elementary schools who meet or exceed their Measures of Academic Progress growth target from fall to spring in mathematics <u>will increase by two percentage points each year above the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
2.6	The percentage of students at Leaphart Elementary School who score met or above on SCPASS science	2% points 4% points 6% points	September 30, 2018 September 30, 2019 September 30, 2020

	<u>will increase by two percentage points each year above the 2017 baseline.</u>	8% points 10% points	September 30, 2021 September 30, 2022
2.7	The percentage of students at Irmo High School who earn a passing score on the English 1 EOCEP <u>will increase two percentage points per year above the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
2.8	The percentage of students at Irmo High School who earn a passing score on the Algebra 1 EOCEP <u>will increase two percentage points per year above the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
2.9	The ACT composite scale score of 11 th grade students at Irmo High School will increase compared with the previous year's score (2017 data used as baseline).	1 school 1 school 1 school 1 school 1 school	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
2.10	Graduation rate at Irmo High School will increase annually (2017 data used as baseline).	1 school 1 school 1 school 1 school 1 school	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022

MSAP Purpose 3: the development, design, and expansion of innovative educational methods and practices that promote diversity and increase choices in public elementary and public secondary schools and public educational programs.

Discover Five Objective 3: To design, implement, and sustain innovative theme-based programs that promote diversity and increase choices, in partnership with parents and the community.

Discover Five Performance Measures		Targets	Timeline
3.1	The percentage of magnet components as identified in each school's implementation rubric that are fully implemented at each magnet school will increase to...	50% 75% 100% 100% 100%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.2	The percentage of teachers at each magnet school who report implementing cooperative learning strategies in their classroom will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.3	The percentage of teachers at each magnet school who are observed using cooperative learning strategies in their classroom will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022

3.4	The percentage of teachers at each magnet school who report utilizing desegregation and equity strategies routinely in their classroom will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.5	The percentage of teachers at each magnet school who report that Discover Five increases interactions among students of diverse backgrounds will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.6	The percentage of teachers at each magnet school who report that Discover Five increases student engagement in learning will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.7	The percentage of students at each magnet school who report that Discover Five engages them in interactions with students from different social, economic, ethnic, and racial background will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.8	The percentage of students at each magnet school who report that participation in Discover Five is increasing their engagement in learning will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.9	By June 30 of each project year, at least 10 of the 14 school climate factors at each magnet school will show an increase in their percentile ranking (2017 data used as baseline).	4 schools 4 schools 4 schools 4 schools 4 schools	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.10	The percentage of parents at each magnet school who report that they are satisfied with the learning environment of their child's school will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.11	By June 30 of each project year, each Discover Five magnet program will conduct four theme-based family engagement activities each year.	4 schools 4 schools 4 schools 4 schools 4 schools	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.12	The number of family members attending magnet theme-based activities organized at each magnet school <u>will increase by 10% each year over the 2018 baseline.</u>	NA 10% points 20% points 30% points 40% points	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022

3.13	By June 30 of each project year, each Discover Five magnet program will add at least two partnerships with community organizations and local businesses (2017 data used as baseline).	4 schools 4 schools 4 schools 4 schools 4 schools	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
3.14	Each of the four Discover Five magnet schools will create and maintain a diverse magnet advisory council, including teacher, parent, student, administrator, and community representatives.	4 schools 4 schools 4 schools 4 schools 4 schools	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
MSAP Purpose 4: courses of instruction within magnet schools that will substantially strengthen the knowledge of academic subjects and the attainment of tangible and marketable career, technological, and professional skills of students attending such schools			
Discover Five Objective 4: To prepare students as 21 st century learners by improving academic achievement and providing them with the necessary career, technological and professional skills.			
Discover Five Performance Measures		Targets	Timeline
4.1	The percentage of Discover Five students at Irmo High School earning at least a Silver National Career Readiness Certificate (NCRC) as measured by the ACT WorkKeys <u>will increase by two percentage points each year above the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
4.2	The percentage of students reporting that participating in the Discover Five magnet program has improved their “world class knowledge”, as defined in the Profile of the SC Graduate, will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
4.3	The percentage of students reporting that participating in the Discover Five magnet program has improved their “life and career characteristics”, as defined in the Profile of the SC Graduate, will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
4.4	The percentage of students reporting that participating in the Discover Five magnet program has improved their “world class skills”, as defined in the Profile of the SC Graduate, will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
4.5	The percentage of Irmo High School students reporting they intend to enroll in post-secondary education (i.e., two-year and four-year institutions) <u>will increase each program year compared to the 2018 baseline.</u>	NA 1 school 1 school 1 school 1 school	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
4.6	The percentage of students reporting they have the skills necessary to be successful after high school in	NA 1 school 1 school	June 30, 2018 June 30, 2019 June 30, 2020

	college and career <u>will increase each program year compared to the 2018 baseline.</u>	1 school 1 school	June 30, 2021 June 30, 2022
MSAP Purpose 5: improving the capacity of local educational agencies, including through professional development to continue operating magnet schools at a high performance level after Federal funding for the magnet schools is terminated			
Discover Five Objective 5: To build the capacity of administrators and teachers to deliver rigorous programs of study that integrates systemic reforms and site-based reforms through sustained professional development.			
Discover Five Performance Measures		Targets	Timeline
5.1	The <u>percentage of administrative staff</u> at each Discover Five school <u>who participate in at least 24 hours</u> of annual professional development in systemic reforms (desegregation, equity, and cooperative learning strategies) will increase to...	75% 80% 85% 90% 95%	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
5.2	The <u>percentage of teachers</u> at each Discover Five school <u>who participate in at least 60 hours</u> of annual professional development in systemic reforms (desegregation, equity, and cooperative learning strategies) will increase to...	75% 80% 85% 90% 95%	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
5.3	The <u>percentage of administrative staff</u> at each Discover Five school <u>who participate in at least 18 hours</u> of annual professional development in site-based, thematic content will increase to...	75% 80% 85% 90% 95%	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
5.4	The <u>percentage of teachers</u> at each Discover Five school <u>who participate in at least 30 hours</u> of annual professional development in site-based, thematic content will increase to...	75% 80% 85% 90% 95%	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
5.5	The percentage of teachers at each Discover Five school who rate the professional development components as effective will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
5.6	The percentage of teachers in each Discover Five school reporting they have received sufficient training to continue operating the magnet program after Federal funding ends will increase to...	50% 60% 70% 80% 90%	June 30, 2018 June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022
MSAP Purpose 6: ensuring that all students enrolled in the magnet school programs have equitable access to high quality education that will enable the students to succeed academically and continue postsecondary education			
Discover Five Objective 6: To reduce the achievement gaps between student subgroups and promote postsecondary success by providing all students with innovative theme-based			

instruction through systemic reforms in desegregation and equity strategies, cooperative learning practices, and innovative, theme-based instruction.			
Discover Five Performance Measures		Targets	Timeline
6.1	The achievement gap between African American students and white students on the state’s English language arts assessment used for federal and state reporting will <u>narrow by two percentage points each year compared with the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
6.2	The achievement gap between African American students and white students on the state’s mathematics assessment used for federal and state reporting will <u>narrow by two percentage points each year compared with the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
6.3	The achievement gap between students on paid lunch and students on free/reduced price lunch on the state’s English language arts assessment used for federal and state reporting will <u>narrow by two percentage points each year compared with the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
6.4	The achievement gap between students on paid lunch and students on free/reduced price lunch on the state’s mathematics assessment used for federal and state reporting will <u>narrow by two percentage points each year compared with the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
6.5	The achievement gap between African American students and white students who earn at least a Silver National Career Readiness Certificate (NCRC) as measured by the ACT WorkKeys will <u>narrow by two percentage points each year compared with the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022
6.6	The achievement gap between students on paid lunch and students on free/reduced price lunch who earn at least a Silver National Career Readiness Certificate (NCRC) as measured by the ACT WorkKeys will <u>narrow by two percentage points each year compared with the 2017 baseline.</u>	2% points 4% points 6% points 8% points 10% points	September 30, 2018 September 30, 2019 September 30, 2020 September 30, 2021 September 30, 2022

Defined Responsibilities to Meet Objectives and Performance Measures

The management plan outlines an integrated system of support that will ensure objectives and performance measures are achieved on time and within budget. Project staff are represented

in three key areas: Central Magnet Office, Magnet School Leadership Team, and Other Key Personnel critical to achieving the project’s objectives and performance measures.

The Central Magnet Office as shown in Table 9, will be responsible for oversight and implementation of grant-funded activities to ensure the grant is carried out with fidelity. Two newly created MSAP-funded positions will address efforts to effectively recruit prospective students and their families to the magnet programs, and support magnet school leaders and teachers to effectively implement cooperative learning as a key desegregation strategy to improve social relations and raise student academic achievement.

Table 9. Central Magnet Office

Position	Employment Status		% Time on Project	Funding Source	
	In Place	To be Hired		Local	MSAP
Project Director (PD)	X		100%		X
Project Assistant/Bookkeeper	X		100%		X
Recruitment Specialist (RS)		X	100%		X
Cooperative Learning Coach		X	100%		X

Each school will be led by a School Magnet Leadership Team as shown in Table 10. This team will have the primary responsibility of leading local transformation at the magnet school. Each school will hire a Site Coordinator, who will oversee grant implementation and management and serve as the first point of contact for school staff, parents and community members for information related to recruitment, theme-based programs and instructional strategies at their school. Administrative duties include grant and fiscal reporting, coordination of professional development, and data collection support for the External Evaluator. Site Coordinators will serve as the school liaison to the MSAP Project Director and work collaboratively with the Central Magnet Office to support outreach and recruitment activities. Site Coordinators will also have specific content expertise aligned with the school’s magnet

theme in order to support instructional staff in curriculum development of magnet theme content and instructional strategies required to ensure equitable access of magnet theme instruction to all students, including minority and underrepresented students.

Table 10. Magnet School Leadership Team

Position	Employment Status		% Time on Project	Funding Source	
	In Place	To be Hired		Local	MSAP
Principals	X		100%	X	
Assistant Principals	X		100%	X	
Lead Teachers	X		100%	X	
Site Coordinators (SC)		X	100%		X

Other key personnel as identified in Table 11 will be critical to supporting the magnet schools as they implement their proposed plans. At the district level, the Superintendent will provide strategic vision and advocate for the role of magnets as a key strategy increasing socioeconomic and racial diversity in the district. The Superintendent will work closely with consultant, Richard Kahlenberg, and the Board of Trustees to develop strategies and messaging surrounding the district’s socioeconomic diversity plan. The Superintendent will also lead the District Magnet Advisory Council. The Chief Instructional Officer will support district and school administrators to ensure that curriculum is rigorous for all students and meets SC State-adopted standards. The Chief Instructional Officer will also provide oversight to ensure that the educational interventions proposed in the project are implemented with fidelity in order to meet the stated project objectives and performance measures. The Director of Career and Technical Education will support the IB-CP Magnet staff (administration and teachers) by bringing a diversity of perspectives to the School Magnet Advisory Councils and the IB-CP programs of study. The Director of Career and Technical Education will play a strong role in advocating for rigorous CATE programs made possible through the IB-CP Magnet. Instructional Coordinators, Instructional Specialists and Digital Integration Specialists will support magnet school teachers

in curriculum development that aligns with SC State-adopted standards, integration of theme-based curriculum into the classroom, and digital integration of one-to-one digital devices at the elementary schools.

At the school level, magnet teachers will be critical to developing and implementing the systemic and site-based reforms at their respective schools. Specific to the unique needs of launching an arts integration magnet school, MSAP funding has been designated for three related arts positions. These positions will be sustained through a combination of Title One re-allocations and competitive grants. Similarly, the position of a STEAM Coach at Leaphart Elementary School STEAM Magnet will be critical to building capacity throughout the duration of the five-year grant. External key personnel include the South Carolina Educational Policy Center which will lead the project’s evaluation.

Table 11. Other Key Personnel

Position	Employment Status		% Time on Project	Funding Source	
	In Place	To be Hired		Local	MSAP
District Level					
Superintendent	X		5%	X	
Chief Instructional Officer	X		5%	X	
Director of CATE	X		5%	X	
Instructional Coordinators	X		10%	X	
Instructional Specialists	X		10%		
Digital Integration Specialists	X		10%	X	
School Level					
Magnet School Teachers	X		100%	X	
Media Arts Instructor		X	100%		X
Theater Arts Instructor		X	100%		X
Instrumental Music Instructor		X	100%		X
External					
South Carolina Educational Policy Center		X	100%		X

The management plan, in relation to the district’s organizational structure, is depicted in Figure 9.

Project Milestones and Timeline

Table 12 details the project milestones as divided into five areas that align to core logic model activities and project objectives:

Recruitment; Student Selection; Capacity Building; Implementation; and Sustainability.

These milestones represent the core activities needed to foster systemic and site-based reforms in the proposed magnet schools over the course of the five-year grant period. Each milestone includes benchmarks and identifies person(s) responsible.

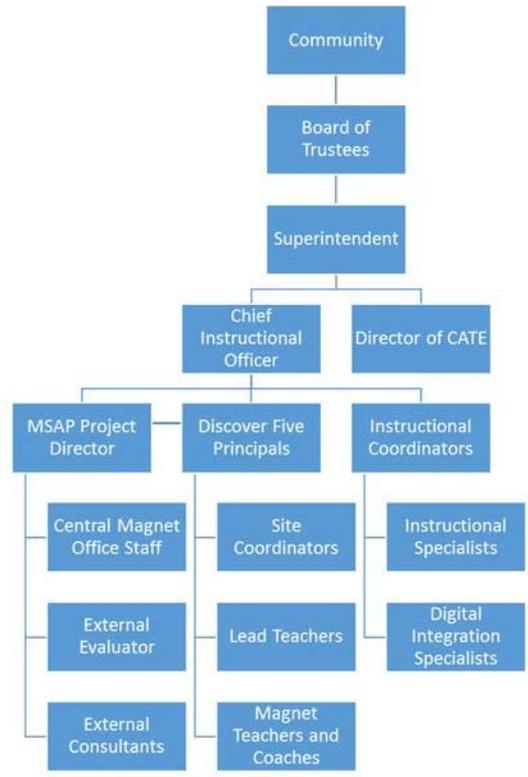


Figure 9. District Organizational Structure

Table 12. Discover Five Project Milestones

Recruitment Milestones						
Milestone 1. Educate community on benefits of socioeconomic and racial diversity. Objective(s) 1, 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Prepare background report and community profile to assess perceptions of diversity.	Kahlenberg	Q1-Q3				
Present report to Board of Trustees.	Kahlenberg Superint.	Q4				
Present report to Magnet Advisory Councils (district and school levels) and SICs.	PD, Principals		Q1			

Communicate the benefits of socioeconomic and racial diversity at all outreach and recruitment events.	PD, RS, Principals		Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone 2. Create a district wide marketing and outreach campaign to profile each magnet school. Objective 1						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Develop logo and branding for each magnet school.	PD, RS, Principals	Q1				
Develop print and electronic marketing materials for each magnet school.	PD, RS	Q1	Q1	Q1	Q1	Q1
Create new signage to “scream the theme” inside and outside of each magnet school.	PD, RS, Principals	Q3				
Produce school choice catalogue that highlights uniqueness of each magnet school.	RS	Q1	Q1	Q1	Q1	Q1
Provide training to all school staff to ensure consistency of messaging throughout the learning environment and to targeted audiences.	PD, Principals	Q2-Q4	Q1	Q1	Q1	Q1
Provide training specific to elementary and secondary guidance and placement staff to ensure understanding of magnet schools in order to provide equal access to magnet programs for all students.	PD	Q2	Q1	Q1	Q1	Q1

Produce a 3-5 minute video with student, teacher and parent testimonials.	Magnet School Leadership Team		Q1	Q1	Q1	Q1
Promote the Central Magnet Office as the go-to Parent Information Resource Center.	PD	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Purchase mailing lists to recruit target audiences.	PD, RS	Q1	Q1	Q1	Q1	Q1
Produce consistent communications that reflect each magnet school theme and push out to targeted audiences.	RS	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Participate in district recruitment events.	PD, RS, Principals	Q2	Q2	Q2	Q2	Q2
Participate in school recruitment events.	PD, RS, Principals	Q1-Q3	Q1-Q3	Q1-Q3	Q1-Q3	Q1-Q3
Participate in community recruitment events.	PD, RS, Principals	Q1-Q3	Q1-Q3	Q1-Q3	Q1-Q3	Q1-Q3
Communicate vision, mission and culture of magnet school at all school meetings and events.	Principal, SC	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Create a team of magnet school ambassadors at each school.	Principal, SC	Q1	Q1	Q1	Q1	Q1

Promote leadership opportunities for magnet school ambassadors.	Principal, SC	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Promote magnet theme, testimonials, and personal stories in monthly school newsletter and video vignettes posted to school website.	Principal, SC	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Create opportunities for staff to visit other schools in (and outside) of district to share and learn best practices for magnet-theme content and implementation.	Principal, SC	Q1-Q3	Q1-Q3	Q1-Q3	Q1-Q3	Q1-Q3

Student Selection Milestones

Milestone 1. Accept applications, using an open enrollment process without academic criteria.

Objective 1

Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Set defined time period for acceptance of applications, and communicate to all target audiences.	PD	Q1	Q1	Q1	Q1	Q1
Provide applications in various formats (bi-lingual, paper, electronic) to accommodate for limited English proficiency of prospective students and/or parents.	PD	Q2	Q2	Q2	Q2	Q2
Provide assistance to families and students to complete application and answer questions related to student selection process.	PD	Q2	Q2	Q2	Q2	Q2

Milestone 2. Conduct a weighted lottery.
Objective 1

Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Implement a race-neutral, controlled choice lottery.	PD	Q2	Q2	Q2	Q2	Q2
Notification letters sent to students.	PD	Q2	Q2	Q2	Q2	Q2
Letters of Intent sent to students, with expected return date to ensure enrollment in selected magnet school.	PD	Q2	Q2	Q2	Q2	Q2
Milestone 3. Retain students who have selected to enroll in a magnet school. Objective(s) 1 and 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Host orientation for students and families at magnet schools.	RS and Principals	Q3	Q3	Q3	Q3	Q3
Host magnet-themed family engagement activities at magnet schools.	Principals	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Capacity Building and Professional Development Milestones						
Milestone 1. Hire highly qualified teaching and support staff necessary for project implementation. Objective 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
MSAP PD will work with magnet school administrators to fill open positions required for project implementation, with superintendent and school board approval.	PD, Superint., School Board	Q1				
Milestone 2. Provide professional development to magnet school administrators and teachers systemic reforms (desegregation/equity strategies and cooperative learning). Objective(s) 2 and 5						

Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Teachers at each magnet school will participate in 60 hours of professional development annually. (Administrators 24 hours).	PD, Principals, SCs	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone 3. Provide professional development to magnet school administrators and teachers in site-based reforms (theme-based curriculum development and integration). Objective(s) 2 and 5						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Teachers at each magnet school will participate in 30 hours of professional development annually. (Administrators 18 hours).	PD, Principals, SCs	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone 4. Provide professional development to magnet school administrators in magnet operations and best practices. Objective(s) 2 and 5						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Magnet school administrators will receive professional development by the National Institute for Magnet School Leadership.	PD, Principals	Q1-4				
Milestone 5. Provide opportunities to magnet school administrators and teachers to develop peer network. Objective(s) 2 and 5						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Attend national magnet-related conferences (MSA, USDOE).	PD, Principals	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Implementation of Magnet Programs Milestones						
Milestone 1. Create implementation rubrics for each magnet school. Objective 3						

Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Each magnet school will develop an implementation rubric that defines specific tasks and responsibilities throughout the five-year grant period.	SCEPC, Principals, SC, Teachers	Q1 & Q3				
Milestone 2. Purchase supplies and materials to support magnet theme content and implementation at each magnet school. Objective 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Supplies and materials will be purchased as presented in the Budget Narrative and adhere to district purchasing and procurement procedures.	SC	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone 3. Develop, implement and refine magnet-themed curricula and instructional practices. Objective(s) 2, 3, 4, 6						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Teachers at each magnet school will deliver magnet-themed curriculum.	Principals, SC, Teachers	Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Teachers at each magnet school will be given on-site support to integrate magnet-themed curriculum in the classroom.	SC, Instruct. Coords. and Specialists	Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone 4. Implement cooperative learning practices in classrooms. Objective(s) 2, 3, 4, 6						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Teachers at each magnet school will use cooperative learning practices in their classrooms.	Principals, SC, Teachers	Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4

Teachers at each magnet school will receive on-site coaching support to improve effectiveness of cooperative learning practices.	Coop. Learning Coach	Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone 5. Monitor implementation of grant Benchmarks.						
Objective 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Central Magnet Office and School Magnet Leadership Team will convene monthly to monitor implementation of grant benchmarks to ensure benchmarks occur on time and on budget, with fidelity to the purposes of the grant.	PD, SCEPC, Principals, SC	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Review on going evaluation findings to identify and address mid-project adjustments needed to achieve objectives and performance measures.	PD, SCEPC, Principals, SC	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Sustainability Milestones						
Milestone 1. Establish Magnet Advisory Councils at the district level and at each magnet school.						
Objective 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Each magnet school will establish a Magnet Advisory Council that will convene quarterly.	Principals	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
The district will establish a District Magnet Advisory Council that will convene twice annually.	PD, Superint.	Q1 & Q3				

Milestone 2. Complete Sustainability Self-Assessment Tool (MSAP Center). Objective 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Each magnet school will complete the MSAP Center's Sustainability Self-Assessment Tool.	Principals	Q4				
Each magnet school will re-visit the self-assessment tool annually.	Principals		Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4
Milestone 3. Develop a plan for sustainability for each magnet school. Objective 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Each magnet school will complete a sustainability plan.	Principals		Q3			
Each magnet school will monitor, revise and update their sustainability plan.	Principals			Q1 & Q3	Q1 & Q3	Q1 & Q3
Milestone 4. Create a platform to share best practices for sustainability. Objective 3						
Benchmarks	Person(s) Resp.	Y1	Y2	Y3	Y4	Y5
Include magnet schools as agenda item on all school and districtwide meetings.	Principals	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4	Q1-Q4

(2) How the applicant will ensure that a diversity of perspectives are brought to bear...

The Discover Five project design is the culmination of two years of careful planning at the district and school levels. Planning involved multiple layers of stakeholder involvement with a goal to create magnet programs that would be attractive and viable. The district surveyed community members through an electronic survey distributed by each school's School Improvement Council to gather feedback related to proposed themes and community perceptions

of magnets and intra-district school choice. Each proposed school also surveyed teachers and solicited informal input from students and parents at established school events including PTO and SIC meetings. The Board of Trustees approved the proposed plans for each Discover Five magnet program at their board meeting on October 26, 2015. This meeting, as are all board meetings, was open to the public with time for public comment. The District Magnet Advisory Council launched under the FY13 MSAP grant provided strategic input for the creation of the Discover Five project design. This council is comprised of community members such as local business leaders, civic leaders, as well as parents, teachers, and students, and will continue to be a vital source of input in the Discover Five project.

The planning of site-based reforms for each Discover Five magnet program was the culmination of extensive research and collaboration with internal and external stakeholders. Each school had a planning team comprised of administrators and teachers representing a variety of perspectives on academic needs at their school. For example, planning teams consisted of Digital Integration Specialists, Reading/Math Interventionists, Special Education Teachers, Parents, Principals and Assistant Principals for Instruction, Related Arts Teachers, and Instructional Staff. Community partnerships will continue to be the driving force behind the implementation and sustainability of the proposed magnet programs to ensure a diversity of perspectives including the business community, higher-education, community members and parents via two avenues—a District Magnet Advisory Council and local School Magnet Advisory Councils.

The Superintendent will lead the **District Magnet Advisory Council** to guide the strategic vision of magnet programs. This council will convene twice annually and include representatives from the Board of Trustees, Central Magnet Office and School Magnet Leadership Teams, as well as business leaders, parents, teachers, and students. Each school will

launch a **School Magnet Advisory Council** to guide the vision and operations of their local magnet program. This council will convene quarterly and include representatives from the school's Parent Teacher Organization, School Improvement Council, local business and community members, parents, teachers, and students, as well as the School Magnet Leadership Team. This council will identify community partners and resources to contribute to the theme-based curriculum and provide feedback to the design of theme-based programs and extracurricular activities that support the school's diverse learners.

Ultimately, the diversity of perspectives from students enrolled in Discover Five magnet programs will be critical as new curriculum is introduced. Feedback and reflection from students gathered from the External Evaluation Team will be used to inform program modifications and scaffolding of teacher competencies across the five-year grant period. Discover Five was unequivocally designed and guided by a diversity of perspectives, and will continue to be so in order to establish and sustain results-driven magnet programs.

(d) QUALITY OF PERSONNEL

The Secretary reviews each application to determine the qualifications of the personnel the applicant plans to use on the project. The Secretary determines the extent to which—

(1) The project director is qualified to manage the project.

Ms. Sara Wheeler will serve as the Project Director for Discover Five. She is a 40-year veteran in public education and has more than 20 years' direct experience working in magnet programs and currently serves as the Project Director for Project ACCESS, District Five's first MSAP grant awarded in FY13. Ms. Wheeler is active on the national level where she has served on the Board of Directors for Magnet Schools of America since 2008, and is currently President. Ms. Wheeler is a certified teacher in K-8, social studies, and gifted and talented. She has a superior knowledge of magnet programs and federal grant management in addition to the

thematic content of the Discover Five schools. This expertise will be advantageous when combined with Ms. Wheeler's community involvement, including her role in the Midlands Cradle to Career Initiative—a private-public partnership that focuses on supporting the success of every child from birth to career.

Ms. Wheeler has extensive experience that aligns with the core tenets of Magnet Schools, as defined by Magnet Schools of America: Diversity, Innovative Curriculum and Professional Development, Academic Excellence, High Quality Instructional Systems, and Family and Community Partnerships. As Project Director, she will ensure this project is implemented with fidelity and that decisions are made through collaborative processes that align with the district, community, and magnet school needs. Ms. Wheeler's resume is provided in Appendix L.

(2) Other key personnel are qualified to manage the project.

Resumes for all key personnel named in the project can be found in Appendix L, as well as all job descriptions for positions to be filled.

Central Magnet Office Personnel

Project Assistant/Bookkeeper, Leigh Floyd is currently serving in this role under the FY13 MSAP grant. ***Recruitment Specialist***. To be hired. Qualifications include a bachelor's degree (master's degree preferred) from an accredited university or college, and at least three years of successful marketing and/or public information, preferably in a school environment. ***Cooperative Learning Coach***. To be hired. Qualifications include a current valid Teacher or Principal certificate from the S.C. State Board of Education, a bachelor's degree (master's degree preferred) from an accredited university or college, and at least three years of successful administrative experience, preferably in a magnet school environment.

District Office Personnel

Superintendent, Dr. Stephen W. Hefner was named Superintendent of District Five in January 2011. He holds a master's and doctoral degree from the University of South Carolina and has received numerous honors for his leadership in public education. Dr. Hefner has twice been honored as Superintendent of the Year (2015 and 2002) by the South Carolina Association of School Administrators. In 2009 he received the Order of the Palmetto, the highest civilian honor in the state of South Carolina, presented by the Governor. Other accolades include: the "Friend of Gifted Education" presented by the South Carolina Consortium for Gifted/Talented Education (1995), "Educator of the Year" by the South Carolina Association of School Administrators (1997), and the "President's Technology Award" from the American Association of School Administrators (2005). Dr. Hefner has served as the Superintendent of record on three MSAP grant-funded programs while at Richland County School District Two and District Five. He is credited for bringing his vision of choice to District Five that has resulted in expanded academic offerings and equitable learning opportunities for all students and families.

Chief Instructional Officer, Dr. Christina Melton was named Chief Instructional Officer at District Five in 2013, after serving as the Director of Elementary Education (2012-2013) and Principal of Nursery Road Elementary School (2007-2012). Dr. Melton was recognized as the 2016 School Administrator of the Year by the South Carolina School Administrators Association. She is immediate past-president of the South Carolina School Administrators Association and is an active member of AdvancED (formerly Southern Association of Colleges and Schools) on the Quality Review Team and Council on Accreditation of School Improvement. Dr. Melton is credited for her leadership and oversight of the successful

implementation of the district's FY13 MSAP Project ACCESS grant and the inclusion of cultural competence training as a district wide professional development priority.

Director of Career and Technical Education (CATE), Dr. James Couch, is a state and national leader in career and technical education. In 2015, Dr. Couch was appointed to serve as the Speaker of the House of Representative's educator representative to the South Carolina Educational Oversight Committee. A chief architect of the landmark Education and Economic Development Act of 2005, Dr. Couch oversaw the implementation of the legislation that created a seamless career pathway for students in South Carolina public schools. For 14 years, he worked as the State Director for Career Technical Education, prior to joining District Five as the Director of CATE.

ELA Coordinator, Dr. Robin Cox, has worked in the field of public education for 24 years. She holds a Bachelor of Arts in Interdisciplinary Studies, a Master's degree in Elementary Education, an Education Specialist in Teaching, and a Ph.D. in Elementary Education. She is responsible for coordinating curriculum and instruction in English language arts courses, as well as reading intervention services for elementary students in the district. ***Mathematics***

Coordinator, Colleen Boissinot has worked in the field of education for 30 years. Ms. Boissinot is responsible for coordinating curriculum for mathematics based on State-adopted standards, as well as managing and coordinating online learning in the district. She holds a B.A. in Elementary Education and a Master's Degree in Educational Administration. ***Social Studies Coordinator,***

Melony Sanford has worked in public education for fifteen years. She is responsible for coordinating the Social Studies curriculum and works with teachers in grades kindergarten through twelfth grade. She holds a Bachelor's Degree in History and a Master's Degree in

Divergent learning. She has endorsements in Social Studies, History, and Gifted and Talented. ***Science, Health and PE Coordinator***, Elizabeth Boland, has worked in the field of public education for nineteen years following six years of work in the environmental field. She holds a Bachelor of Science degree in Natural Science and Math, a Master's degree in Public Health Administration, and has obtained the Gifted Endorsement on her teaching certificate. She is responsible for coordinating curriculum and instruction in science, health, and P.E. courses. ***Fine Arts and Gifted/Talented Coordinator***, Tami Richardson has worked in the field of public education for 28 years. She is responsible for coordinating gifted programs and visual and performing arts programs for the district. She holds a B.A. in Elementary Education, a Master's Degree in Educational Administration and has obtained the Gifted Endorsement on her teaching certificate.

ELA Specialist, Kayce Cook supports secondary level school leaders and teachers to design and implement curriculum that meets State-adopted standards. In this role, she also plans and provides professional development unique to the needs of schools, content areas, or teachers, and oversees implementation of Middle Level Intervention. Ms. Cook holds a B.A. in Education and Master's Degree in Conflict Resolution and holds the Advanced Placement Language Certification. ***Mathematics Specialist***, Dian Alston has been the Instructional Specialist for Elementary Mathematics in District Five for seventeen years. Prior to this position, she was a classroom teacher for twenty years. She has taught grades 2nd-5th in general and gifted education. In her present position, Ms. Alston works closely with members of the Instructional Department, elementary school administrators, teacher leaders and teachers to ensure successful student achievement in elementary mathematics. Additionally, she is a Certified Data Team Trainer who has co-authored a professional article on the Data Team process. ***Digital Integration***

Specialist, Laura Adair supports Nursery Road Elementary School in technology integration. She received her B.A. in Early and Elementary Education from Furman University and her MLIS (Master of Library and Information Science) from the University of South Carolina. **Digital Integration Specialist, Heather Reit** supports Leaphart Elementary School in technology integration. She received her BA in Interdisciplinary Studies from the University of South Carolina and her Master of Education in Integrating Technology in the Classroom from Walden University. **Digital Integration Specialist, Lisa Knoche** supports H.E. Corley Elementary School in technology integration and assistive technology for students with disabilities. She received both her B.A. in Elementary Education and Masters of Education in Divergent Learning from Columbia College.

School Personnel

Principal, H.E. Corley Elementary School, Dr. Judy Franchini has more 28 years' experience as an elementary school principal and is in her tenth year as Principal of H.E. Corley. Prior to her role at District Five, she served as a state-appointed principal in a "takeover" district in one South Carolina's poorest schools featured in the film documentary "Corridor of Shame" which brought national attention to the inequity of education in the state. Under her leadership, she was able to move the school out of the "needs improvement" status. Dr. Franchini has administrative experience with Montessori in the public schools and extensive experience in leading systemic reform at high-need, Title One schools.

Principal, Leaphart Elementary School, Kelly Brown has more than a decade of experience as a Teacher and School Administrator at the elementary, middle and high school levels in magnet schools within District Five and previously in Richland County School District

Two where she served as the AVID Administrator to help close the achievement gap in the district. Ms. Brown holds a Master Degree in Elementary Education and is a Ph.D. candidate in Educational Leadership. Ms. Brown has extensive experience working with students and families from diverse backgrounds and has laid the foundation for local school transformation to a STEAM Magnet.

Principal, Nursery Road Elementary School, Love Ligons has 18 years of experience in public education. She holds a Bachelor of Arts Degree in Elementary Education and a Master of Education Degree in Educational Leadership, both from the University of South Carolina. Prior to assuming an administrator role in 2008 at her current school, Ms. Ligons taught second through fifth grade. As the principal of a Positive Behavior Intervention and Support (PBIS) school, discipline referrals have decreased by 88% compared to the five years prior to Ms. Ligons' tenure as principal. She is a passionate advocate for the arts and recognizes the potential for transformation in the lives of students from all backgrounds and skills levels.

Principal, Irmo High School, David Riegel has 27 years' experience as an educator. He holds a Bachelor's Degree and Master of Arts Degree in English, and is licensed as an English Teacher for grades 7-12, Principal, and Superintendent. Mr. Riegel was recruited as the Principal at Irmo High in 2013 from Franklin High School in Franklin, Ohio where he served as Principal for five years and led school reforms to increase student achievement. Mr. Riegel is credited for his role in the implementation of the FY13 MSAP grant to transform Irmo High into an International School for the Arts.

Site Coordinators will be selected for their expertise in project management and educational administration. Each individual will be expected to have a valid teaching credential,

a bachelor's degree (master's degree preferred) and at least three years' experience in a public school setting, preferably in a magnet school environment. Site Coordinators will have prior experience in grant and budgetary management, project management, facilitating community partnerships, and curriculum development. Content expertise in the magnet theme will be required.

External Evaluation Team

South Carolina Educational Policy Center (SCEPC) was established in 1987 by the South Carolina Commission on Higher Education as a vehicle for focusing research on education policy issues pertaining to teaching, student learning, school organization, and student performance in the public schools. Through both federal and state contracts obtained during its 23-year history, the SCEPC has conducted studies and evaluations related to many issues including school improvement, school leadership, school finance, teacher leadership, technical assistance to low-performing schools, summer school, gifted education, the achievement gap, and school climate. **Dr. Diane Monrad** serves as the Center's Director and is a research associate professor in the Department of Educational Leadership and Policies. Dr. Monrad has extensive research experience in program evaluation, educational policy analysis, and assessment of K-12 educational reform programs. She is currently the principal investigator for District Five's FY13 MSAP grant evaluation of Project ACCESS. Dr. Monrad also works on projects to develop 4-year school climate profiles for low-performing schools in SC. She serves on the Advisory Board for SC's Race to the Top district project on Enterprise Learning which is using a technology platform to create personalized learning plans for students in four low-performing school districts. She was principal investigator on the evaluation of SC's Reading First program

and conducted studies on summer reading loss, the state's gifted and talented program, gap-closing schools, summer school programs, the SC Teacher Loan Program, and SC's teacher specialist program. Dr. Monrad has co-authored over 50 reports or publications related to these research studies, and SCEPC's work has been presented at 16 regional or national conferences for a variety of educational organizations. She will serve as the principal investigator on the evaluation of Discover Five.

Robert Lewis Johnson, Ph.D. will serve as co-principal investigator. He is a member of the Evaluation Team and Professor in the Department of Educational Studies at the University of South Carolina. He earned his Ph.D. in Educational Research, Measurement, and Evaluation from the University of North Carolina-Greensboro. Dr. Johnson has been on the evaluation teams for three MSAP-funded projects including: *Project ACCESS* School District Five of Lexington and Richland Counties; *Full STEAM Ahead Magnet* Richland County School District Two; and Evaluation of the *International Baccalaureate Magnet* Richland County School District Two. He has also worked with Dr. Monrad to evaluate the South Carolina Reading First Initiative.

Dr. Tammiee Dickenson, Director of the Office of Program Evaluation at the University of South Carolina, will serve as chief statistician for the Discover Five project and will have responsibility for managing the impact study. Dr. Dickenson holds a Ph.D. in Educational Research and Measurement and has almost 12 years of experience leading evaluation and research studies in PK-12 school settings, most of which were funded by the US Department of Education. She has extensive experience with managing and compiling complex data for federal grant reports. In addition, Dr. Dickenson has a solid record of scholarship evidenced by regular

presentations at annual meetings of the American Educational Research Association since 2006. Relative to the planned impact study design, Dr. Dickenson completed the Quasi-Experimental Design and Analysis workshop, offered annually at Northwestern University, under the guidance of Drs. Thomas Cook and William Shadish. Dr. Dickenson has worked with researchers from NWEA on a previous study that used the VCG methodology with MAP data to select comparison students for a summer reading initiative in South Carolina. With this combination of expertise and experience, Dr. Dickenson is well positioned to provide leadership on the impact study for the Discover Five project

(3) Teachers who will provide instruction in the participating magnet schools are qualified...

Lead Teachers

Music Education Teacher, Nursery Road Elementary School Arts Magnet, Lisa Brooks, has more than 23 years' experience teaching elementary music. She holds a Bachelor Degree in Music/Speech and Theater Education and a Master of Arts in Teaching (M.A.T.) in Music Education both earned from Winthrop University. Ms. Brooks has played a vital role in developing state standards for Music Education in North and South Carolina. Prior to her current position at NRES, Ms. Brooks taught in arts magnet schools. She is active in the professional arts community and has led numerous school and community performances.

Lead Teacher, Leaphart Elementary School STEAM Magnet, Denise Collins-Bennet, will be the lead support for thematic content and curriculum development. Ms. Collins-Bennet has served in a variety of teaching roles at Leaphart and was named Teacher of the Year in 2011. She is trained as an Elementary Science Teacher and received her master's degree in Divergent Learning. Ms. Collins-Bennet has been instrumental in leading curriculum development at Leaphart, with an emphasis on science and engineering and is a certified PLTW trainer.

IB Coordinator, Irmo High School International Baccalaureate Career-related Program, Diane Padula has 21 years' experience as an Educator. She began her career as a Science Teacher and joined the Science Faculty of Irmo High in 2005. In 2010, Ms. Padula became the AP/IB Coordinator and leads a team of two core IB Teachers. Ms. Padula will be joined by the following Lead Teachers in the IB-CP:

Aerospace Engineering Instructor, Martin Cwiakala, Ph.D. joined the district in 2012. He received a Bachelor's, Master's, and Doctoral Degrees in Mechanical Engineering from Rutgers University. Dr. Cwiakala is certified in the full Project Lead the Way (PLTW) Engineering Curriculum. He was the 2011 recipient of the SC PLTW Award for Engineering Design and Development.

Biomedical Sciences Instructor, Rebecca Howell has more than 19 years' experience as a highly qualified teacher. She holds a B.A. in Biological Sciences and a B.S. in Science Teaching: Biological Sciences, both from Clemson University. She earned her Master's in Education Degree in Divergent Learning at Columbia College, SC. She holds certification in Project Lead the Way (PLTW) Biomedical Sciences and was the 2014 recipient of the PLTW National Teacher of Excellence Award (1 of 6 nationally).

Culinary Arts Instructor, Patrick Duggan joined the district in 2015. He holds a bachelor's degree in Food Service and Management from Johnson & Wales University in Charleston, SC and holds an Associate's Degree in Pastry Arts. Mr. Duggan has 12 years' experience in the food industry as an executive pastry chef and served as Director of the Culinary and Wine Institute at the University of South Carolina where he oversaw the planning and implementation of curriculum to meet industry standards.

Media Technology and Film Instructor, Ashlon Langley is a multimedia producer and educator with over 10 years' experience in the professional marketplace. He joined the district in 2012. Prior positions were at the University of South Carolina - Technology Services where he was the Classroom Studio Director responsible for distance learning broadcasting; and South Carolina Educational Television as the Director of Education and Engagement. Mr. Langley has produced educational media for distribution through various formats, including television and the Internet, as well as to audiences in classroom, boardroom and workshop settings.

Veterinary Sciences Instructor, Jessica Jones joined the district in 2014. She holds a Bachelor's of Science degree in Animal and Veterinary Science from Clemson University and a Master's of Science in Animal Sciences and Industry from Kansas State University in the Summer. Her focus of studies centered on equine nutrition. Ms. Jones is an advisor for the school Future Farmers of America chapter and enthusiastic about developing future leaders in the field of veterinary sciences.

Magnet School Teachers

All teachers in the magnet programs are highly-qualified. District Five places a strong emphasis on recruiting and retaining highly-qualified teachers and this will continue to be emphasized, without exception, for the Discover Five project. District Five's focus on highly-qualified teachers begins with strong recruitment and induction programs. Based on a commitment to recruit, select, employ and retain highly-qualified personnel, District Five enjoys an approximate 90% employee retention rate and 86% of teachers are on a continuing contract. Approximately 70% of teachers in District Five hold advanced degrees and 24% are Nationally Board Certified.

The district has a formal Equal Employment Opportunity Statement and Policy of Non-discrimination on the Basis of Disability that has been approved by the Board of Trustees. This statement reads: "School District Five of Lexington and Richland Counties does not discriminate on the basis of age, race, creed, color, disability, spousal affiliation, sex, national origin, sexual orientation, religion, pregnancy, service to the armed forces, or status with regard to admission to, treatment in, or employment in its programs and activities as required by Title II of ADA, Title VI, Title IX and Section 504, or any other protected characteristic, as may be required by law." Additionally, all new hires must be approved by the Superintendent and Board of Trustees.

The Office of Human Resources organizes an annual Teacher Recruitment Fair, of which all 23 schools participate, to establish connections with interested persons throughout the community and to fill vacancies in critical needs areas. Additionally, the Office of Human Resources regularly participates in recruitment events sponsored by Historically Black Colleges and Universities (HBCU) to secure a diverse work force that reflects the diversity of the district's student enrollment. Statewide and district staffing guidelines provide direction for appropriate school staffing.

Teachers are provided with extensive supports once they are hired to assist in retainment. District Five follows South Carolina's system for Assisting, Developing, and Evaluating Professional Teaching (ADEPT). This induction program provides for on-going meetings, peer-to-peer mentoring at the school level, and coaching by teachers and district instructional staff. Mentoring and coaching is provided to all new teachers, and is available to existing staff who seek to expand the depth of their instructional practices. District and school leaders consistently monitor instructional practices using the online application, Classroom Mosaic. This tool

provides immediate feedback based on observation protocol that has been communicated with all instructional staff. The reports generated from this data collection tool assist school administrators to focus their support on improving teacher and student growth, and also provide an opportunity for collaboration, conversations about teaching, learning, and planning for future work with teachers.

(e) QUALITY OF PROJECT EVALUATION

The Secretary considers the quality of the evaluation to be conducted of the proposed project. In determining the quality of the evaluation, the Secretary considers the following factors:

(1) The extent to which the methods of evaluation will, if well-implemented, produce evidence of promise (as defined in this notice).

The Discover Five evaluation, led by principal investigator Dr. Diane Mondrad, is integrated into all aspects of the magnet programs in an ongoing collaboration between the evaluation team and the magnet project staff. All of the evaluation team's work is designed to support the implementation of quality magnet programs, assess progress in meeting performance measures, provide information for program refinements, and evaluate evidence of effectiveness. The participatory and collaborative nature of the evaluation increases the commitment of the project staff and their willingness to use the evaluation data for program improvement (Johnson, Greenseid, Toal, King, Lawrenz, & Volkov, 2009).

The district and individual school logic models will guide the Discover Five evaluation design. It is expected that if Discover Five successfully utilizes program resources, implements activities, and produces outputs, this will lead to achieving expected short-term, medium-term, and long-term outcomes. Therefore, data collection methods and evaluation tools developed will be targeted to each logic model element, ensuring that evidence found can be systematically linked to program components. Data collection methods will include a mix of **quantitative** and

qualitative data. The evaluation team will also conduct an **impact study** to investigate the effectiveness of cooperative learning.

A critical element for ensuring program strategies can be linked to outcomes is to investigate and track program implementation. Measuring project implementation is an often overlooked but important part of a comprehensive evaluation (Field, 1985). According to Century, Rudnick, and Freeman (2010), it is not acceptable to merely measure outcomes to determine if the intervention is fully effective. They urge evaluators to focus on the "why, how, and under what conditions" that programs work (p. 30). The foundations for a more holistic framework for understanding implementation of programs and practices have been proposed throughout implementation research. Fixsen, Blase, Naoom, and Duda (2015) have developed a framework for assessing the core implementation components, or implementation drivers, which may be critical to successfully implementing interventions.

As shown in Figure 10, this model is in the shape of a triangle with the following three sides: Competency Drivers, Organization Drivers, and Leadership Drivers. At the top of the triangle is performance assessment, used to provide feedback on performance to identify areas of improvement. Competency Drivers focus on the ability to implement an intervention as intended and include staff selection, staff training, and coaching activities. Organization Drivers focus on the organizational and ecological environment within which interventions are implemented, and include decision



Figure 10. Fixsen et al.'s Implementation Drivers

support data systems for continuous quality improvement, facilitative administrations that support the work of practitioners, and systems interventions that allow organizations to work with external systems to help support practitioners. Leadership Drivers focus on leadership and management processes that can support the intervention and include both technical and adaptive leadership. The implementation drivers are integrated and compensatory so that they work together to support each other and compensate for weaker drivers.

Implementation will be the primary focus in year one of Discover Five. Using the framework developed by Fixsen et al. (2015) as a guide, the evaluation team will develop implementation rubrics with each school to identify the critical program components needed for successful implementation, fidelity, and program sustainability. The implementation rubrics will target the needed resources, activities, and outputs required for each Discover Five school, and will assess the degree to which each component is implemented in each school. The core components of each school's implementation rubric will be developed considering each of Fixsen et al.'s three implementation drivers. With input from Discover Five personnel, rubrics will be specified to reflect each Discover Five school's unique needs and program components. Rubrics will be completed twice each year so that progress can be assessed regularly and needed changes in implementation can be identified and initiated. A sample rubric can be found in Appendix M.

Comprehensive site visits will be conducted in each program year at each Discover Five school. The site visits will provide an opportunity for the evaluation team to see the program “in action” at each school, and to assess teacher and student reaction to the various program strategies and components. The site visits will consist of classroom observations, principal and

site coordinator interviews, and focus groups with teachers and students. The site visits, in combination with the implementation rubrics, will allow the evaluation team to fully assess implementation, stakeholder reactions to program components, and to provide program leadership with feedback in order to make data-driven program modifications as implementation is occurring.

Expected short-term and medium-term outcomes will be measured through the collection of administrative records (i.e., application and enrollment data) and the development of teacher and student surveys. Yearly evaluation reports provided by the evaluation team will show clear linkages between the degree to which program components (i.e., resources and activities) have been implemented (as measured by the implementation rubrics; site visits), reactions by stakeholders to these components (as measured by focus groups/interviews; surveys), and progress on meeting expected short-term and medium-term outcomes (as measured by school/administrative records; surveys). Data collected for yearly annual progress reports (APR and Ad Hoc) will show each schools progress in meeting expected long-term outcomes.

The evaluation team's measurement framework further situates the evaluation within the context of the Discover Five logic models and can be found in Appendix N. The objectives and performance measures are consistent with the district and school outcomes depicted in the logic models and will produce both quantitative and qualitative data for project monitoring, reporting, and improvement. The measurement framework depicts the details of how the various outputs and outcome measures will be defined, measured, and collected.

Impact Study

An impact study will be conducted to assess the effectiveness of the Discover Five magnet program's cooperative learning strategy to improve academic performance of students. Cooperative learning is one of Discover Five's critical strategies being implemented as part of the magnet program. The study conducted by Stevens and Slavin (1995) used in this proposal as evidence of promise for cooperative learning, found that students in elementary schools where cooperative learning was implemented had significantly higher achievement scores in both reading and mathematics compared to a matched sample of students from traditional elementary schools. The impact study conducted by the evaluation team is designed to expand on the work of Stevens and Slavin and add to the literature indicating evidence of promise for cooperative learning.

Under ideal statistical settings, students would be randomly assigned to treatment (i.e., the magnet schools in the program) or control (i.e., non-magnet schools) groups and analysis of outcomes would be compared to investigate effectiveness of the new program. The use of random assignment serves to control for factors, observed and unobserved, that may be related to the outcomes. For magnet school programs with a large enough applicant pool, it may be feasible to randomly select half of the students from the pool to participate in the magnet program and half to attend a non-magnet school. However, with a new magnet program, the reality is that the initial applicant pool is not expected to be large enough to have adequate sample size for both the treatment (i.e., magnet) and control (i.e., non-magnet) groups with sufficient power to detect differences. In addition, the Discover Five project will serve both zoned and choice students, thus a design that includes all students who enroll in the schools is desired. Therefore, a quasi-experimental statistical matching technique that identifies a set of comparison students who are

similar to the treatment (i.e., magnet) students on key demographic variables will be used to allow for a rigorous evaluation of the impact of the Discover Five project.

The impact study for Discover Five will be conducted at the three elementary schools, H.E. Corley, Leaphart, and Nursery Road for students in grades 3-5. Across the three schools, there are a total of 219 third graders, 225 fourth graders, and 222 fifth graders for a grand total of 666 students enrolled in the 2016-2017 school year. Matched samples of comparison students will be selected using a process developed and implemented by Northwest Evaluation Association (NWEA). The outcome of interest is student achievement on the Measures of Academic Progress (MAP) assessments in the subjects of reading and math. These assessments are published by NWEA.

The design proposed for the impact study will involve selection of students who are matched on observable characteristics, including prior academic achievement, as controls to ensure that treatment and comparison groups are similar at the start of the Discover Five project. However, an important characteristic that is not observable is selection bias of families who chose magnet schools, which may cause the magnet students to differ from the comparison students. The inclusion of prior achievement serves to equalize the two groups academically at the outset and by extension serves as a proxy for family motivation, investment, and support of education. These are considered the prime drivers of selection bias and so we consider at least some of the selection bias to be mitigated by controlling for prior achievement.

Researchers at NWEA have developed a research control group methodology called virtual comparison groups (VCGs) that can be used with groups of students who take the Measures of Academic Progress (MAP) assessments. MAP assessments are available for student in grades K-12 in subject areas of reading, language usage, science and mathematics. MAP is a

computer-adaptive assessment that is administered as a measure of academic progress up to three times per year; fall, winter, and spring. Most schools that participate in the MAP testing program, including District Five, administer the assessments at least twice per year, in the fall and spring. School districts across the nation participate in MAP testing and thus NWEA's database serves as a robust nationally representative pool of students from which a comparison sample may be selected. Students in Discover Five will be matched to virtual comparison group students from schools with similar key demographics, and similar student factors related to the assessment and individual demographics with a ratio of 51 to 1 (i.e., 51 NWEA students to each District 5 student). RIT scores (short for Rasch unit) will be used as the student outcome measure in the analysis. A RIT score is an estimation of a student's instructional level and also measures student progress or growth in school. The average of RIT scores in the subject area of focus (reading or math) for the multiple comparison students will be used as the matched score for the VCG sample for each student in the Discover Five treatment group. Two VCGs will be generated; one sample selected from NWEA's full national database (i.e., a national sample) and one sample selected from students in southeastern states (i.e., a regional sample).

School level and student level filters will be used to select VCG qualified students in relation to the sample of students who participate in Discover Five. The matched schools will be selected from public schools. First, NWEA schools will be selected using school level filters to ensure similarity to the magnet schools. Next, students will be selected using student level filters associated with the assessment and with student demographics. School level filters to be used include location (rural, urban, suburban), percentage of students on free and reduced lunch (a proxy for low socioeconomic status students), and percentage of black students (the minority groups of focus for this program). Student level filters to be used include assessment filters of

subject area, number of instructional days, and starting RIT score in the fall semester; and student demographic filters including free or reduced lunch status, ethnicity, and gender.

The outcomes of interest are the change scores from fall to spring on the MAP reading and math assessments for students in grades 3, 4, and 5. If the magnet program is successful, students in the Discover Five schools will have greater improvement in performance over each academic year than students in the VCGs. Note that baseline equivalence of the fall assessment scores will be established by means of comparison group selection. Thus, the change from fall to spring will demonstrate academic year growth that can validly be compared between treatment (Discover Five) and comparison (VCGs) groups of students with similar baseline achievement scores. To investigate the impact of the Discover Five magnet program's cooperative learning strategy on achievement, a multiple linear regression analysis with academic year change in MAP score as the dependent variable and treatment group, subsidized meal status, and minority group status (black and non-black) as the independent variables will be conducted for each subject area and grade level combination annually. In addition, interaction terms between treatment group and student demographics will be included to assess whether Discover Five students show statistically lower achievement gaps than VCG students.

The VCG methodology is a quasi-experimental design that meets the What Works Clearinghouse standards with reservations. Based on a webinar presented by the Institute for Education Sciences on March 3, 2015 (<https://ies.ed.gov/ncee/wwc/Multimedia/23>), a high-quality quasi-experimental design should have the following critical components: (1) two or more distinct groups, (2) establishment of baseline equivalence, (3) controls for potential confounding factors; and (4) use of valid and reliable outcome measures that are not over-aligned with the intervention. Our impact study meets all of these criteria. First, two distinct groups of

students will be compared, students in the Discover Five magnet schools and students in the VCGs (national and regional). Second, baseline equivalence will be established by matching the groups on initial achievement in the fall of each school year. Third, other key demographics at both the school and student levels will be included as matching criteria to further ensure that the composition of the groups are similar on these observable traits at the beginning of the school year, thus eliminating a number of potential confounding factors. Fourth, the outcome measures of achievement on the MAP assessments are valid and reliable measures of academic progress in reading and math. In particular, MAP received positive reviews by Cizek (2016) and Gierl (2016) in the *Mental Measurement Yearbook*. Cizek (2016) wrote, “Available evidence suggests that MAP tests can be used with confidence by school districts to gauge student learning, relative standing, and growth with respect to educational objectives deemed central to the curricular emphases of those districts.”

MAP assessments are administered via computer and student scores are available upon completion of the assessments. MAP data from students in grades 3-5 who are assessed in both the fall and spring of each school year will be used in this study. Following the spring assessments, NWEA researchers will need time to select the VCGs from the national and regional databases. Thus, analysis will be conducted during the summer between each school year starting in year 2. Reports on results from the previous school year will be completed and shared with Discover Five leaders by August of project years 2, 3, and 4. In addition, a final report that summarizes results across all project years will be compiled and delivered by August 31, 2022.

(2) The extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project and will produce quantitative and qualitative data to the extent possible.

The evaluators and District Five magnet planning team have established six objectives and 48 performance measures for the Discover Five project, as depicted in Table 8, page 96 of this proposal. All objectives and performance measures align with the district and school logic models, MSAP purposes and performance measures, and GPRA reporting requirements.

Project Objective 1: To promote diversity by reducing and preventing minority group isolation and increasing socioeconomic diversity.

To examine the effectiveness of Discover Five in reducing minority group isolation, the evaluation team will review each school's demographic data to determine if minority isolation of African American students is decreasing in accordance with each school's enrollment targets. For this performance measure (PM 1.1), the District's Accountability Office will provide annual fall (October 1) student enrollment data for the Discover Five magnet schools. Enrollment data will be disaggregated by grade level and ethnicity. The evaluation team will annually compare actual and projected percentages of African American students enrolled at each magnet school to assess whether the percentage of African American students is reduced in accordance with enrollment targets (i.e., a two percentage points decrease per year from the baseline, for a total of 10 percentage points decrease from the baseline over the five years of the program). Similarly, the evaluation team will annually examine each school's poverty index provided by South Carolina Department of Education (SCDE) to determine the effectiveness of Discover Five in increasing socioeconomic diversity (PM 1.2). The actual and the projected poverty index for each Discover Five magnet school will annually be compared to determine whether this is reduced accordingly with the projected targets.

Other measures related to recruitment efforts at the school and district level, as well as the number of applications received annually by each magnet school, will also be considered in the

evaluation. The evaluation team will compare the actual and projected number of recruitment and marketing activities conducted annually by each magnet school and by the district (PM's 1.3, 1.4). In addition, the actual and projected percentage increase in number of applications at each magnet school will annually be compared to determine if this increases as expected (PM 1.5). Lastly, the percentage increase in African American student enrollment at district feeder schools will be monitored and compared with the district overall percentage increase (PM 1.6). Fall student enrollment data for the district and all feeder schools in the district will be provided annually by the District's Accountability Office.

Project Objective 2: To increase student achievement by implementing rigorous, focused programs of study that provide personalized, innovative, theme-based instruction to provide all students the opportunity to meet challenging core content standards and academic achievement standards.

Performance measures for Objective 2 reflect federal and project priorities that magnet students meet South Carolina's rigorous annual progress standards in English language arts and mathematics as measured by the SC READY assessment (elementary and middle school) and the End-of-Course Examination Program (EOCEP) for high school. SC READY English language arts (ELA) and mathematics subtests are included as performance measures for elementary students (PM's 2.2, 2.3). EOCEPs for English 1 and Algebra 1 also are included as performance measures for high school students (PM's 2.7, 2.8). SC READY ELA and mathematics scores and EOCEP English 1 and Algebra 1 scores will be provided to the evaluation team each year by the District's Accountability Office so that student progress can be assessed. Annual comparisons in each magnet school's test scores will be performed to evaluate the increase in the number of elementary students meeting or exceeding expectations on SC READY and the increase in the number of high school students passing the EOCEP subtests.

Additional state and district assessments will also be utilized to evaluate if Discover Five is meeting its student achievement targets. Kindergarten students at H. E. Corley will be administered the Developmental Reading Assessment (2nd edition plus) to track the percentage of students who score at the independent reading level as the Montessori program is implemented (PM 2.1). Elementary students in grades 3–5 will take the Measures of Academic Progress (MAP) reading and mathematics subtests in the fall and spring of each year. The percentage of elementary students who meet or exceed their MAP growth targets from fall to spring in reading and mathematics will be measured (PM's 2.4, 2.5). The science subtest from the Palmetto Assessment of State Standards (PASS) will be examined at Leaphart Elementary School for students in grade 4 and 5 to evaluate the increase in the number of students scoring Met or Exemplary after participation in the STEAM magnet program (PM 2.6) Also, the ACT composite score of Irmo High School's 11th graders will be analyzed to assess the effect of Discover Five programs on readiness for post-secondary endeavors (PM 2.9). Finally, the graduation rate at Irmo High School will be examined annually to determine if there is an annual increase (PM 2.10). The performance measures for Objective 2 reflect the goal that all Discover Five magnet schools will meet or exceed SC's rigorous standards for ELA and mathematics and that student scores on all designated assessments will increase annually.

Project Objective 3: To design, implement, and sustain innovative theme-based programs that promote diversity and increase choices, in partnership with parents and the community.

The Discover Five project is designed to increase interactions among students of diverse backgrounds and students' engagement in learning, increase parental and community involvement, and improve connections between students, teachers, and parents. The evaluation team will monitor and annually examine the implementation of project components at each

magnet school using implementation rubrics developed in collaboration with project staff (PM 3.1). Also, the implementation of core instructional strategies such as cooperative learning and desegregation and equity will be annually assessed by examining responses to teacher surveys developed by the evaluation team and examining the results of classroom observations conducted annually (PM's 3.2, 3.3, 3.4, 3.5). In addition, student interactions with diverse peers and their engagement in learning will be assessed by examining student and teacher surveys responses (PM's 3.6, 3.7, 3.7). Implementation rubrics, student and teacher surveys, and classroom observation protocols will be developed by the evaluation team in collaboration with project staff and administered annually during each year of project implementation.

Improving school climate through the use of Discover Five strategies is the focus of performance measures 3.9 and 3.10. Researchers have noted the importance of a positive school climate for teachers, parents, and students. Favorable school climate provides the structure in which students, teachers, administrators, and parents function cooperatively and constructively (Brown & Medway, 2007; Bryk & Thum, 1989; Gareau et al., 2010; Gottfredson, Gottfredson, Payne, & Gottfredson, 2005; Ma & MacMillan, 1999). A favorable school climate provides a supportive work/learning environment and appears to be positively related with important outcomes such as students' academic achievement (Greenberg, 2004; Lee & Burkham, 1996; Stewart, 2007), students' behavior and their decisions to remain in school (Bryk & Thum, 1989; Rumberger, 1995), increased teacher job satisfaction (Ma & MacMillan, 1999), increased retention and attendance, and better home-school relationships (DiStefano, Monrad, May, McGuinness, & Dickenson, 2007). In addition, a positive school climate has been found to be positively related to indicators of school success, such as standardized test scores, adequate yearly progress (AYP) measures, and school report card information (DiStefano et al., 2007;

Greenberg, 2004; Monrad et al., 2008; Sebring, Allensworth, Bryk, Easton, & Luppescu, 2006).

The evaluation team will also document each magnet school's partnerships with community organizations and local businesses, family engagement activities and attendance, and parental satisfaction with the learning environment of their child's school (PM's 3.11, 3.12, 3.13). In addition, each magnet school is expected to form and maintain a diverse magnet advisory council, including teacher, parent, student, administrator and community representatives (PM 3.14).

Project Objective 4: To prepare students as 21st century learners by improving academic achievement and providing them with the necessary career, technological, and professional skills.

The rigorous and innovative magnet programs and instructional strategies implemented within the Discover Five project are expected to help students develop the career, technological, and skills necessary to be successful in the 21st century. These performance measures will be assessed by examining student performance on the ACT WorkKeys assessment as well as responses to the student surveys developed by the evaluation team. Similar to other state mandated assessments (i.e., SC READY), the evaluation team will obtain the results of the ACT WorkKeys each year from the District's Accountability Office to track progress. The ACT WorkKeys assessment is required for all 11th grade students in South Carolina and is designed to measure job skills. Based on performance, students can earn a National Career Readiness Certificate (NCRC) at a bronze, silver, gold, or platinum level. The evaluation team will track the percentage of students at Irmo High School who achieve at least a silver status NCRC (PM 4.1).

Survey items will be developed to assess the extent to which students believe the Discover Five magnet program is helping them develop the skills as outlined in the *Profile of the*

South Carolina Graduate. This profile was adopted by the State Board of Education (SBE) and the South Carolina Department of Education in 2015 to provide a framework and vision for the knowledge, skills, and characteristics necessary for every South Carolina high school graduate to be successful in college and careers. The profile includes critical elements addressing “world class knowledge,” “world class skills,” and “life and career characteristics.” In collaboration with project staff, the evaluation team will develop survey items to address student perceptions in how the Discover Five project is contributing to their development of “world class knowledge” (i.e., mathematics, science skills), “life and career characteristics” (i.e., integrity, perseverance), and “world class skills” (i.e., creativity, critical thinking) (PM’s 4.2, 4.3, 4.4, 4.6). Finally, survey items will also be developed to assess Irmo High School students’ intentions to attend post-secondary education and their perceptions related to how well they feel prepared for life after high school (PM 4.5).

Project Objective 5: To build the capacity of administrators and teachers to deliver rigorous programs of study that integrates systemic reforms and site-based reforms through sustained professional development.

In order to improve the district's capacity to maintain the Discover Five programs after funding ends, District Five will ensure professional development services are of sufficient quality and duration to lead to improvements at all targeted schools. MSAP grant funds will be used to provide a variety of professional development opportunities for school administrators and teachers through workshops, job-embedded training, peer coaching, grade-level planning, reflection, and technical assistance from professional organizations and skilled consultants and experts in desegregation, equity, and cooperative learning strategies, as well as site-based and thematic content unique to each Discover Five school (PM’s 5.1, 5.2, 5.3, 5.4).

Schools will keep records of teachers' attendance at professional development trainings

and participation in all job-embedded training. Teachers' perceptions of training effectiveness will be gathered through annual spring teacher surveys. Survey data also will be used to assess teachers' confidence in their ability to continue operating Discover Five magnet programs after Federal funding ends (PM's 5.5, 5.6).

Project Objective 6: To reduce the achievement gaps between student subgroups and promote postsecondary success by providing all students with innovative theme-based instruction through systemic reforms in desegregation and equity strategies, cooperative learning practices, and innovative, theme-based instruction.

Performance measures for Objective 6 are designed to assess the impact of Discover Five's efforts to provide "equitable access to high quality education" for all students in order to improve student achievement. By implementing strategies into the classroom such as cooperative learning, and transforming the learning environment of the Discover Five schools into one that is equitable and promotes rigorous academic achievement, it is expected that the achievement gap between critical student subgroups will be reduced. To measure this, the evaluation team will assess the change in the achievement gap in performance on state mandated assessments between African American students and white students, as well as between free/reduced lunch status students and paid lunch students (PM's 6.1, 6.2, 6.3, 6.4).

For elementary students, the evaluation team will examine the change in the achievement gap by assessing the difference in the percentage of students who meet or exceed expectations on SC READY in ELA and mathematics. For high school students, the evaluation team will examine differences in ACT composite scores across the different student subgroups. Additionally, for high school students, the evaluation team will assess differences in student subgroup performance on the ACT WorkKeys assessment by examining differences in the percentage of students attaining a silver status National Career Readiness Certificate (NCRC)

(PM's 6.5, 6.6). All data for Objective 6 will be obtained from the District's Accountability Office.

Objectivity and Validity/Reliability of Measures

Although some evaluation data collection will be maintained by district project staff, objectivity will be maintained by ensuring that the entire evaluation analysis and reporting is conducted off-site of the district by the trained SCEPC and OPE evaluation team members at the University of South Carolina. Validity will be increased by soliciting ongoing feedback from project staff as part of the development of evaluation instruments, such as annual surveys and workshop evaluations, to ensure that instrument content is accurately assessing program constructs. Further, the internal consistency reliability of the annual surveys will be tested using Cronbach's alpha, which computes correlation values among groups of items measuring the same construct. The reliability associated with the state assessments (Developmental Reading Assessment, SC READY, SCPASS, EOC English 1 and Algebra 1) and the norm-referenced Measures of Academic Progress (MAP) assessment is considered acceptable by the advisory groups that provide psychometric expertise in test development.

Quantifiable and Qualitative Results

The evaluation methods will produce quantifiable results for all project objectives and performance measures. Disaggregated student enrollment data will be provided by the district's Office of Accountability to evaluate the schools' performance measures related to the reduction of the percentage of African American students and each school's poverty index. The assessments used in Objectives 2, 4, and 6 to review progress in student achievement include state assessments (Developmental Reading Assessment, SC READY, SCPASS, EOC tests, and the ACT) and MAP which all provide objective measurements of student achievement. In

addition, the evaluation team will use confirmatory factor analysis (CFA) to explore school climate data at each magnet school for Objective 3. This multi-variate statistical procedure will determine how well the survey items measure the climate construct and will result in mean factor scores for each of the school climate factors for each school. Other descriptive and inferential statistics (i.e., t-tests) will be utilized as needed. The comprehensive impact study planned to assess the effectiveness of Discover Five's cooperative learning strategies is designed to produce valid results in order to determine evidence of promise. Quantifiable statistics will also be shared in the annual performance report for the following data elements: hours of professional development (key district personnel, administrators, and teachers), item analysis of teacher and student annual surveys and teacher workshop evaluations, frequencies and percentages of parental involvement, and graduation rates.

Qualitative data will be collected through site visits, focus groups, and interviews. The collection of qualitative data is critical to assess stakeholder reactions to program components and strategies, and to triangulate data collected via implementation rubrics and surveys. Additional qualitative data collected will include open-ended survey items to further solicit input from teachers and students about issues related to project implementation and needed improvements.

(3) The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed project.

The extent to which evaluation costs are reasonable is directly related to the comprehensiveness of the proposed evaluation. The evaluation team has planned a rigorous, comprehensive evaluation, including an impact study, to ensure that the evaluation data can be used to guide program implementation, improvement, and the measurement of performance objectives as well as examining the project's evidence of promise. The evaluation of Discover

Five will address all six project objectives related to the effectiveness of the program in (1) promoting student diversity, (2) increasing student achievement, (3) increasing interactions, engagement, and partnerships with diverse stakeholders, (4) increasing student career, technological and professional skills, (5) building capacity of administrators and teachers; and (6) reducing achievement gaps between student subgroups. To monitor progress and assess the effectiveness of the program on all these objectives and their corresponding performance measures, the evaluation team will conduct the following major activities at the school and district level:

School level

- Develop implementation rubrics and monitor program implementation at each school
- Develop, review, and administer student and teacher magnet surveys
- Analyze survey data including closed- and open-ended responses for each school
- Analyze school climate data and develop school climate profiles
- Provide school personnel with additional resources (e.g., School Climate Interpretation Guide) and training for interpreting their school's climate profile
- Develop interview/ focus group protocols and classroom observation rubrics
- Conduct school site visits including classroom observations and interviews/focus groups of students, teachers, parents, and school leadership
- Create summary reports for each school (i.e., annual survey results report, site visit report, annual progress report on project objectives and performance measures)
- Participate in monthly school magnet meetings

District level

- Design and conduct an impact study including data collection, data analysis, and reporting on program's impact on student academic achievement at proposed magnet schools
- Collect additional school and district level data needed for federal reporting and complete federal reports (i.e., Ad-Hoc, APR)
- Collect and analyze additional school and district level data needed for monitoring visits
- Participate in district level magnet meetings

The comprehensive set of data collection instruments including implementation rubrics, student and teacher surveys, interview/ focus group protocols, and classroom observation rubrics will allow the evaluation team to assess the development of the project's implementation in each school as well as to get feedback from **all** teachers and students (grade 3 and higher) who are

participating in Discover Five. Project participants have valuable insights on project implementation and the evaluation team will make certain that all participants have a voice in gauging the success of Discover Five and identifying any needed improvements.

Implementation rubrics will be completed twice a year by the evaluation team in collaboration with project staff at each magnet school. In addition, the evaluation team will annually administer student and teacher surveys and will conduct classroom observations and interviews/ focus groups with various stakeholders (i.e., students, teachers, parents, and school leadership) at each magnet school. Data analysis of quantitative and qualitative data will be conducted yearly by the evaluation team and results will be reported in a series of deliverables prepared for program staff and stakeholders as well as for federal reporting and monitoring visits. In addition, school climate data obtained from the SC Department of Education (SCDE) will be analyzed and school climate profiles will be developed and presented to each magnet school.

The evaluation team will use a variety of methods to provide both formative and summative performance feedback and specific outcome data for the project director, school and district staff, parents, and other project stakeholders. A variety of evaluation reports, shown in Table 13, will be prepared and shared with district and school staff throughout each project year.

Table 13. Evaluation Reports Provided Annually to District and School Project Staff

Type of Evaluation Report	Date(s) Provided
Federal Annual Performance Report (APR)	April in each project year
Federal Ad-Hoc Performance Report	October in each project year
Project Implementation Report	August in each project year
Project Performance Measures Report	October in each project year
Site Visit Report	May in each project year
Teacher and Student Survey Report	August in each project year
School Climate Profiles	August in each project year
Final Discover Five Evaluation Report	September 2022
Impact Study of Cooperative Learning	August 2022

The formative evaluation will provide magnet school leadership teams with updates on their implementation progress and their meeting of program objectives. The evaluation team will guide district, school, and project staff in reviewing project implementation and outcomes. To document project implementation, evaluation team members will attend project staff meetings to monitor the progress of the project activities. The review of project implementation and outcomes will involve project staff in the development of data collection instruments, the interpretation of the results from data collection, and project improvement planning based on the results. In addition, the evaluation team will provide project staff and stakeholders with site visit reports based on classroom observations and interview/focus groups conducted at each magnet school. Results will be discussed with school and district leadership and necessary changes will be considered for program improvement. These will help monitor the progress of program implementation and effectiveness by taking into consideration a variety of perspectives from students, teachers, parents, and administrators.

Summative evaluation feedback will be provided at individual meetings with school magnet leadership teams (summer) and full magnet project meetings including all district magnet staff and school leadership teams (fall). During the summer meetings with individual school leadership teams, the results from the teacher and student surveys will be shared in addition to the school climate profiles for the current year. Additional resources such as a school climate interpretation guide developed by the evaluation team will be provided to school personnel to facilitate the interpretation of their school's climate profiles and accurately determine strengths and weaknesses in their school's climate as well as trends in their climate over years. The quantitative and qualitative data from these instruments will be discussed and any necessary changes in program implementation for the coming year will be discussed.

In the fall, the district staff and school leadership teams will review the evaluation's annual performance report which will describe the implementation of the project and the degree to which program objectives and performance measures are met. This report also provides a summary across performance measures for the individual magnet schools by providing them with information about performance measures that were met or not met. Importantly, the summary also lists measures where progress was made toward meeting those measures. The formative and summative implementation and performance data shared with the magnet project personnel are critical in ensuring that continual progress is made in the progress of project implementation and the achievement of performance measures.

Further, to assess the project's impact on student academic achievement, the evaluation team will design and conduct an impact study at the three Discover Five elementary schools. This will include working with NWEA in creating the comparison group used for the study, collecting data annually from both program students and comparison students, performing preliminary statistical analysis for each year of the project, and presenting preliminary results to project staff and stakeholders. In addition, at the end of the project, the evaluation team will conduct comprehensive statistical analyses for the entire duration of the project, will prepare reports, and present the results and conclusions on program effectiveness in increasing student academic achievement at the three magnet schools.