Competitive Preference Priority 1—Need for Assistance

Longview Independent School District (LISD) in Longview, Texas is applying for a Magnet Schools Assistance Program (MSAP) Grant from the U.S. Department of Education, Office of Innovation and Improvement, entitled the Synergy Project under the following competitive priorities: 1. Need for assistance 2. New or revised magnet schools projects and strength of evidence 3. Selection of students 4. Increasing racial integration and socioeconomic diversity. Five schools will participate in this magnet project: East Texas Montessori Prep Academy (PK-K), East Texas Montessori Academy (1-6), Ned E. Williams Elementary School (1-5), Forest Park Middle School (6-8) and Longview High School (9-12).

Breaking out of the traditional silo subject areas being taught in isolation, this project is redesigning instruction to make learning interdisciplinary and authentic as well as personalized for every student. The Synergy Project title comes from the idea that, in order for learning to be meaningful and dynamic, all elements must 'work together.' The proposed Longview MSAP project will incorporate **personalized, interdisciplinary, project-based learning (PBL) pedagogy** with a strong **STEAM infusion throughout the curriculum** into each of the magnet themes at the project schools. East Texas Montessori Prep Academy and East Texas Montessori Academy are new campuses whose magnet themes are based on Maria Montessori's ideas of the prepared environment where children and youth grow and develop intellectually in harmony with nature. Ned. E. Williams will become a STEM through the Arts magnet campus where all subject area disciplines work together to make learning fun and exciting. Forest Park Middle School is developing an International Baccalaureate-Middle School Years (IB-MYP) program with a strong STEAM focus, and Longview High School is renewing and expanding its International Baccalaureate (IB) program as well as adding an Early College pathway program.

Each of these project schools is committed to 'develop the intellectual, personal, emotional, and social skills' of each learner. Each school has embraced the strong theory of personalized learning using interdisciplinary project-based learning as the way to ensure students are engaged in authentic learning; and each school is committed to developing students and teachers who are inquirers, knowledgeable thinkers, communicators, principled risk-takers, as well as being balanced and reflective. This magnet strand interlaces the arts through all five schools as the element that brings together STEM conceptual ideas into a 'synergy' of meaningful learning. The Longview Synergy project will juxtapose rigorous and dynamic academic experiences using project-based learning within hands-on, high-tech environments. Student leadership development and individual wellness will be a part of the personalized student learning throughout the schools. Educators will be facilitators of learning to help students as they develop intellectual and social skills. This emphasis on personalized learning will take Longview to a new level of excellence. It will be an artistic composite of personalized learning for every student, allowing each student to embrace his/her own identity while maneuvering in any circle of society and in whatever field of work or study each chooses to pursue.

Background

Longview, Texas is a mid-sized city situated in the beautiful piney woods of East Texas. According to legend, as pioneers migrated westward through East Texas to find their fortunes or start anew, they found themselves at a "jumping off" point in Longview. Originally inhabited by Caddo Indians, Longview is approximately 60 miles west of Shreveport, Louisiana and 125 miles east of Dallas. Longview was established in 1870 and named by a Southern Pacific Railroad surveyor who, while laying out the town from a hillside home site, observed the exceedingly long view of the surrounding area and thus, the name of Longview was determined.

The economy of the area has stagnated in the past two decades, largely due to the closures of several small manufacturing plants and severe cutbacks in the larger plants, such as Eastman Chemicals, Advance Ross Steel Co., and Bio Derm Laboratories. The city's taxable revenue continues to increase slightly each year, because of the expansion of health and medical related services and the retail trade. Nevertheless, the median income of persons living in Longview is $47,532, which is $8,121 below the state median income, with 17% of persons 18 years or older and 13% of families living at or below the poverty level. Seven percent of the households in Gregg County receive public assistance. According to *The State of Literacy in America*, 16% of the adult population 25 years or older failed to complete high school or obtain a GED, and more than 20% of the adults in Gregg County are functionally illiterate.

Longview ISD (LISD) is a mid-sized district that has an area of 120 square miles and is centrally situated in Gregg County. It has a current enrollment of 8,651 students **(down from 8,852 in 2012)** with 7 elementary schools, 3 middle schools, one high school, and two schools serving special populations (the Student Development Center and the Juvenile Detention Center). In addition, the district provides educational services to the hearing impaired, ages birth through 22 years at the Regional Day School for the Deaf. LISD is land-locked in the west by Gladewater ISD and north by White Oak ISD, Pine Tree ISD, and Spring Hill ISD, in the east by Hallsville ISD, and in the south by Kilgore ISD and Ore City ISD. **Many LISD students enroll as transfer students to these contiguous districts and this MSAP project hopes to reclaim them, as well as students attending private and parochial schools and home-schoolers.**

According to the 2010 U.S. Census Bureau, the population of Longview is 74,902 and serves as the county seat of Gregg County, which has a population of 115,649. Minority residents constitute **30% of the city** population and **34% of the Gregg County** population, while within

LISD the **minority student population is 79.5%.** In both the city and the county, African Americans are the largest single minority group, along with a growing low-SES population, and a burgeoning Hispanic population whose needs will also be addressed in these project schools.

School	Af. Amer. Enroll	Hisp. Enroll	White Enroll	LowSES Enroll	Total Enroll
East Texas Montessori Prep (PK/K)	37.4%	42.8%	14.8%	72%	1092
East Texas Montessori Academy (1-6)	N/A	N/A	N/A	N/A	350
Ned E. Williams Elementary (1-5)	47.5%	39.7%	6.2%	88%	406
Forest Park Middle School (6-8)	31.2%	57.6%	6.4%	83.7	500
Longview High School (9-12)	39.4%	33.5%	23%	52.3%	2354
Longview ISD	35.3%	38.5%	20.5%	72%	8651

*Both Montessori campuses will open in Fall 2017. (PK/K students will be relocated.)

The district has operated under a **court-ordered desegregation plan since 1970**. A **consent decree focusing on the historic African American racial isolation in the district was issued in December 2014**. The Final Consent Decree stipulates that, *"The obligations set forth in this Final Consent Decree shall expire at the end of the three-year term, on December 22, 2017, at which point the United States shall not oppose LISD's motion for a declaration of full unitary status provided that there are no outstanding disputes pending before the Court concerning the District's compliance with this Final Consent Decree."* Pursuing the implementation of quality magnet programs that personalize instruction for every child will serve to attract non-minority as well as affluent students back into the school system in order to address the African American racial isolation and the growing low SES isolation in LISD. **Longview ISD is requesting**

funding under the Magnet Schools Assistance Program to support its court-ordered desegregation and comprehensive school reform efforts. Additionally, LISD will continue with a Voluntary Desegregation Plan upon obtaining unitary status.

The table below reveals the academic achievement of Longview project schools' students compared to students throughout the state of Texas. **Each school is diligently working to achieve annual progress and has identified Math, Science, and Reading as high need areas for improvement.** According to the 2015/2016 Texas accountability, **none of the project schools in this application have achieved an A rating from the state.** Major intervention is needed in these schools. The chart below shows the percentage of students at each campus who achieved "Met Satisfactory Standard or Above" on the Texas accountability tests.

Texas State Accountability

LONGVIEW HS	**State**	**Hispanic**	**Af. Am.**	**LowSES.**	**White**	**Campus**
Mathematics	76%	89%	86%	86%	84%	87%
Science	79%	92%	94%	93%	99%	95%
Reading	73%	66%	65%	66%	88%	70%
FOREST PARK MS	**State**	**Hispanic**	**Af. Am.**	**LowSES.**	**White**	**Campus**
Mathematics	76%	69%	58%	66%	88%	68%
Science	79%	54%	43%	54%	88%	54%
Reading	73%	61%	53%	59%	89%	62%
NED E. WMS ELEM.	**State**	**Hispanic**	**Af. Am.**	**LowSES.**	**White**	**Campus**
Mathematics	76%	87%	89%	87%	100%	89%
Science	79%	88%	74%	76%	*	80%
Reading	73%	84%	89%	85%	91%	86%

E.TX Montessori Academy (grades 1-6) and E. TX Montessori Prep (PK/K) are not open yet.

*Too small a number of students to report.

For the 2015/2016 A-F Preliminary Ratings from the state of Texas, LISD as a district received a D for the Postsecondary Readiness domain. Both Longview High School and Forest Park Middle School received Cs for Postsecondary Readiness, while Ned E. Williams Elementary received a D for Postsecondary Readiness. The consequence of this rating is that the public perception of Longview ISD is that these schools are not quality; however the district earned an A in the Student Progress domain and a B for the Closing Achievement Gaps domain. There is still much work that needs to be done. This magnet project will enable LISD to market these project schools in order to recruit families and to continue improving instruction. LISD also recognizes that there are students sitting 'on the bubble,' as well as other students languishing but not really flourishing, whose lives could be forever changed for the better with this magnet project. A priority under the U.S. Department of Education's Magnet Schools Assistance Program holds a possible lifeline for these schools since, according to the priority, **"schools identified for school improvement, corrective action, or restructuring under Title I [can be]…magnet schools to be funded under this project…" The fact that these LISD schools did not achieve "A" status in all of the state accountability domains puts the entire district academic program at risk, which impedes its desegregation efforts.**

Each project school has a minority population percentage that is over double the city's and county's minority percentage and climbing. The LISD School Board has directed the Superintendent to seek Magnet Schools Assistance Program funding for these schools and to create the Longview Synergy Project. These magnet themes were carefully crafted to provide rigorous mathematics, science, and literacy understandings that are accessible to all learners in

meaningful ways and that promote critical thinking, reasoning, and lasting understanding. Partnerships, internships, and in-class experiences will make these magnet themes attractive as schools of choice as well as relevant and rigorous.

The costs of fully implementing the project as proposed:

Longview Independent School District is requesting $3,390,930 for 2017/2018, $3,134,632 for 2018/2019, and $2,917,035 for 2019/2020, $2,819,008 for 2020/2021, and $2,726,774 for 2021/2022. The driving force of this grant proposal is to provide educational opportunities for the over 4500 students in the project campuses, and to bring back homeschoolers and students from the private, parochial, and nearby suburban public schools in spite of budgetary problems. The MSAP grant funding will enable district officials to remain focused on improvement of academic achievement, balance demographic profiles in the schools and initiate innovation. Meeting the need for assistance at this time will put in place the structures and training that will sustain the LISD magnet instructional program beyond the grant cycle. More than **10,000 potential non-minority public school applicants** are in the surrounding bedroom communities of Longview. Additionally, over **1000 non-minority private school applicants** live within driving distance of LISD. Because the amount of local funds available is limited to maintaining facility needs and basic supplies, the need for assistance is tremendous if these potential students are to be attracted to the five project magnet schools. The cost of this proposed project allowed under MSAP guidelines is high due to the number of schools, the needed supplies, and high-end technology needed for each of the magnet themes, as well as for the specialized training to develop and sustain the authentic project-based studies.

Three areas of major expenditure will be necessary to support the unique elements and requirements of the program: professional development, marketing & recruitment, and supplies

& equipment. It becomes obvious during classroom observations and interviews with administrators and teachers that in the past there has not been the **amount and depth of training needed relative to authentic content or up-to-date strategies or methodologies**. MSAP funding will be used for training and coaching to infuse science, math, technology, engineering, and the arts learning throughout the core subject areas, for content background and instruction in application of pedagogies with professors at local universities, with nationally recognized consultants, and at premier conferences and training centers nationwide. Both Montessori and International Baccalaureate training is intense and expensive. It will be important to give the very **best professional development in specialized magnet content, integration of curriculum, and the strategies and best practices that match the academic concepts within each of these magnet themes**. Additionally, it will be essential to train all faculty members on the various **technological equipment and software applications** that will be purchased in support of the standards-based curriculum and instruction. The specialized equipment and supplies listed in the budgets of the five schools are costly and offer a **level of instructional excellence** that these students would not have without this special funding. The potential value for students cannot be realized without **sustained and extensive training** for educators on these specific pieces of equipment and supplies relative to their respective magnet school sites. Basic to the success of the overall program will be the implementation of a **professional marketing and recruitment plan**. A dynamic and intensive marketing campaign has been outlined that will educate the public as to the many advantages of magnet school attendance. The timeline for the recruitment/marketing plan has been developed to reflect a sequential and comprehensive approach for attracting and holding the interest of students. (See Priority 3-Selection of

Students.) The theme for each magnet school will emphasize academic rigor through personalized learning in all **marketing strategies and promotional materials**.

The resources available to the applicant to carry out the project:

LISD's commitment to its proposed school improvement program is evident in the local dollars spent on upgrades and additions of close to $40 million over the past five years. The reconfiguration of buildings will continue in an effort to provide high quality facilities for students and a quality work environment for staff. The need for additional classroom space was a dominant factor in the planning for the MSAP grant application for this 2017 to 2022 funding cycle. The renovations and improvements for the Longview schools in this application are indicated below:

East Texas Montessori Prep (PK/K): This is a brand new facility opening in Fall 2017 at a cost of over $36,000,000.

East Texas Montessori Academy (1-6): An existing elementary campus is in process of being renovated to create the new E. TX Montessori Academy, opening in 2017/2018. From room divisions to provide more compartmentalized space and learning labs, to classroom upgrades and ensuring the campus is ADA compliant and the technology infrastructure is viable, the restructuring of the school has been paid out of the LISD fund balance of close to $3 million.

Ned E. Williams Elementary (1-5): General maintenance and repair

Forest Park Middle School (6-8): General maintenance and repair

Longview High School (9-12): General maintenance and repair

Each of the project campuses has an **Instruction Technology Specialist** in place. These IT Specialists provide just-in-time professional help on both hardware and software implementation for faculty and staff members on a daily basis. LISD identified this as a critical need to ensure

that teachers use technology as a tool instead of a digital worksheet. **Bilingual services** in the district ensure that families whose home language is not English are able to understand all the nuances of the educational system. Another important, and costly, resource that the **district provides is complete transportation services to the project schools**. The district budget is stretched to the limits to provide the facility upgrades that are absolutely necessary to add classroom space at these schools. Basic instructional supplies have been provided from the general fund and the district is committed to funding and sustaining these magnet schools beyond the five-year grant cycle. This dynamic and innovative Longview Synergy Project will not happen without MSAP funding.

Each school site will use their MSAP project design as a working reference as each step of the plan is implemented. Then, when the whole program is in place and funding ends, that same working reference will serve as a touchstone to ensure that future modifications or additions are true to the basic design. By 2022, LISD will have five highly successful magnet schools that are sure to be well received in the Longview area and will be drawing students back to the district. They will have a critical mass of teachers who will have been trained, with some advancing to trainers in project-based learning, various technology and software platforms, as well as other instructional initiatives so that they will be in a position to maintain and sustain these systemic reforms. This Synergy project will counteract White Flight and keep families in LISD.

Building capacity of staff will be a main priority and, once established, will remain in place through a continuation plan for comprehensive training and coaching as new faculty members come on board. According to the Center for Comprehensive School Reform and Improvement, there are six **quality indicators of high achieving schools**. These indicators are: aligned and rigorous curriculum, effective instruction, use of formative assessment along with student

assessment data, positive school climate focused on achievement, effective school leadership, and family/community engagement. **Each of these indicators is apparent throughout this project**. With five years to put the project in place under the guidance of strong leaders and with teachers committed to its success, the 'ripple effect' will ensure that these magnet schools will sustain beyond the five-year grant cycle.

Magnet campus faculty members, under the guidance of their principals have been meeting in small writing groups to secure additional funding for classroom projects, as well as for campus wide projects. Funding sources include **state grant opportunities, local corporations, foundation grants, district mini-grants, and even soliciting Eagle Scout projects** for such projects as campus outdoor environmental areas and outdoor decking. The Synergy project is the next phase of the district improvement plan; therefore, each of the campus improvement plans is aligned to this vision. District writing teams meet regularly, and have met with success in securing outside funding through the National Science Foundation, the Kennedy Center partnership, the Texas Economics Initiative, as well as regional partnerships with Longview Regional Medical Center, Christus Good Shepherd Medical Center, Eastman Chemical, and businesses such as Target, Walgreen's and Wal-Mart. Additionally the Longview ISD Foundation awards grants from $100 to $2500 for innovative classroom projects and programs that enhance the quality of education for Longview students.

The district level management team **will review all available resources** that become available, assessing and selectively choosing materials and support services that are the diagnostic or prescriptive fit for each school. With MSAP funding contributing to expanding institutional capacity, enhancing intellectual capital, and providing for detailed evaluation and documentation of the efficiency and effectiveness of the magnet Synergy project, LISD can focus their attention

on generating funding for a program running at full capacity with established and documented evidence of success. Once the equipment and supplies are in place, their replenishment and cyclical **upgrading and replacement will become part of the district technology and maintenance plan**. Partnerships with local universities and community colleges, medical facilities, businesses, and corporations will be forged with this project. Members from these partnership organizations, along with parents and community leaders will advise and support the Longview Synergy project through the **LISD Magnet Advisory Council**, which will meet under the leadership of the Assistant Superintendent Horace Williams along with the Magnet Director. In conclusion, sustaining reform is a process. Data collection will be crucial for ascertaining what is working and what is not. Keeping monthly tabs on patterns in student behavior, classroom assessments, and instruction can provide early indications of forward momentum or problems. Partnerships with outside assistance providers will be established and will help negotiate the inevitable changes that naturally occur within a school and within a district. These external providers can give advice on how reforms can be adapted to work better…both technically, but also politically, by communicating and reminding everyone of the vision and core values set forth at the onset of the project. Leadership depth will also be developed at each school and within the district over time so that there is sustained growth. The responsibility for leading the reform effort will be distributed among the campus faculty members and administration as well as central office administrators. The special personnel budgeted within this grant application will be charged with developing the expertise of the faculty and staff so that their expertise will no longer be needed at the end of the five year grant cycle. This project is developing strong teacher leaders in order to ensure that reforms within the schools last even when dynamic and effective leaders retire or move on.

The extent to which the costs of the project exceed the applicant's resources:

LISD has stretched its budget to the limits in order to provide the facility upgrades that are absolutely necessary to add classroom space. Basic instructional supplies have been provided from the general fund and to applicable past categorical projects. The district will provide transportation services to the magnet schools and pledges that this proposal will be sustained beyond the grant cycle. The needs to be met through MSAP funding will be the highly specialized support structure provided through the district magnet office, supplies, equipment, and the extensive professional development necessary to implement the magnet themes at each of the applicant schools. **Examples of supplies and equipment** that will be needed for the magnet strand include: presentation equipment, library titles (both e-books and print, streaming subscriptions and videos), professional library materials including expository readings, engineering software and ancillary materials, robotics, advanced science investigation kits, physics equipment, math manipulatives, reading literacy materials, multicultural art prints, digital technology including individual student personal notepads, iPads, state-of-the-art integrated arts materials and equipment, stagecraft supplies and equipment, radio and TV broadcasting equipment, computers and printers, language software programs, media retrieval system, environmental science materials and equipment along with outdoor field science monitoring devices, video streaming, Makerspace equipment and supplies, costuming materials, music keyboarding and musical instruments, and graphic design software. This proposal includes the various equipment and supplies that are required to ensure that the Synergy project is learner centered and students have the materials needed to be successful.

The Longview Synergy project is truly **innovative and supports systemic reform**, while also being **intriguing and interesting to young people**. The implementation of Science, Technology,

Engineering, Math, and the Arts that are inherent in these magnet themes (Montessori, STEAM, and IB) are very costly and these costs greatly exceed the resources that are currently in place. As detailed in the table below, the cost of the Synergy project will not be possible without MSAP funding. The cost of the project implementation exceeds district resources by 7% in 2017/2018, by 6% in 2018/2019, and 6% in 2019/2020, by 5% in 2020/2021, and by 5% in 2021/2022.

Cost of the Longview Synergy Project

Funding Year	**Funding/Pupil** (5% increase/yr)	**Local Resources** (based on 4500)	**MSAP Funding**	**Total Funding**
2017/2018	$9,878	$44,451,000	3,390,930	47,841,930
2018/2019	$10,372	$46,674,000	3,134,632	49,808,632
2019/2020	$10,891	$49,009,500	2,917,035	49,012,452
2020/2021	$11,436	$51,462,000	2,819,008	54,281,008
2021/2022	$12,008	$54,036,000	2,726,774	56,762,774

The additional MSAP funding is extremely important to the full implementation of the Longview project at the five project schools. The success in attracting students from affluent areas of the city to these project schools lies in the full use of the specialized resources, equipment, and supplies associated with engaging inquiry and understanding in the classroom. This requires proper training and technical support for the faculty to use the resources properly and on-site specialists to provide just-in-time answers and guidance to faculty members. These expenses cannot be absorbed in the local funding. As with any district, personnel costs make up over 85% of LISD's local budget; therefore, additional specialized personnel and professional development are needed. The additional personnel hired for the five years of the MSAP grant cycle will train the teachers. **At the end of the 2021/2022 school year teachers will be ready to**

carry on the Synergy project on their own. This ensures that all personnel within the schools understand that ***this is their project rather than an add-on project that only the specialists are charged with***.

The difficulty of effectively carrying out the project exceed the applicant's resources: High costs are associated with higher levels of integration and educational quality. District officials realize that to establish magnets designed to raise educational quality, as well as attract homeschoolers and students from private and parochial schools, the startup cost will necessarily be high. In this funding request, approximately 4500 students will be served each year at a cost of over $10,600 per pupil, which includes the local basic support costs. **For start-up costs of a carefully designed program of this high caliber, and in a system that is in need of intervention, this per pupil cost is extremely reasonable.**

Longview Independent School District is deeply committed to establishing and maintaining its magnet schools beyond the grant cycle. This is the next phase of the district vision for improving LISD schools. As stated before, this project will introduce project-based learning for interdisciplinary and real-world STEAM curricula to all teachers in these project schools through their individual magnet themes: Montessori, STEM through the Arts, and International Baccalaureate & Early College. This is the next phase of the district vision. Non-discrimination practices and fair employment standards will continue, not just because they are required, but because this district fully endorses them as a part of their belief in the positive benefits of diversity. Federal funding through the **Magnet Schools Assistance Program will provide the "seed" money** that moves the dreams of this community, staff, and most especially the parents and students to reality. The innovations developed during the grant cycle are expensive; but by the end of the five years, equipment, technology, and other large purchases will be in place **and**

the critical mass of teachers and staff will be trained. **Budgeted district funds will maintain the specific support of these innovations in the future.**

In preparing this proposal, LISD has developed a cost-effective budget for sufficient start-up funds to implement the revision of the five proposed magnet schools in a manner that will assure accomplishment of their magnet project objectives, so that when funding ends, the district can, in good faith, pledge to continue support. This proposal contains a request for MSAP funding of approximately $15 million for five years to operate five magnet schools. The funding will support the district level magnet office and the five magnet schools designed to attract, hold the interest, and improve the academic achievement for more than 4500 students. The proposed MSAP budget is sufficient to allow each school to offer, not just another special program, but a program that will resonate with staff and parent expectations while making extensive contributions across the school community.

Marketing and Recruitment: Basic to the success of the overall program will be the implementation of a professional marketing and recruitment plan. The timeline for the marketing plan (in the Priority Three section) reflects a sequential and comprehensive approach for **attracting and holding the interest of students**. The magnet fairs, mass media advertising, open house events, and materials for distribution **must be of the best quality and therefore will be costly**.

Personnel: In order to accomplish the objectives of this proposal, funding is needed for full-time staff members at the Central Office to coordinate magnet curriculum development and instructional trainings, develop marketing/recruitment, provide clerical support for the operation of the grant, as well as coordinate parent support to families. Additionally, ten full-time equivalent (FTE) Teachers (five Student/Parent Intervention Specialists and five Magnet

Specialists) at the project campuses are needed to facilitate curriculum, professional development training, purchasing, technology, and parent relations. The five campus Magnet Specialists will be hired for the five-year cycle and will coach and mentor the teachers to become independent of them by the end of the five years. During the five years of the grant cycle, these instructional coaches will meet monthly with the district subject-area specialists as well as their individual magnet theme specialists to network and develop instructional expertise at their campuses. The project campuses are each requesting a Student/Parent Intervention Specialist. These Student/Parent Intervention Specialists are critical for attaining the positive parent involvement needed to advance student academics and sustain the project. These campus student/parent liaisons will be under the direction of the campus principals; but will meet monthly with the Magnet Director to network and develop strategies to enhance family relationships at the project schools. Each campus student/parent intervention specialist will develop positive parent relationships and work with families of students on a more personal basis in order to assist students in maintaining good attendance, answering questions about academic issues, and helping families navigate college applications and financial aid. It is planned that the district will absorb these positions locally as personnel retire or move on and positions can be adjusted to accommodate the Student/Parent Intervention Specialists into the local funding.

Resources and Training: While administrators and teachers have had some great professional development trainings, there hasn't been the critical mass of teachers trained and the training did not continue with follow up and coaching to ensure that the training was implemented with integrity into the classroom. The implementation of the training techniques into the classroom instruction will be ensured because of the magnet personnel in place at each campus to provide just-in-time coaching and support but also because there will be a whole campus emphasis on the

training. MSAP funding will be used to secure authentic curriculum development and instructional methodologies training with nationally recognized consultants, with University professors in the fields of engineering, math, the sciences and business, with Montessori and International Baccalaureate consultants, as well as at premier conferences/training centers nationwide. It will be important to secure the very best professional development in the science, technology, engineering, arts, and math content and integrate that content with the project schools' Montessori, STEM through the Arts, IB-MYP, and IB & Early College themes along with the strategies/best practices for these project schools.

Equipment and materials must be state-of-the-art and staff must be trained to effectively use new and innovative teaching strategies if diverse groups of students are to be attracted. Additionally, teachers will be given the time and resources necessary to develop curriculum that is truly innovative, meets the needs of their students, and utilizes the full potential of modern technology. It will also be essential to train all faculty members on the various equipment and software applications that will be purchased in support of thematic curriculum and instruction. The specialized equipment and supplies listed in school budgets are costly and they require on-going training on how to use them effectively and efficiently. The potential value for students cannot be realized without extensive training for teachers on specific pieces relative to the STEAM and personalized learning focus of the Synergy project.

LISD is requesting adequate funds to cover start-up costs of collaborative activities with the Science, Math, Engineering, and Business departments at LeTourneau University and the University of Texas at Tyler, along with summer enrichment, as well as other expenses necessary to achieve the goals of this project. Aggressive marketing and recruitment, comprehensive and targeted professional development, thematic curricular design and development, strong

alignment to the Texas state standards, thematic curriculum document writing and publishing, interactive evaluation and personnel improvement plans, recruitment of highly qualified personnel in specific thematic areas, instructional and marketing/recruitment materials, and upgrading of supplies and equipment will be taken to a new level of excellence.

LISD is committed to integration and educational equity for all students as outlined in this Longview magnet application; however without MSAP funding, the Synergy project will not be able to provide the level of quality that is critical to attract a diverse population. Parents must be convinced that the quality of education received in these magnet schools is world-class. **Without the accoutrements inherent in a strong curriculum of instruction that is necessary with the STEAM focus of Montessori, International Baccalaureate, and STEM through the Arts themes** as well as the **structures to safely nurture and guide students through to post-secondary employment or further education**, families will not be attracted to these urban project schools and students currently in these schools will suffer.

Competitive Preference Priority 4—Increasing Racial Integration and Socioeconomic Diversity

Every child carries within him/herself a voice that cries, "Help me find my greatness!" The high expectations implicit in a teachers' demand for excellence and the help by involved adults are important elements for answering that cry. A child learns that he/she is capable and that greatness is expected of him/her. Longview is a community whose children are increasingly separated along socioeconomic lines. Racial and socioeconomic integration is the foundation of this grant proposal. These magnet schools will bring non-minority, affluent students together with minority, Low SES students. Students must grow up together so that they are able to interact and work together as adults. The very nature of the Longview Synergy project brings

students together. The arts infused coursework throughout the day is a natural draw to students as they design, interact, and develop artistic endeavors in tandem. Harvard Associate Professor, Dr. Jal Mehta states, "…the way in which people learn outside of school –with like-minded others, around topics they care about, with people of varying levels of expertise, in networks that reach out in all directions—will penetrate how both students and adults learn in schools." This profound statement is why project-based learning will be such a powerful enhancement of the project schools' curricula for truly increasing racial integration and socioeconomic diversity. **As students work together in teams on intriguing and engaging projects, with varying levels of expertise and with varying background perspectives, friendships will be forged and relationships will develop.**

There is mounting support for schools to take a more holistic approach to educating poor children. While people in poverty are as diverse as people in any other socioeconomic class, substandard housing, inadequate medical care, and poor nutrition can affect a child's physical and cognitive development. Living in daily economic hardship can also adversely affect students' mental health. Children who live in poverty often come to school behind their more affluent peers in terms of literacy and language development. Poverty also places constraints on the family's ability to access high-quality day care, before- or after-school care, and limited physical space to create private or quiet environments conducive to study. One initiative that provides evidence of promise is Harvard University's Education Redesign Lab that links agencies responsible for children's services. In this approach, school systems and social services agencies work together to address both in-school and out-of-school factors that affect student learning. Another initiative that holds evidence of promise is "Broader, Bolder Approach to Education" which is a group that uses comprehensive "whole-child" strategies for educating

students in poverty. The Longview Synergy project has incorporated the following best practices from both of these initiatives in order to address the racial and socioeconomic integration in the project magnet schools: 1) ***Personalized learning***, which is a kind of individualized education plan that addresses in-school and out-of-school needs of students. 2) ***Integration of social, emotional, and health services*** so schools can respond to issues that arise, which affect a child's ability to attend classes or pay attention when he/she gets there. 3) A third area of best practices is ensuring all students have access to ***arts-rich activities***, including after school and during the summer. And finally 4) ***governance*** in order to seek critical community and family input when making education decisions so that a collaborative and comprehensive approach is used to mitigate the effects of poverty and racial isolation.

A blend of family attitudes, cultural ideas, and frustration often lead students to believe that their academic ability is a fixed trait like eye color. By nurturing **growth mindsets** students will learn that the brain can grow and change and that they don't enter schools with a set of unchangeable strengths and weaknesses. With the Synergy project, work will be about changing students' beliefs, but also giving them opportunities to self-assess in order to become aware of their own growth academically. Another evidence of promise deals with peers. There is **power of peers** learning from each other when the academic setting is diverse racially, ethnically, and economically. There is some indication that in classrooms that engage students in looking at and learning from one another's work, the quality of student learning rises. By building on the authentic desire to do well, teachers tap into a deep-seated motivation and elicit remarkably well-informed, high-quality ideas. This power of peers makes the challenge and achievement of good work much more manageable and attainable for students.

To help teachers work with students who have disengaged from school, the following classroom strategies from Robert and Jana Marzano's book, "The Key to Classroom Management: Translating Research Into Action" are **research-based strategies** that will be used to help students reconnect and be successful in the academic environment. 1. For students who avoid connection with others, are shy, or who don't initiate conversations…almost an attempt to be invisible as well as for students who have a fear of failure, who give up easily, are convinced they can't succeed, or are easily frustrated and use negative self-talk: Provide safe adult and peer interactions and protection from aggressive people. Provide assertiveness and positive self-talk training and reward small successes quickly. 2. For the student who is hostile, oppositional, or covert by appearing to agree but then doing the opposite of what is asked: Describe the student's behavior clearly. Contract with the student to reward corrected behavior and set up consequences for uncorrected behavior. Be consistent and provide immediate rewards and consequences. Encourage and acknowledge extracurricular activities in and out of school. Give the student responsibilities to help foster successful experiences. 3. For the student with attention problems such as hyperactivity or inattentiveness: Contract with the student to manage behaviors. Teach basic concentration, study, and thinking skills. Separate the student into a quiet work area. Help the student list each step of a task. Reward successes and even assign a peer tutor. 4. For the perfectionist student: Ask the student to make mistakes on purpose as a teaching tool for others as well as have the student tutor other students. 5. For the socially inept student who is teased for unusual behavior, appearance, or lack of social skills: Teach the student to keep the appropriate personal space distance from others. Teach the meaning of facial expressions, such as anger and hurt. Make suggestions regarding hygiene, dress, mannerism, and posture.

Desegregation

Rebecca Wheat who is the author of, "The Spirited Principal, Success for Boys" and "Action Now: Transforming Schools Through Community," wrote a commentary in the September 30, 2015 *Education Week* entitled, "ZIP Codes Needn't Predict Students' Futures." In this commentary, she outlines how school principals can counteract the abilities, capabilities, and life expectancies that are statistically predicted for their students, based on where they live. Wheat states that, based on ZIP codes, which identify students' communities and residences, two children living only ten blocks apart have a statistically 15-year difference in their life expectancies because of how each school deals with its student population. In schools where collaborative work is understood and used to advantage, time is set aside each week for grade-level teachers' meetings. Teachers plan together and have time to discuss individual children. Various racial and economic groups are represented in the school's family activities, and as participants come together, they get to know each other and realize more concretely that they have the same important vision in common: a desire for their children to have the most rewarding school experiences possible. This is the power of the desegregation plan that is transforming Longview Texas Independent School District.

Effectiveness to recruit students from different social, economic, ethnic, and racial backgrounds

Strong school leadership, ongoing professional development, a tech savvy environment with the rich appeal of the arts will make learning relevant and fun for every child, drawing families to the LISD schools. Each school will foster a participative school culture where students and teachers are not just consumers of knowledge but also producers of knowledge. The magnet program will provide a seamless, high quality, coherent education, grounded in STEM

conceptual understandings that articulate from the project elementary magnet schools up through the high school. Learning will be transformed using project-based units of study that are interdisciplinary and infused with the arts to engage students. These PBL units will incorporate design-thinking with hands-on, inquiry learning in technology-rich environments.

There are **no entrance requirements** for any child or youth wishing to attend these Longview magnet schools. Students will be recruited from the surrounding affluent, non-minority suburban districts, from private and parochial schools, and from homeschoolers. **In Texas, students are able to enroll in the school of their choice without the approval of the sending district**. Children and youth from any race, ethnicity, or gender, including those with limited English proficiency and/or special education needs, or physical disabilities are welcome in LISD. All magnet students will have access to free transportation. Selection into the program is **based on space availability and is through random computer lottery**. Information, in both English and Spanish, regarding the magnet school programs and application deadline will be placed in **newspapers, radio and television advertising, brochures, cable community calendars, billboards, banners, and on the district website.** In addition meetings at gathering places such as **neighborhood churches, community centers, the city library, and neighborhood Boys and Girls Clubs** will ensure that **no family is left out of the loop**. Persons registering the last day of the application period have the same chance of being accepted into the program as those registering the first day. The computer lottery ensures fairness by assigning students by random selection.

A strong academic focus is a primary motivator for parents to send their children to a magnet school and will be **highlighted in the marketing campaign**. Longview's Synergy project at the high school offers pathways to an IB Diploma program, an AP Diploma Program, or an Early

College Program. Each pathway to graduation has requirements above and beyond the standard high school diploma. Although academic excellence is an essential criterion for being admitted to the **IB diploma program**, success also depends to a large degree on motivation and character. Students will have access to the IB-Middle Years Program at Forest Park Middle School to prepare them to carry on into the high school IB program; however, students can still be accepted to the high school IB program if they have completed Algebra I as a prerequisite to taking Geometry as freshmen. For the **AP advanced diploma program**, students as Sophomores go through a year-long AP Seminar and then as Juniors, students conduct a rigorous and independent year-long research project. For the **Early College program** (in partnership with Kilgore Community College) students will complete an aligned, seamless curriculum plan that provides the high school and college courses that students need to take to complete both degrees and that avoids unnecessary duplication and/or omissions of critical content. This will allow students to be able to accomplish the goal of two years of college credit or an associate degree by the time they graduate from high school. Texas also offers an Advanced Initiative for Math and Science (AIMS). With this Synergy project the elementary and middle school project campuses are developing their teaching staffs to support and develop a pathway for students to be successful in AIMS and thereby scaffold and broaden the number of students who are prepared and able to access the IB program, the AP advanced academic program or the Early College program. This will be marketed throughout the city since these will attract and support families from diverse backgrounds to these project schools.

To increase awareness of educational choice, a communication network will be part of the campus strategies to ensure that outreach efforts are extended to all parents. This **communication network** consists of easily navigated district and campus websites, flyers,

newsletters, contact through campus student/parent intervention specialists and magnet specialists, parent meetings, community-parent reading programs, mentorships, partners-in-learning adoptions, campus committees, parent chaperones for field trips, career days, multicultural events, and other opportunities for participation at schools. Each of the magnet schools have addressed parents' desire for rigorous and highly-engaging educational programs that are infused with the arts, are academically challenging, are focused on higher order thinking skills, have high student expectations, are technologically advanced, and provide holistic student-centered instruction. A marketing campaign that keeps parents apprised of the options that children have available to them through magnet schools is critical for effectively recruiting students from diverse backgrounds to the project schools. All the project schools are whole school magnets. The neighborhood children within each attendance zone, as well as those recruited to the school, will all be magnet students. Families in Longview indicated the following factors were major considerations when deciding to send their child(ren) to a magnet school: 1) safety of the campus 2) advanced academics 3) cutting edge technologies 4) attractive theme/program emphasis 5) bus transportation. Marketing will stress these factors to potential magnet families. The yearly recruitment schedule and marketing will be analyzed and improved each year with input from principals and magnet staff members. (See marketing timeline in Priority 3 – Selection of Students section.)

The perception of historically low academics in these proposed magnet school sites will be discussed with families, explaining the steps being taken to broaden and deepen the curricular offerings at the magnet schools, how differentiated and personalized instruction will support all students, and the extent of interaction with the home. Marketing will target families with a consistent, positive information flow relative to the positive aspects of the program. East Texas

Montessori Prep Academy (Montessori PK/K), East Texas Montessori Academy (Montessori grades 1-6), Ned E. Williams Elementary School (STEM through the Arts grades 1-5), Forest Park Middle School (IB-MYP grades 6-8), and Longview High School (IB and Early College grades 9-12) will all become new magnet schools. All will have a strong STEAM base with computer science concepts underlying their individual magnet themes.

How to foster interaction among students of different social, economic, ethnic, an racial backgrounds in classroom activities, extracurricular activities, or other activities

While educators can't compel friendships among students, they can help them navigate the terrain. The nature of a shared project can foster or discourage interaction. The LISD Synergy project will foster interaction among students of different social, economic, ethnic, and racial backgrounds in all school activities. Adolescence is a transition time from childhood to adulthood; and emerging research suggests adolescence is also a critical time for the development of complex problem-solving and social learning. In a series of studies by University of California, Los Angeles, neuroscientist Matthew Lieberman found that teenagers assigned to learn a card game picked up strategies more quickly and performed better when they played with three others of the same age group than they did when they played the game only against a computer. Understanding adolescents' need for social learning, the Synergy project has incorporated extra-curricular and co-curricular clubs and organizations as part of the plan for fostering interaction among students of different social, economic, ethnic, and racial backgrounds. Since adolescence is a time for figuring out one's identity and who one is going to be for the rest of one's life, it is extremely important that the Synergy project schools' students bond with each other in academic environments as they work together on projects assigned in their core classrooms; but also in activities and events beyond the school day.

The Synergy project design is meant to achieve a true integration of culturally diverse school settings throughout each of the magnet campuses. While all students within the school participate in the magnet program, there are subtle ways that teachers can enhance interactions among students. One technique is called **co-generative dialogues**, which are meant to better meet the specific academic needs of students. In co-generative dialogues, four to six students and their teacher (during lunch, before or after school) engage in a conversation about the classroom. The conversation must generate an action plan and the goal is to help the teacher become a more effective teacher. Teachers will be learning how to conduct co-generative dialogues, as they are powerful tools for creating classroom-learning communities, especially with students from historically disenfranchised groups.

Various research-based best practices and strategies, including multi-tiered interventions and positive behavior support that improve student achievement for children from diverse groups will be implemented in these project schools. Using Vgotsky's theory of social constructivism, Johnson, Johnson, and Holubec state that **cooperative group work** produces higher achievement, greater motivation to learn, more positive relationships among students, greater acceptance of differences, and higher self-esteem. **Interdisciplinary project-based learning** eliminates the piecemeal, patchwork approach to learning and focuses on the interconnectedness and interrelationships of real-world, critical issues. Both cooperative group work and interdisciplinary project-based learning will be cornerstones in the LISD Synergy project.

Social scientists often use the term social capital to describe social connectedness to describe the informal ties to family, friends, neighbors, and acquaintances, as well as involvement in civic associations, religious institutions, athletic teams, volunteer activities, etc. A New York University doctoral researcher, Kate Schwartz analyzed the transition from elementary to middle

school and from middle school to high school in a study in the American Journal of Community Psychology and indications are that community groups and sports can help students stay more connected academically during this critical transition period for low income students. Schwartz found that students who took part in one or two sports or community activities outside of school a few times a month had higher grade point averages. Students will be encouraged to participate in these activities in the project schools.

Lower SES parents' social ties tend to be disproportionately concentrated within their own extended family and perhaps a small group of friends as well as a neighbor or two. This means that lower SES children are more likely to interact regularly only with kin and neighborhood children. When adjusting to college, choosing college majors, and making career plans, youth from more affluent, educated homes are more likely to engage with a wider array of informal advisors than just family members, such as faculty and outsiders. Children from poor families typically only have the opportunity to consult with one or two members from their immediate family. In short, the social networks of more affluent, educated families amplify their other assets in helping to ensure that their children have richer opportunities. To counter and 'level the playing field' for poor families that lack informal advisors for their children, **mentoring programs at each of the project schools** will connect mentors and "savvy" adults outside the family for students academically as they conduct academic research projects; but these mentors and savvy adults will also play a critical role in helping each child develop his/her full potential. Careful, independent evaluations have shown that formal mentoring can help at-risk children and youth to develop healthy relations with adults (including parents), and in turn to achieve significant gains in academic and psychosocial outcomes such as school attendance, school

performance, self-worth, and reduced substance abuse. These measurable effects are strongest when the mentoring relationship is long-term and strongest for at-risk children.

Each of the Synergy project schools will incorporate ways to connect with families from diverse backgrounds. By sharing with the people around us, it helps everyone to make connections. Public art project and intercultural learning experiences will be fostered at the campuses. A particularly powerful art project that will be replicated at the Synergy project schools is the "Before I Die" art project. This project uses blank walls where post-it notes are used for parents, faculty, staff, and students to post a goal. A person's goal may be as simple as putting in a garden or as complex as becoming a fighter pilot; but it can also reveal commonalities and trigger connections. PTA meeting structures will value families by requiring faculty members to attend meetings in order to build relationships with families. Each meeting will begin with a simple dinner and include babysitting services for those who choose to use it, so families feel welcome. Additional monthly parent involvement meetings will be held in the mornings for those who must work nights. From Family Math Nights to Staff/Family Sporting Games to International Nights, families will be valued and placed at the center of the school community.

How to ensure equal access and treatment for participants who are traditionally underrepresented in courses and activities

Stereotypes start breaking down as people become more acquainted on a personal level. LISD plans to conduct an "equity audit" of each of its project campuses. This audit will examine such things as the school's discipline, suspension, and expulsion procedures, ensure that all students have access to rigorous courses to prepare them for college and careers, and partnerships between higher education institutions, medical facilities, and the business community. Research

suggests that years of little biases add up, shaping who gets identified for accelerated or advanced courses. “Are you sure you belong here?” is a critical question for a disadvantaged student, and it’s a micro-aggression incident of discrimination. Awareness of micro-aggression incidents will be highlighted and suppressed. Another strategy for addressing equal access and treatment of underrepresented students is called ***Shadow a Student***. Throughout the year, campus staff members take part in shadowing a student for a full day. This means eating lunch with the student, attending classes, and even riding the bus with the student. Adult insights from this exercise serve to shift their mindset and to bring them into full realization of what students encounter each day. Susie Wise, the K-12 lab network director at Stanford University’s digital-school states, “Some of the leaders who’ve done this have been surprised with how passive the student’s day is, how much sitting there is, how many transitions there are that don’t make much sense.” Using these insights administrators, teachers, and other staff members can develop ways to make the project schools more attuned to the needs of all students to ensure none feel disenfranchised. A further strategy will be to connect every student at the onset of middle school with an “education mentor” charged with mentoring the student through high school graduation and the transition to postsecondary. As part of this mentoring program, students will receive help from the local community college and higher education institutions, including tutoring, visits to college campuses, and financial planning. An often overlooked, underrepresented student population group is girls and especially girls from minorities and/or low SES. All-girl teams and/or girl-led teams in Engineering Club, Chess, Robotics, and other extra-curricular and co-curricular STEM and entrepreneurial activities will be a top priority for encouraging their full participation.

The Synergy project will also upgrade and strengthen the family unit throughout the district over the next five years. Vikki Katz, an associate professor of communications at Rutgers University with Michael H. Levine, executive director of the Joan Ganz Cooney Center, and Carmen Gonzalez, assistant professor of communication at the University of Washington state that their research clearly demonstrates that schools' outreach to parents is critical to helping families support their students' classroom learning and enhance their technology related skills. They found that parents and children fluidly trade expert and learner roles as they use technology together, and do so even more frequently in Spanish-dominant, immigrant-headed households. Beyond wiring the schools, the Synergy project will provide Wi-Fi to the neighborhoods where the historically underserved children live in order to better close the opportunity gap for them. Equal access and treatment for traditionally underrepresented students will be accomplished through 1) **safe and secure learning environments** 2) a dynamic, **highly qualified professional staff** successfully teaching a real-world curricula 3) campuses and facilities organized as **centers of community collaboration and learning** 4) a student body at each school that exhibits pride in school and is **fully engaged** in their learning 5) a comprehensive program to **integrate technology** throughout and 6) campuses that have effective and **open dialogue with the community**. We know that it takes high-quality teaching as well as good parenting for children to succeed. Through carefully crafted professional development the Synergy project will upgrade and strengthen the teaching and learning in classrooms throughout these project schools over the next five years. Families will also be provided needed supplemental services. These include summer and after-school enrichment and tutoring programs as well as health and social activities at the project campuses. One strategy for helping students who show signs of disengaging during the 7th and 8th grade years is to run apprenticeship programs to help them transition to the high

school. Counseling workshops will help students evaluate their options for high school and to be prepared for the social and emotional aspects of the transition and will include a peer-to-peer support system that employs high school students. A high school readiness metric will be based on students' attendance, grades, and history of suspensions from school because these are proven indicators of success.

Some strategies that will be used to increase access to advanced academic classes with the necessary academic support interventions to assure their success are: 1) Loosen or eliminate enrollment criteria for accessing advanced courses. Many times, teachers and guidance counselors express concerns that African American, Hispanic, or low SES students are unprepared and that enrolling them in advanced courses would lead to failure. This "protection from failure" actually works to deny students opportunities for rigorous educational experiences. 2) Send teachers and administrators to College Board workshops. 3) Indicate to parents it's better for students to take advanced academic courses, even if they get a lower grade. 4) Train guidance counselors on identifying and encouraging students to take advanced coursework. 5) Open more sections and offer more advanced coursework. 6) Develop an AP preparation program for first-time AP students. 7) Make an AP course the standard course (or eliminate the honors level). 8) Build more science labs in order to offer more sections of advanced science courses that require a lab setting.

To better serve the traditionally underserved student populations, including African Americans, Hispanics, Native Americans, females, Special Education students, limited English proficient students, and the disabled, magnet staff members will complete gender sensitivity training, generational poverty and diversity training as well as cultural competency coaching. Many of the magnet personnel represent these diverse populations (and diversity will be a top priority as

LISD recruits and develops top educators from their own ranks). These personnel will provide positive role models for encouraging students to think of the possibilities for their own lives.

The effectiveness of all other desegregation strategies to eliminate, reduce, or prevent minority group isolation with substantial minority students

The success of the project magnet schools in bringing families back to LISD will ensure diversity in the district. No one can operate within a hostile environment, let alone children whose circumstances were set just because of their birth: race, religion, gender, national origin, disability, or sexual orientation. The magnet schools in this MSAP project have developed **anti-bullying and character development programs**, are grounded in multicultural activities, and students will be engaged in community service projects and civic activities to develop and promote safe and nurturing environments. **Mentorships** on every campus will allow both face-to-face and electronic contacts with experts-in-the-field for work on academic projects; but will also connect students to the possibilities for their future. **Career awareness** activities will enable students to learn about career choices from engineers, lawyers, doctors, scientists, architects, accountants, computer technicians, government employees, psychologists, and others. Collaboration with community agencies and organizations provides opportunities for unique contribution to the magnet programs. Home visits reveal that **technology is non-existent** in many homes beyond a cell phone for students who attend LISD schools. The Synergy project will ensure that these children are afforded the resources to bridge the digital divide from one-on-one computer/tablet accessibility to a Wi-Fi environment for completing homework outside of the campuses through mobile Wi-Fi stations as well as having Wi-Fi available on the project campuses until at least 7:00 PM throughout the work week. High expectations in teaching means

effective teachers **make every instructional minute count**; time on task means students are engaged throughout the school day.

Research on raising achievement consistently points to an effective teacher as the most crucial element in a student's success. These campus projects are designed around some basic premises for ensuring effective teaching for enhanced desegregation efforts: 1) a strong **principal leader** 2) **raise expectations** for what's possible 3) participate in **literacy-based professional learning communities** 4) develop a **shared belief and vision** of the schools and its students 5) participate in **effective coaching** experiences, and 6) work toward becoming a **self-sustaining school**.

The Partners in School Innovation in San Francisco, CA states that, "Typically, black students still perform at significantly lower levels than white and Asian students. Schools that do achieve strong results for black students address racial dynamics carefully yet directly, empower students to bring their whole selves to school, and teach in ways that leverage students' experiences and cultures." For students, respect involves "a basic recognition of your humanity." Middle-school-age students reported losing respect for teachers who disciplined students in a dismissive or punitive way. Feeling respected can change how hard students are willing to work in class. One strategy for addressing racial dynamics is social justice through storytelling: connecting cultural literacy—an awareness of and sensitivity to diverse cultures and lifestyles—and media literacy—a knowledge of how to decode and produce media messages. Personal stories allow students to talk about their passions, whether it's their own lives or the problems they see in the world. These cinematic personal documentaries allow students to talk about their struggles. Although extremely personal in nature, when students are empowered to tell their own stories, learning becomes energized. The process of telling your own story automatically becomes one of listening to and decoding the stories of others.

Quality of Project Design

The LISD Synergy project incorporates strong STEAM conceptual understandings infused throughout its magnet themes. **Starting with the ideal high school graduate, Longview determined what every student would need to reach that ideal**, regardless of which pathway to graduation the student chooses**.** Nancy Spillane, a clinical associate professor at the Center for Excellence in STEM Education at West Virginia University and Sharon Lynch, a professor of curriculum and pedagogy at George Washington University in Washington, DC collaborated with doctoral candidate, Michael Ford to analyze what highly successful secondary schools do that make them so effective. The study schools were scattered across the nation and were made up of higher proportions of students from groups that are traditionally underrepresented in STEM (African Americans, Hispanics, women, students from low-income families, and first-generation college-bound). None of the schools used academic admission requirements; but instead used a randomized lottery for admission. The research study was called, "Opportunity Structures for Preparation and Inspiration." The following strategies and/or procedures highlighted in the study are being infused in the project design of the LISD project schools: 1) Students will be offered broader and deeper STEM coursework than mandated by the state of Texas in order to graduate with a more enhanced high school diploma. 2) Leadership will be distributed among school administrators, teachers, and at times, students. 3) Each school will have a clear sense of its mission. 4) Project-based learning will be the dominant instructional pedagogy used to deliver the curriculum. 5) There will be a blurred boundary between formal and informal education allowing for reconfiguring relationships among teachers, students, and knowledge. 6) Each school culture will be a rich learning place for students, but also for the adults who work there.

Each of the LISD project schools will have regular professional development opportunities designed to foster staff collaboration horizontally through grade-level planning sessions and vertically through subject-specific efforts. One morning each week will be designated for using a "tuning process" at campus staff meetings where teachers will engage in reflections about their teaching practices and choices for assessment. Professional development experiences will include teacher-developed lessons inspired by instructional rounds conducted by groups of teachers observing each other and led by the campus Magnet Specialist.

This Synergy project is built on **strong theory** that students, especially minority and low SES students, will be more engaged academically when the curriculum is more **personalized to their interests**, when the curriculum is more **authentic**, in other words, where conceptual understandings are applied through interdisciplinary projects addressing real-world issues, and when the curriculum is **infused with the arts** to address individual student expression. With STEM, students will engage in scientific inquiry through questioning, developing models, investigating, constructing explanations, and communicating information. STEM also promotes collaborative learning, which is key for students to be successful in careers, and has been shown to increase both flexibility and fluency in math. STEM pushes science and math learning to Bloom's highest cognitive level (creating and evaluating). Optimal solutions rather than perfect solutions means critical thinking must come into play as learners grapple with the requirements of a problem. A designer in the corporate world, in order to design the most affordable products or processes, must make some trade-offs or compromises. The reality is practicality. These real world understandings will become apparent as students work through a design project. As they record their design sketches, data, and reflection pieces, students must rely on their knowledge of science and mathematics as well as the specialized skills of design, optimization, and making

trade-offs. Purdue University's Design Goal Process will be used to guide project-based learning: ASK: What is the problem? What have others done? What are the constraints? (**research phase**) IMAGINE: What could be some solutions? Brainstorm ideas. Choose the best one. (**brainstorming and converging ideas phase**) PLAN: Draw a diagram. Make a list of materials. (**application of science and math concepts phase**) CREATE: Follow your plan and create it. Test it. (**synthesis/creating phase**) IMPROVE: Troubleshoot and make your design even better. Test it. (**critical thinking phase**) The answers to these projects are in the students' realm as opposed to traditional schooling where teachers hold the correct answers. Students have control of the outcome. Students use oral and written communication to promote knowledge construction and critique using scientific argumentation, which includes **individual cognitive activities** and the **negotiated social act** of talking and writing within a specific group. Students learn to **research to understand** problems better, they must **argue from evidence** and **analyze data using mathematics**; and they must communicate results to others.

Partnerships: The project schools will be "porous" to the outside world, changing the relationship between student, teacher, and knowledge by changing the schools' connections with their surrounding communities. Outside experts will be welcomed as project mentors, panelists, and/or judges…either in person or virtually. Students will be provided outside-of-school, real-world experiences and career connections through community-based projects, field trips, mentorships, internships, and job shadowing. Students will make formal presentations of their completed projects before panels made up of business personnel, scientists, teachers, other students, and community members. Such connections to outside STEM experts and community resources will give students increased freedom and accessibility to learn in settings beyond the traditional classroom. These intentionally created school structures will support teacher

collaboration and foster relationships that will allow teachers to learn from one another and work toward common goals by creating an environment of trust. Shared decision making and opportunities to assume leadership roles within the schools will give teachers a sense of ownership for the school outcomes, and reinforce the school-wide collaborative culture. For students, the flattened hierarchies of the project schools will deepen student understanding of STEM, bolster their confidence, and allow them to see new opportunities for college and career. The Longview, TX Chamber of Commerce partners in education is addressing ways that local businesses can leverage their expertise to support and mentor students in the Synergy project schools. Eastman Kodak Chemical, Longview Regional Medical Center, and Christus Good Shepherd Health System are just three of the local partners that will have invaluable experts for the Synergy theme. LeTourneau University and the University of Texas at Tyler will partner with the project schools to bring real-world STEM experiences through events such as *Astronomy Star Party* or *Business Ventures through the Stock Market*. The magnet schools will focus on innovative instruction, and then access informal STEM resources in the community to enrich student learning. These partnerships will unite scientists, educators, and students through mentoring experiences for students working on research projects as well as for teachers developing lesson plans and activities, and through summer internships and shadowing experiences for both students and teachers working with scientists. An example of a project-based unit that incorporates a real-world STEM experience is one that would allow students to choose a medical facility such as a Senior Living Home, a Nursing Home, a Hospital, or Rehabilitation Center in order to learn biomedical concepts tempered through an entrepreneurial lens. Students and teachers, with the various business and medical partners, would discuss each facility's common purpose within the community, thus bringing civics understandings together

with the STEM conceptual understandings. As students probe deeper into their unit of study, under the guidance of their teacher and the expert(s)-in-the-field the question of, "Why do I need to learn this?" is answered and becomes a powerful learning motivation.

Through a very rigorous curriculum that **personalizes learning for every youth**, students will develop deep understandings of the world economically, socially, and environmentally. Economics and finance lessons will emphasize analysis and critical thinking. Capitalizing on the **high interest of the arts**, students will use the arts to develop strong science and math literacy inherent in project-based learning. For example, the science and math needed to create a kinesthetic art piece that has movement yet captures the theme of the city's spring celebration is a real world challenge for young students as they explore center of gravity, simple machines, and friction within a civics community project. Team building, leadership, service learning, and citizenship will be key elements as students hone their skills as young entrepreneurs, enabling them to take higher level academic courses when they move on to Longview High School and then graduate to pursue advanced certifications and/or higher education.

The following logic models are based on strong theory of change in alignment with overarching outcomes of the MSAP legislation statutes dealing with desegregation effort, student academic achievement effort and capacity building effort. The extent the project is supported by these strong theories will be discussed in more depth at the end of this Project Design section.

Logic Model: Longview, TX Project DESEGREGATION EFFORT

Magnet Themes: Montessori PK/K and Montessori 1-6 campuses, STEM through the Arts 1-5 campus, IB-Middle Years Program campus (6-8), IB & Early College (9-12)

THEORY of CHANGE: High student interest in arts-infused and hands-on academic environments is based on STRONG THEORY that the arts have a dynamic draw for low-SES and minority student engagement

Resources	**Activities**	**Outputs** (products/services)	**Short Term Outcomes**	**Mid Term Outcomes**	**Long Term Outcomes**
District Staff MSAP funds -Funded Staff -Supplies/Equipment -Contractual Services -External Evaluation Professional development for teachers on cultural competency, generational poverty, and diversity issues Community Support -Magnet Advisory Board -Campus PTOs	-Board approved Voluntary District Desegregation Plan and Marketing/Recruitment when released by court order in December 2017 -Educate community about magnet school offerings -Showcase events featuring magnet school students and faculty/staff -Teacher/staff home visits to transition year students (PK, 6th, 7th, 9th grades)	-Annual distribution of Magnet brochures and flyers to Longview area -District Magnet Infomercial to air on local TV channel -Area-wide marketing blitz of magnet program, including billboards, radio spots, and newspaper ads -Quality project management -Applications and race-neutral lottery process	-Increased community awareness of magnet schools -Increased enrollment of students from outside district -Improved parents' knowledge and perception of magnet schools	-Increased community and parent support for magnet schools -Improved school/family relations -Increased sense of belonging and school bonding for students	-Increased socioeconomic and racial diversity in magnet schools -Consistent pool of applicants each year to magnet schools -Interaction and parent involvement from all diverse groups throughout schools
Context: -LISD's commitment to equity for all students -Lack of diversity in advanced academic courses throughout LISD project schools -Need for more welcoming and student-centered learning cultures for all families and students within the project schools -High School IB program is highly considered by the community and drawing affluent non-minority students to the school.					

Logic Model: Synergy Project Academic Improvement and Capacity Building Effort

THEORY of CHANGE:-Relevant and authentic interdisciplinary learning is based on STRONG THEORY that PBL and personalized learning academic environments have a strong impact on all student populations but especially for low-SES and minority student engagement

Resources	**Activities**	**Outputs** (products/services)	**Short Term Outcomes**	**Mid Term Outcomes**	**Long Term Outcomes**
Approximately $15 million in MSAP funds over 5 years -Funded Staff -Supplies/Equipment -Contractual Services -External Evaluation Professional development featuring evidence-based teaching strategies and interventions, as well as, strong theory-based pedagogy such as PBL, STEM, and personalization -Creative learning spaces in schools that blend on-site and off-site learning	-All teachers and staff participate in magnet prof. develop. with follow-up coaching -All campus leaders participate in leadership trainings w/ follow-up coaching -Teachers meet in PLCs weekly to work on improving instruction and student learning -Business, community, and higher education partnerships established -Align standards-based curriculum with STEM concepts across schools -Develop annual Faculty/Staff Retreats -Expand campus' Parent Resource Centers -Hold Parent workshops and family events	-Teacher developed Interdisciplinary units of study that include student-centered goals for learning -Mentoring relationships -Professional Learning Communities at each project campus -Core courses aligned to graduation pathways, including IB, AP, and Early College diploma pathways -Arts infusion throughout core content coursework -Authentic STEM experiences that connect student learning to the outside world -Bridges for families that connect them to academic and community resources -Mentoring and enrichment for students and staff	-Teachers increase knowledge of content and instructional strategies w/ theme -Teachers develop shared values and vision emphasizing student-centered learning -Enhanced communication skills of school leaders, teachers, and administrative staff -Increased parent/teacher/student relations -Enhanced instructional competence of teachers -Service learning projects become an integral part of curriculum	-Teachers adopt effective instructional practices; including increased use of differentiated instructional pedagogies and interventions -Improved student academic achievement -Student-centered school cultures that are aware of and accept each child's individuality -Increased student interest in STEM careers -Schools' cultures see students as unique individuals and encourage them to use critical and creative thinking	-Increased student achievement on state assessments -Institutionalize evidence-based strategies and interventions -Decreased disparities in graduation rates -Increased rates of college acceptance and attendance without the need for remediation -Student-centered school cultures that accept and enhance each child's individuality -Personalized learning with social, emotional, and health services integrated throughout the culture of the schools

Context:
-Many students are not accessing their academic potential and languish as they move on to each grade level
-Lack of diversity in advanced academics and higher level STEM courses at the middle and high school
-Lack of diversity in co-curricular and extra-curricular activities throughout the project schools' grade levels
-Students leave LISD to be home-schooled or to attend private, parochial, or suburban schools perceived as safer and/or more academically viable

Professional Development: All of the project schools are new magnet schools with unique themes, which will accommodate all the nuances of an integrated STEAM curriculum. Training for the teachers in the Synergy project will be ongoing and embedded as "just-in-time" coaching and mentoring on the concepts to ensure that STEAM is truly infused throughout the day and throughout the core magnet theme curricula. Longview High School will continue the articulation of the International Baccalaureate magnet theme from Forest Park Middle School's IB-MYP magnet theme up through the 12th grade. Ned E. Williams Elementary will be a STEM through the Arts magnet and both E. TX Montessori Prep and E. TX Montessori Academy will incorporate STEAM throughout Maria Montessori's vision of the child-centered prepared environment. This Synergy project has brought the project schools' faculties and staffs together with a concerted determination and all are excited about the new magnet focus of their schools. The higher education institutions in the Longview area will offer teaching endorsements in engineering, science, mathematics, and entrepreneurship, while also connecting teachers to internships and shadowing experiences throughout the summer months through the local and regional partners in education.

The common threads that connect each of the project schools will include 1) **guided inquiry** using extended projects that teach concepts and skills that generate complex products 2) **curriculum, aligned to each school's magnet theme and to the Texas State standards,** which use authentic problems set in **real world contexts** which deepen students' science and math literacy 3) the use of **modeling and visualization** for bridging experiences and abstractions 4) students' **collaborative construction of meaning** through differing perspectives based on shared experiences, and 5) the use of **workplace tools for developing face-to-face and virtual learning communities**. Project campus' faculties will receive basic Project Based Learning

training from the Buck Institute and over time, as with any initiative, individual teachers will be identified and step forward as leaders to work on more advanced PBL training, serving as mentors and coaches to their peers.

All teachers and staff members will have extensive training on project-based learning, which is the use of in-depth and rigorous classroom challenges that students use to focus their learning of STEM concepts and understandings. This is a non-traditional style of teaching and it means teachers will need the initial training and then coaching and follow up to ensure that implementation of this new student-centered learning is maintained. The **Buck Institute for Education (BIE)** offers consultants, webinars, workshops, and videos designed to help districts implement project-based learning in the schools. BIE is highly regarded by educators who use PBL strategies and the use of BIE across the Synergy project schools will maintain its implementation integrity. This professional development will be used to give teachers throughout the project schools the extensive and intense professional development on PBL pedagogy needed to ensure that all staff members are highly qualified to implement the required coursework effectively. This consistent training based throughout the project schools will provide a common instructional language for teachers to reflect and improve their teaching practice. The structure of this proposal with instructional coaches and PLCs in place at the campuses, trainings through the five years of the grant, and the daily focus of the entire faculty and administration on this new vision of learning, is designed to personalize instruction and truly revise the curricular programs at these project schools. Teacher teams will be linked to develop and co-teach projects in order to integrate subject areas and to ensure real world viability of the projects. This will also strengthen teacher buy-in and support for this student-centered teaching style.

Technology-rich work settings will allow students to use technology to investigate, problem-solve, design, model and test original solutions in order to **construct appropriate mathematical and computational models to illustrate conceptual understandings**. Each of the schools is requesting **classroom sound systems** to minimize distractions for students, and especially for students with hearing loss. Assistive technology offers supports for not only students with disabilities, but for all students, including those in the special education arena. For example, a student with autism might use a tablet and keyboard to remove the anxiety that writing by hand causes him/her. While access to the tablet is the first step, it doesn't end there. Lessons need to integrate the technology purposefully in order to allow students with special needs to learn successfully. Technology has the power to unleash the academic and social potential of students enrolled in special programs and for students with a variety of disabilities. Instead of remedial school experiences, students with special needs deserve instruction that is accessible and purposeful. Technology can enable students to work through parts of the learning process that are particularly challenging for them. The right tools can also help make content more accessible by allowing students to learn through their strengths. Technology gives students with Individual Education Plans multiple paths to reach a goal. In addition, students often exhibit increased confidence because they need less assistance from an adult. Some simple but powerful ways to maximize student learning include: 1) **speech-to-text apps and software** for students who are highly verbal yet struggle with writing 2) **a mini-lesson recorded** to watch again as needed for students who need more processing time 3) **specific apps or games which focus on a particular skill** such as phonics or math for students with a specific learning disability in reading or math 4) **apps and software that read text aloud** for students with a specific learning disability in the area of reading 5) **sequencing apps** for students with expressive language needs.

These instructional and assistive technologies are often underutilized, and their impact on students is invaluable. When used purposefully, technology enables teachers to provide more interactive, graphic, and sensory supports.

To close the achievement gaps and build on ELLs' (English Language Learners) strengths, teachers for ELLs need additional skills and abilities. Ideally, a bilingual teacher in the classroom is the best solution and LISD will recruit bilingual teachers as much as possible. Beyond bilingualism, the following **Sheltered English techniques** will be developed as part of the cultural competency professional development offered at the project schools: 1) knowledge of language uses, forms, and mechanics 2) efficacy with respect to helping all students achieve high standards 3) strong relationship-building skills and attention to the social-emotional needs of students 4) cultural knowledge and the ability to incorporate this knowledge into instruction 5) specific pedagogical skills, including knowing how to conduct formative assessment of students' developing skills 6) organize the classroom to invite greater participation and 7) scaffold instruction for students who are struggling with English. Great care will be given to provide professional development for non-bilingual teachers on ways to adapt their lesson plans and materials. Books, apps, computer programs, and learning materials, in the languages needed, will be provided. Bilingual parents and volunteers will be invited to engage in reading and learning activities, thus preparing and encouraging families to take an active role in home language literacy. Bilingual paraprofessionals for classrooms that need language supports will be a top priority.

Building relationships with families of immigrant students, along with ALL the students in the magnet schools, will be a major focus of this LISD Synergy project. It will be important for teachers to get to know each family and learn the family's "story." This can be a long process,

filled with trial and error. In order to handle informal, ongoing communication between teachers and parents, bilingual services are available throughout the district, but additionally, will be **guided by the Student/Parent Intervention Specialists** at the magnet schools. It is critical to do the following: 1) find out whether parents prefer communication through phone, email, or text messages 2) use bilingual interpreters and/or parent liaisons to help translate classroom signs and labels, activities students take home, and parent newsletters, or to help during parent meetings or open houses 3) train parents or community volunteers to interpret key communications to parents 4) use a language line to have a conference call with a parent. While sometimes necessary, it will be best to avoid having students translate for their parents. This task is stressful and students may only know the school-related vocabulary in English. Building trust with families is all about making them feel comfortable and at ease.

Professional development will be highly focused on projects and incorporate science and math applications through engineering design. A Council of Chief State School Officers 2008 study stipulated that three conditions must be met to have an effective STEM program: 1. The programs should be focused on content in mathematics and science. 2. The programs should include on-site follow-up in classrooms. 3. The teacher-contact time should reach at least 50 hours. The Synergy project has taken all three conditions into account. With instructional coaches at the campuses, follow up and just-in-time coaching will be a daily process as teachers incorporate content and strategies into their teaching. After extensive teacher training and coaching, the faculty members of the project schools will incorporate innovative teaching practices and techniques, such as but not limited to, **constructivist teaching strategies, cooperative learning techniques, and project-based learning** that integrate STEAM concepts through the content areas. **Design Technology Engineering for American Children**

(DTEACH) professional development will train teachers on beginning lessons on engineering topics from design and product fabrication to design technology and energy. **LEGO-Dacta Robotics** training will generate enthusiasm among teachers as they experience the exciting world of pneumatic circuit construction combined with problem solving and real-life structural principles. **Activities Integrating Mathematics and Science (AIMS)** professional development integrates hands-on design activities with the use of technology to promote analysis of structures and their construction. The **University of Texas at Tyler Summer Seminar Project** provides educators with the opportunity to collaborate with guest speakers who are engineers from all walks of life. **NASA Distance Learning** training assists teachers in affording students virtual field trips through linkups to provide tours, activities, and discussions with engineers and astronauts, which focus on space flights. **Jason Projects** such as, "Frozen Worlds" will motivate upper level teachers to develop projects that investigate, in this case, the habitats and survival of animals and humans at Glacier National Park and Antarctica. **Computer Assisted Design (**CAD) program training actively involves educators through computer technology in how to rotate a 2-dimensional object to a 3-dimensional object for architectural and mechanical engineering student projects. A variety of community-based instructional trips, shadowing opportunities, and mentoring experiences will provide positive learning for all ages.

The manner and extent student academic achievement will improve

National research has shown that by the fifth grade students lose interest in individual science, technology, engineering, and mathematics. The interdisciplinary STEAM focus that undergirds each of the magnet themes at the project schools will be geared to excite and engage even the most reluctant student. The project magnet schools will be exposing students to coding, engineering, and general problem solving while incorporating the arts into STEM. At the upper

elementary and middle school years, **courses will be reworked and relabeled to spark students' interest.** After school programs such as, *Engineering, Design and Modeling* as well as *Engineering Simulation and Fabrication* will be semester-long opportunities that will allow 7th and 8th graders to explore career and technology. Mini career and technical education classes will give middle school students experience with fun classes to motivate them to get into the more rigorous academic pathways when they move on to high school. A high-school credit class (Essentials of Computer Programming), which is a prerequisite for many career pathways, will be offered to eighth graders. Students in this course can go into programming, computer science, digital design, or web development. The need is to hook students early so they can take advanced career and technical coursework, including dual credit courses, before they leave high school. At the high school, students pursuing an advanced diploma such as AP or IB will have access to advanced courses, including but not limited to, the following: Seminar with Leadership & Service Learning in the ensuing semester, Research, Micro and Macro Economics, Robotics, Principles of Biomedical Sciences, and Cyber-security. At the middle school, students taking IB-MYP or an advanced academic pathway will have access to advanced courses, but not limited to, the following courses: Information & Communications Technology, Leadership & Service Learning, Exploring Personal Finance, Robotics, Design & Modeling, Algebra I, Physical Science, Essentials of Computer Programming, and Environmental and Spatial Technology.

The plan is to expose all students to a rigorous curriculum and increase the value of a high school diploma by taking concrete steps to increase opportunities for minority and low SES students. One step will be to identify "missing" students by digging into school-level data and surveying staff and students about barriers and access. Student profiles will be prepared with information on each student's educational goals, career interests, adults they trust, and barriers

they face. Letters will be sent home to parents and an IB/AP recruitment night will be held for middle school, as well as high school freshmen and sophomores where the students and families can meet IB and AP teachers and students already enrolled in the classes so as to ease their anxieties about pursuing the advanced diploma pathways.

Personalized learning is a progressively student-driven model in which students deeply engage in meaningful, authentic, and rigorous challenges to demonstrate desired outcomes. As students gain more insight and responsibility for their learning, the facilitation of learning goals becomes more student-driven. For example, a **teacher-generated learning goal** on a science unit on extreme weather might be for students to understand the causes of hurricanes and tornadoes in the United States. A **teacher and students co-created learning goal** for that same unit might be that, after initial research on various kinds of dangerous weather patterns, the teacher and students work together to identify two locations that are of interest and key questions they'd like to explore about the kinds of extreme weather that affect those geographic areas. Finally, a **student-generated learning goal** for that same extreme weather unit might be to study how recent hurricanes have affected Haiti since the student's heritage is Haitian. Thus each unit of study is **structured and based on learning standards, yet flexible** to meet individual students' interests and passions.

Mobile devices are allowing digital learning to take place anywhere—on a bus, a beach, a bed, or at a ball game. That's why each of the Synergy project schools are turning their libraries, unused closets, hallway nooks, classrooms, and even outdoor areas into open, collaborative spaces that better reflect the open, collaborative learning of today. The question is, "How do we design this so students are able to see themselves as learners where ever they go?" The project schools will be upgrading the bell/clock safety systems to incorporate hall video monitoring,

paging and piped in sound systems. School curb appeal will also be important to bring a sense of pride and ownership to these campuses, since students intuitively respond to their physical environment by taking pride in belonging to a highly perceived institution.

A meta-analysis of one-to-one computing programs conducted by Michigan State University researchers and led by Binbin Zheng, an assistant professor of counseling, educational psychology and special education found that one-to-one laptop programs, on average, had a statistically significant positive impact on student test scores in English/language arts, writing, math and science. The project schools will be implementing one-to-one computing programs at each of their schools to encourage the frequency and breadth of student technology use for writing, Internet research, note-taking, completing assignments, and reading. Laptop use will be used extensively, as a tool throughout the writing process. It is also hoped that student-teacher communications (via email and Google docs) will increase to enable parent involvement in their children's schoolwork to increase as well for more positive student attitudes and higher student engagement, motivation, and persistence.

Spaces must be able to be reconfigured as students gather in the morning for a Socratic circle to discuss ideas and opinions and then roll their moveable desks into small collaborative groups to work on a project. Students learn about engineering and manufacturing with hands-on projects—designing parts on the computer and then creating prototypes with 3D printers and using other machines to produce final products. Inspiration for the schools' student-friendly spaces center around micro-learning areas to address how people learn. Each school's "IDEA" (Innovation, Discovery, and Engagement Area) can be reserved by any teacher and will be able to be reconfigured in seconds to fit a wide range of activities. Students can face forward for a formal presentation or face each other for a discussion. Dry-erase paint will cover at least one wall,

inviting students to write or illustrate ideas. A mix of café tables in another section of the room will invite small group collaborations. Each area's centerpiece will be an Apple-style genius bar, where the instructional technology specialist can assist students and teachers with "just-in-time" support. Rather than simply telling students what to do, teachers facilitated by the Magnet Specialists will guide students through a structured "ideation" process so they find their own solutions—such as picking a tool for a video project or an app for a lesson.

Student spaces will be transformed to look and function more like work spaces in tech companies. From letting students draw on hallway tiles to create bar graphs and spreadsheets to putting old lawnmowers, sewing machines, and discarded coffeemakers in a project lab for students to rebuild, these magnet schools will encourage students to be "makers" and "inventors." An unused closet may become a maker space complete with 3D printers and a tool cabinet filled with items from people's garages, including glue guns, drills, and soldering irons. The idea is for students to invent things and solve problems. Instead of an Hour of Code, these schools will weave coding into cross-curricular projects all year long.

In a manuscript titled, "How Does Participation in Middle School Technology Education and STEM-Related Career and Technical Education (CTE) Courses Impact Student Achievement in Science, Mathematics, and Reading?" Dr. Daniel Cox from the Volusia County, Florida school district studied the relationship between enrollment in the county's 14 middle schools' STEM offerings and student performance on the Florida Comprehensive Assessment Test (FCAT). The first conclusion was that students who enrolled in CTE courses scored better on math and science than students who took no CTE courses; but when the study looked specifically at students who enrolled in the **Technology/STEM elective that included Pitsco labs**, an additional bump in scores was identified. The Synergy project schools are incorporating these labs into their STEM

classes. With **Pitsco Education Missions**, the teacher can access student data and information in a matter of minutes. The upper-level mission pretests and posttests track all student scores for each mission. Based on the content learned in the hands-on, team-based missions, the teacher can also show examples of higher-order thinking, problem solving, brainstorming, and collaboration. Mission titles include: Circuits, Crime Lab, Energy, Engineering, Flying Things, Motion and Force, Puzzlers, Rocketry, Simple Machines, Skyscrapers, and Technology and Design.

Another area that project schools are incorporating into STEM classes is robotics, which is expanding rapidly. **TETRIX Building System** is a natural choice for robotics. TETRIX has a wow factor that impresses engineers and programmers. TETRIX has a multitude of parts available so building and programming a humanoid robot is a great possibility…in fact a high school team using a TETRIX Building System took first place in the World Robotics Olympiad competition at Qatar in 2015. The team built an elbow system, increasing the number of servos on each arm to six, which allowed for greater mobility. They also added an ultrasonic sensor to their rock detection system and transformed the right arm of their humanoid robot into a rock grabber. Then, they added some '*bling*' in the form of an LED strip.

Freshmen will be able to enroll in either (or both) Pitsco Module labs (STEM/Robotics or Biotechnology) as introductory career courses. All students will encounter project-based learning experiences in the core math and science classes where Pitsco kits will be used in PBL learning activities. The STEM/Robotics module lab addresses a critical shortage of engineers and skilled technicians as well as programmers, technology troubleshooters, and audio/visual specialists. The Biotechnology module addresses the healthcare system where there is a critical shortage of qualified professionals in all areas. Near the end of the school year, the knowledge these

freshmen gain from the biotech modules will culminate in a field trip to Longview medical facilities to see up close how nurses, doctors, surgeons, and others perform their duties.

In the math and science classrooms at the middle school and high school, students will better understand perplexing concepts by using hands-on Pitsco kits, such as T-Bot II, which is a hands-on robotics project that illustrates hydraulic power and mechanics. By doing higher-level polynomials, which is factoring and cubes, and since T-Bot shows volume and pressure, there is a strong tie-in for students. In Advanced Algebra (Algebra 2) students will be able to use the T-Bot II Hydraulic Arm from Pitsco Education that they assemble and use during several class periods to tie the Algebra 2 concepts to a real-world object. The T-Bot II illustrates hydraulic power and mechanics when students use a series of syringes and tubes filled with water to operate four axes on a robotic arm. From Straw Rocket Launchers to Cartesian coordinate systems to Parachute Kits, Longview students will explore STEM careers in an applied and dynamic environment.

Learning continues at both the middle school and high school as students reinforce concepts such as Earth & Weather and Force & Motion using drones. With the implementation of drones, students will understand applications of the content. Since drones fly with the use of a variety of forces, students will get the opportunity to experiment with the merger of forces that keep drones flying. The camera and video system aboard drones can be used to better understand geological and meteorological features. In Engineering 1 and 2, electronics, programming, mechanical engineering, and leadership as well as responsibility will all be part of using drones in the coursework. It can take students as long as two months to build a drone before getting it to fly. Thrust, lift, and drag are terms that will have meaning, especially because of the many crashes students are sure to encounter. They must pay attention to outside conditions, especially wind.

Using 3D printers to create different blades will allow students to experiment with different blade types and drag. Using drones will bring engineering and programming to life.

At the high school, an old environmental area that was used as an Outward Bound Ropes Course twenty years ago will be repurposed for an **outdoor environmental learning center called the Synergy Outdoor Studio with an amphitheater complete with sound and lighting and a nature trail.** Similar environmental learning centers will be developed at Forest Park Middle School (Environmental Pavilion), Ned E. Williams (Field Science Center), E. TX Montessori Academy (Nature Exploratorium) and E. TX Montessori Prep (The Farm). These will all have butterfly gardens, herb gardens, and landscaping designed by students through after school clubs and exploratories. Students with Chromebooks, iPads and/or laptops in hand will have the opportunity to cluster around the learning areas working on nature projects. **Dance, music, theater arts, pottery, photography and the visual arts** are all a part of the arts-infused focus of these magnet schools, especially for low SES and minority populations who may not have access to the arts beyond the school day. Students will not be turned away from participating in the arts due to lack of personal funds for an **instrument, a uniform, a costume, or materials and competition fees**. A **keyboard lab** as well as a **strings lab** will be developed at Forest Park Middle School, while a **guitar lab** will be added to Longview High for those students who want to pursue music. Arts integration turns curriculum toward work that not only reproduces knowledge, but uses it in authentic intellectual ways. Evidence shows that the arts can have powerful effects on student achievement…and be most profound for struggling students. Hallways in each of the schools will have nooks that resemble coffee shop environments with soft music and clustered tables for students to study and work together.

Collaborative learning spaces both indoors and outdoors will transform the cultures at these magnet project schools.

Some teachers in the Synergy schools have decided to turn their classrooms into "Learning Lounges" using furniture that is more informal than traditional such as **standing desks** that allow children to fidget as they concentrate on schoolwork and **stability ball chairs** pushed up to cozy, lamp-lit tables for student collaboration. Coffee Shop like tables can be adjusted to differing heights, allowing students to stand at counter height or to dangle legs while perched on bar stools. Other tables can be rearranged easily to suit different lessons or collaborative work. Students can also sit on beanbags or lean back in rocking video-game chairs. The minute the students have a Chromebook or a laptop in their laps, they tend to huddle in different places. This will make the room a place where students want to be. Since colored walls stimulate certain emotions, a bank of colored lights (which teachers can change depending on the need) will project the desired hue against white classroom walls. A large monitor will ensure every student an ideal view. Since monitors are usually twice as bright as projectors that only work best in dark rooms, teachers will be able to keep shades open during class time. The **PentaClass classroom audio sound systems** will provide 360˚ sound dispersion which is easily mounted in the ceiling and typically only requires one speaker per classroom.

Health and fitness are a huge concern at all the project schools and students will be offered ways to stay fit for life at the project schools, including after-school martial arts as well as early morning Tae Chi. For many low-income city kids, school life can expose them to healthy exercise and enjoyable life past times that they, hopefully, will continue as adults. At the project campuses **health and fitness equipment** will be added to the Physical Education programs to instill lifelong health habits for these students. Texas has an obesity crisis and the fitness habit is

something that must be nurtured and developed while students are at an age to make fitness and health a lifelong habit.

Chess is a game of skill that will start in the upper elementary grades and continue through the middle school and on to the high school. It has the power to transform lives for students as their ability to think more critically, to process data more rapidly, and to make better decisions is developed. The focus of the after school Chess Clubs will not be to simply learn how to play the game; but how to also apply its tactics and strategies to life. Throughout the year, students will keep a written journal or a web blog on how the tactics and strategies of chess are connecting to their lives…in other words learning the consequences of one's actions, to think through all available options when faced with a problem or decision, and to consider what may be the result of one's actions.

Each project school will also provide office space for teachers to collaborate on planning. The offices will be located near classrooms that constitute small learning communities in which teachers instruct student groups. These spaces make informal conversations about lessons and students more natural. It will also encourage more team teaching and interdisciplinary projects. Instead of working individually in classrooms, teachers will collaborate and plan together.

The computer labs at the schools will be turned into colorful open spaces with flat-screen TVs, pop art, roller chairs, and large tables. Students will be able to choose from semester long courses in programming, game design, interactive storytelling, or digital art and leave each school with a portfolio, a game or product they've developed, as well as a Certificate of Accomplishment. The libraries will become communication/media arts centers that connect with their school's TV and recording studios. Imagine students using laser cutters, 3D printers, microcontrollers, and wood shop equipment to learn about art, design, computer science,

robotics, engineering, and programming. One example of a project might be students who develop their own candy bars by creating vacuum molds in 3D and then designing wrappers with nutritional information in Photoshop. Then they will be ready to script and produce commercials as young entrepreneurs.

A distance learning lab, Young Authors' Lab, and mobile broadcasting station will be installed at the project schools for literacy and PBL student use. Housing conditions come alive as students assume the role of architects to design housing for migrant workers or for families interested in the minimalist life style by designing 'tiny house' living. The students will be able to work with local architects to design the project as part of their unit of study. In another PBL unit, high school students might gather and analyze data on texting and driving to create a public service announcement from their research. The after school computer club can also become an in-school internship as members of the class can work to code for computers and web sites while others, when needed, can be fixing and tweaking technology…providing a strong background for students wanting to go into some type of technology or engineering-based career. Students can also develop and execute their own community service projects through a community-based tutoring outreach program called Project Heart. This can become a "game changer for students" because it provides them with the opportunity to pause and see that there's a world out there that they can impact. The implementation of these projects requires students to exercise real leadership skills, which will serve them well when they step out the door and into the world of work.

CAMPUS DESIGNS

Montessori Magnet Theme at E. Texas Montessori Prep Academy (PK/K) &

E. Texas Montessori Academy (1-6): LISD has had a Montessori program in place for many years and it has provided a strong academic start for LISD children. Unfortunately because it has been 'scattered' at each elementary school for just the PK/K grade levels, the integrity of the program has suffered. Some families have also complained that they would like their children to have the option to stay with this dynamic academic program into the upper grades. In answer to parents' wishes and with the construction of the new E. TX Montessori Prep Academy for early childhood-age students as well as the newly refurbished E. TX Montessori Academy for grades 1-6, LISD will now have a viable Montessori program that will extend and articulate through the elementary years. True to Maria Montessori's philosophy of multi-age classrooms (typically, 3-5 yr olds; 6-9 yr olds; 10-12 yr olds), sixth grade will be added to E. TX Montessori Academy to give students an additional year before transitioning to middle school.

Guided by Dr. Montessori's discovery that children teach themselves, the Montessori Academies are designed around the concept of the "prepared environment." Under the age of six, Montessori emphasizes learning through the five senses, not just through listening, watching, or reading. Children, at this age, are engaged in individual or group activities of their own, with materials the teacher (who knows what each child is ready to do) has introduced to them 1:1. Above age six, children learn to do independent research, gather information through field trips, interview 'experts,' create group presentations, as well as create art projects, musical productions, science projects, and dramas. The most important element of any Montessori school is a fully trained Montessori teacher. LISD currently has a core group of Montessori teachers whose expertise will be 'retooled and re-polished' as these academies open for the 2017/2018

academic year. Each of the magnet specialists at these academies, will be experienced Montessori teachers and they will be supported by a certified American Montessori Society (AMS) district Montessori Specialist who will be hired to ensure that the Montessori programs at both academies are implemented with integrity.

The Montessori personalized instruction is designed to create a cohesive learning community, while respecting and nurturing individual abilities. Montessori materials offer dynamic exploration and avenues for self-expression, allowing children to progress according to their individual abilities and skills. Instruction begins in concrete realities and moves sequentially into abstract theory. This ensures that critical thinking skills occur naturally. At all times, children are guided according to their individual learning plans. The teacher continually adapts the plans by following the child's individual academic, social, and emotional needs. The Early Childhood Montessori education begins with "The Beginnings." Children share many different story myths from various cultures around the world as well as the scientific theories about the origin of our universe. The solar system is studied, the planets, the components of the physical world, geology and history, as well as geography. Moving through history, students begin studies of the Five Kingdoms from the first forms of life on earth (bacteria) to the most complex celled animals (humans). Botany and zoology are central components of the science studies. Students explore the needs of humans and how those needs led to the development of language, math, and inventions. As the students progress, studies become more complex and detailed as understanding is gained and further questions and curiosity arise. The math materials in the Montessori classroom allow students to gain complete understanding of the math processes and to build their own foundation of mathematical thinking. The Montessori math materials allow the student to develop an in-depth understanding of math concepts, while also memorizing math

facts. Students work at their own pace while receiving individual and small group lessons. From organizing and conducting an after-school bake sale to designing geometric garden beds, students will use and apply their math skills to real world encounters. Montessori classrooms also abound in music. Daily singing and listening are accentuated. The arts naturally integrate into cultural studies and language. Special guests join the classes to share cultural art forms and classroom drama productions and performances encourage students to gain poise and self-control with public speaking and performing.

In the Montessori schools, children are a part of a community. Acceptance, justice, and fairness are of supreme importance and a major part of the Montessori Peace Education. Peace education and conflict resolution are taught daily so that children learn to be part of a warm, respectful and supportive community. The peace education emphasis also reaches beyond the classroom through community service projects and pen pals from around the nation and around the world. Open shelves arranged around the classroom create separate and defined areas of study. Each area has a large set of perfectly complete didactic materials and lessons. Children freely choose their tasks as long as they know how to utilize the materials. If they do not, they may ask the teacher for an individual presentation. Practical life is a learning area that is focused on fine motor development and increasing the child's focus and concentration, as well as sense of independence. Other areas of study include: the sensory-motor education and cognitive skills development, language arts materials, mathematics, a library and listening center, an art center, a social studies center, and a science area that includes botany, zoology, animal classification, and microscopy. The environment for each of the Montessori classrooms is neat and orderly and is maintained this way by the children, not the adults. No one is permitted to interrupt, bother, or infringe upon another child's work or rights. Everyone's individual needs are always respected.

Children often offer to help others especially as their own needs are satisfied. The environment is always evolving. As children master skills, materials are put away and new ones are introduced. Even the room arrangement may change throughout the year, as the group's needs change.

Parent involvement is an important part of the Montessori program. Parents meet with teachers regularly and become active participants in their child's learning. Regularly scheduled parenting classes will be held to help families be more successful and cognizant of the Montessori philosophy in shaping their family behaviors.

All teachers will take certification training through the American Montessori Society (AMS) in Dallas. Training involves a two to three year commitment. Teachers and paraprofessionals will participate in six 6-hour academic sessions each year with more than 500 hours of hands-on instruction to become Montessori certified. Elementary teachers for the upper grades will receive an additional 30 hours of training to meet the elementary Montessori certification. Montessori training is intensive and includes Montessori child psychology, educational theory, material demonstrations, supervised practice with Montessori apparatus, observation of Montessori classrooms, supervised practice teaching, and extensive written and oral exams. During the internship teachers will have six formal evaluations per year.

When most students in the district are transitioning to the middle school, sixth graders at the E. TX Montessori Academy will benefit from an uninterrupted opportunity to remain for another year of study with their academic family. The academies will each have a new digital marquee, set along the street in front of the schools' entrances, which will be used to keep families and the community informed of upcoming events.

Imagine: Walking from the parking lot to the Montessori Academy, an art gallery of framed, student artistic renderings will guide visitors and families to the school's entrance. Baroque

music can be heard through the outdoor speakers and upon entering the school's foyer a large salt-water aquarium will set the mood for this peaceful and nature-focused Montessori school. Because of Montessori's strong connection to nature and ecology, outdoor learning areas at both academies will connect student learning to the natural world. From learning about the blister beetle (which is lethal to horses) to exotic invasive insects, students will learn how their world is interconnected through nature. Heirloom seeds will be used each spring to plant a Victory garden that students will harvest and use for their afternoon snacks. A butterfly garden to attract and feed Monarchs on their yearly migration will also provide a fitting setting for little ones to release their tiny butterflies at the culmination of their butterfly life cycle unit. An herb garden will be used to illustrate how pioneers and Native peoples used these plants for medicinal purposes. These herbs will also be used to flavor special culinary dishes as part of cultural studies. Student made stepping-stones will connect the garden areas to the Academy's Nature Exploratorium. A fire pit will be available as part of the outdoor learning center and will be lit for performances in the cool Texas winter months, but it will also be handy for students learning about campfire cooking, as well as Dutch-oven cooking on the frontier. Using simple mechanics, a pulley and axle system over the campfire will allow for lifting heavy cast iron pots on and off the coals. Physics becomes real!

A veterinary science unit will include a visit to a local veterinary hospital, to learn about animal behavior and how veterinarians practice routine animal care. Plants and animals will thrive in the outdoor Nature Exploratorium. Students will care and tend them as part of their science learning. A miniature pig, a little red hen, and a fuzzy rabbit will be the start of the Montessori Menagerie. A small greenhouse will allow students to tend to seedlings throughout the winter and then transplant the delicate plants into the campus flowerbeds and garden areas. Students will learn

the science of greenhouses by researching and designing their own prototypes out of popsicle sticks and plastic wrap. They will learn first-hand how the heat generated by the sun's rays must be countered with ventilation so that the tiny seedlings are nurtured rather than baked. In a Bio-fuels PBL unit, older students will learn simple chemistry, physics, and engineering concepts to explain how bio-fuels affect engine performance and emissions as they connect biology and environmental science. Cartography majors from the University will mentor students through their cartography PBL unit as they learn orienteering, geo-caching, and mapping. A culminating campout on the school grounds will include a twilight scavenger hunt and a dewy early morning sunrise. This event will be a lifelong memory for these youngsters.

Theatrical presentations featuring original music and dance will astound parents. The renovated stage area at the school, complete with beautiful stage curtains, a new sound system and additional lighting to highlight student drama and musical presentations will be the backdrop for student productions that evolve from themes of study and cultural events. A dressing room with costume storage will be constructed at the side of the stage. The costumes will be student designs to support the productions as students learn about the cultures and the contexts of each stage production. The cafeteria will be transformed into an inviting Cultural Café complete with murals from around the world. The atmosphere will be relaxed yet energized with large flat screen TVs that have been strategically placed along the walls so that students can watch broadcasts or morning announcements from the school's own TV broadcast studio while eating breakfast. At other times, soft music will play through the sound system.

The academies' classrooms (as well as all the project schools' classrooms) will become a state-of-the-art interactive learning environments. Each will have digital visual presenters, video projectors with ceiling mounts, interactive white boards with appropriate student devices, and

digital cameras. There will be laptop computers with appropriate software, iPads with educational apps, color printers, scanners and other academic tools. As part of the cultural learning in Montessori, students will have access to a wide range of experiences in art and architecture including the use of cultural art prints from various parts of the world. Famous buildings will be studied for their design, history, and political significance. A fully equipped science lab will allow students to actively investigate their world through activities such as learning how the three basic types of rocks are formed by melting milk chocolate chips to form igneous rocks, layering peanut butter and crackers to form sedimentary rocks, and rubbing hands briskly to 'heat' and then apply pressure to mash pieces of salt water taffy to form metamorphic rocks. Interdisciplinary studies connecting to nature will make STEAM learning a perfect fit for both of these Montessori academies.

STEM through the Arts Theme at Ned E. Williams Elementary (1-5): Ned Williams faculty and staff believe that a STEM through the Arts school curriculum provides the academic rigor, higher order thinking, and analytical skills that are essential to quality problem-solving and lasting learning. Children arrive at school with naturally inquisitive minds. Educators play a major role in preserving and enhancing such natural curiosity. Project-based learning set in a technology rich school environment will allow students to solve economic, environmental, and technological problems. *Imagine:* As you walk toward the entrance to Ned Williams, soft soothing sounds of indigenous flute music will be piped in through the outdoor speakers. You slow your step as you cross over the front door so you can read all the student-generated labels and discover what marine life is living in the large salt-water aquarium in the school's foyer. You notice a small sign that informs you that the school's Community Garden is a collaboration with the Longview Master Gardeners. As you pass the school's Science Lab, a 3rd grade class is

experimenting with polluted runoff. A group of students squirm and turn up their noses as they watch red food coloring and water (representing fertilizer and rain) run across grass clumps on a cookie sheet into a pan of water (representing the ocean). A second group investigates the effect of oil spills on birds as they dip feathers in water and then in oil to compare the difference. The students soon realize that the oil-coated feather is no longer able to shed water when they blow on it. Their understanding of environmental pollution is becoming more real to them as they research and participate in hands-on activities connected to this environmental project.

As you move to the primary wing, you open the door to a 2nd grade classroom where students are holding hermit crabs. The children notice your amazement and begin to enlighten you with all their newfound knowledge of this shy creature. A table in the corner, filled with research books and literature on hermit crabs, also displays the scientifically accurate poetry and information sheets that students have produced in their challenge to create an ideal hermit crab habitat. The teacher smiles, turns on the "Magic School Bus" song to signal the students back to their cooperative groups and asks them to record their new findings in their journals. Down the hall, fifth grade students are working on their full-size Leonardo DaVinci hang glider. Using the masters' own sketches, these 5th graders used mathematical ratios to determine the full size of DaVinci's invention. They planned, measured, and built their own small replicas and are now in the process of building a full-size model to fly on the playground. Student press releases have been created and PSAs, appropriate to the Renaissance era and highlighting DaVinci's flying machine, are in production and will be aired over the **school's broadcasting station**. The excitement and student engagement at this magnet school is infectious.

While the above scenarios show the hands-on learning that will continue as students work through the challenges of their unit projects, Ned E. Williams Elementary is also working at

personalizing instruction for every child through a technology rich environment that connects the STEM disciplines. Interactive devices and communication tools will be accessible throughout the school. Math stations will use iPads to allow children to use different math-learning apps while iPad carts, equipped with class sets of the devices, will be available to any teacher for special projects. Students will be able to check out devices from the media center to collect data and record what they're seeing on field trips for video presentations. Hand-held video recorders will be used for project-based learning activities such as interviewing, to record performances, and for raw footage for longer video productions and slide shows. Seamless integration of technology in the classroom is when a child or teacher doesn't stop to think that he or she is using a technology tool, it is just second nature. From connected interactive display boards mounted in each classroom to cordless microphones and textbooks online, Ned E. Williams' students will have access to the tools of the 21st century as they apply their understanding of science and math concepts through creativity, innovation, and design.

International Baccalaureate-Middle Years Program at Forest Park Middle School (6-8) & International Baccalaureate Program and Early College at Longview High School (9-12):

IB-Middle Years Program (IB-MYP) is the pedagogical basis for instruction at **Forest Park Middle School**. It will emphasize learner profiles and focus on intensive study of core subjects integrating internationalism, which articulates up through 10th grade at Longview High.

The **IB Diploma program** for the 11th and 12th grades is an academically rigorous program that emphasizes intellectual and international understanding, as well as responsible citizenship and community service. A goal at both FPMS and LHS is to prepare and nurture students who typically would not "see" themselves taking this elite academic program. The special features of the IB-MYP and IB programs such as the study of languages, emphasis on advanced study skills

including time management and goal setting, research projects, and community service are **features that will be emphasized throughout the entire academic program** at these schools. Interdisciplinary project-based learning and personalized learning using inquiry instructional techniques will be aspects of the whole school curriculum at both schools. As students gain confidence in their ability to apply what they've learned in new scenarios, the various pathways to graduation will be open to them. At the High School, options to graduation include: an IB Diploma, an AP Capstone Diploma, an Early College diploma with an Associate's Degree, or a general high school diploma called a Foundation Plan that includes a specific endorsement such as Public Service Endorsement, Science Technology Engineering and Math (STEM) Endorsement (must include Algebra II, Chemistry and Physics), Arts and Humanities Endorsement, Business and Industry Endorsement, or Multidisciplinary Studies Endorsement. With the Synergy project, students will be well prepared from the elementary grades through the middle school to confidently choose their optimal path to graduation when they progress on to Longview High School.

A **STEM summer camp** will be held each summer as a means of getting students and teachers primed for the STEM experiences and create excitement in the community for recruiting to Forest Park Middle School and Longview High School. Four camps will be held, each one lasting two hours per day over a four-day period (morning sessions for rising fifth and sixth graders and afternoon sessions for rising seventh through ninth graders). Fifth/Sixth grade students will experience the Pitsco Missions curriculum. Each four-student Mission Crew will work to complete hands-on application-based activities. They will also complete robotics activities. Seventh through Ninth grade students will experience STEM Modules and work in pairs as they experience application-based learning activities. On the last day of each session, a

parent information session will be a part of the final culminating celebration in which facilitators will share STEM education and its foundation for the **International Baccalaureate (and IB-MYP) and Early College** (as well as the AP Capstone and general diploma) pathways to graduation.

Imagine: In the **Longview High School** dance studio, dance classes will work out on the practice bars. The classical ballet students will be aspiring for their Pointe shoes, but for now they will practice the tango in preparation for the school *Dancing With the Stars* competition coming up in the ensuing week. Pre-drill team practice will take up most of the gymnasium but it will give way to the Zumba class in the next hour. IB fosters global citizens. Social, physical, emotional, and cultural needs of the developing student along with academic development is the IB goal. Teachers are taught to create a relevant and engaging instructional program that meets world-class standards. Various interdisciplinary approaches to learning such as considering visual depictions of music or looking at Big Ideas across disciplines is a key element of IB, and it will be a key element at FPMS and LHS. *Two examples of this interdisciplinary approach to learning follow*. One is examining connections between the early 20th century novel *The Jungle* and communism. Another example is having students read **The Diary of Anne Frank** while also considering the implications of being a perpetrator, a bystander, or a witness to the Holocaust. In the IB curriculum, questions on every imaginable topic are up for debate as teachers challenge students to ask questions and research their answers. Students' personal projects will usually spring from their individual interests and the products that show their evidence of learning, may be such items as a board game, a skateboarding video, a self-help book for teens, or even a music video with original music and lyrics. The schools' **project labs** will be well used by these students showing what they've learned over the course of researching and investigating their

topics. The IB mission aligns with what FPMS and LHS faculty and staff members believe as well: that they are, "creating a better and more peaceful world through intercultural understanding and respect." As early as the 7th or 8th grade, students will begin to identify their endorsement area or specialization in high school as they plan their pathway to graduation. Students pursuing an Early College diploma will be able to follow a four-year course schedule that will allow them to obtain dual credit at Kilgore Community College and receive an Associate's Degree. Not only will they obtain a world-class education in high school, but they may also receive career training.

A Synergy Extravaganza is planned for the 2017/2018 school year to market the five magnet schools to the community. Set up around the perimeter of the high school auditorium as well as throughout the halls will be stations where students from all project magnet schools and their teachers will demonstrate and explain various science concepts learned throughout the year using exhibits and student developed products. Using the Pitsco Education Flight Technology Module, students can model their own wings and actually put them to the test using a wind tunnel. As aspiring engineers, an airfoil design that produces a down-force instead of lift is exciting because, what is disastrous for an airplane, would be ideal on a car since it would act as a spoiler and enable the car to stay on the road.

Leadership development will be a major part of developing students at these project schools. Using the seven habits of highly successful people as part of the *Leader in Me* process, students will incorporate the seven habits into their personal lives. The *Leader in Me* is a whole-school transformation model that empowers students with the leadership and life skills they need to thrive in the 21st century. It is based on principles and practices of personal, interpersonal, and organizational effectiveness. The program builds individuals' emotional intelligences to improve

relationships, transform the school culture, and develop highly motivated staff members as well as students. Students learn how to become self-reliant, take initiative, plan ahead, set and track their goals, do their homework, prioritize their time, manage their emotions, be considerate of others, express their viewpoint persuasively, resolve conflicts, find creative solutions, value differences, and live a balanced life.

Statistically just 11 percent of low-income first-generation college goers graduate in six years. To combat this statistic for Longview High School graduates, LISD is setting up an Alumni Office in order to develop a way of networking and supporting Longview High's alum as they move on into the real world. Some will go directly into the world of work and it is important to know how they fare in that environment and to provide resources that support them beyond high school graduation. A major part of the Synergy project is to teach perseverance and future success beyond high school. This entails making LISD students, independent learners and preparing them for the ups and downs of college. The Alumni Office will also coordinate assistance in helping students calculate their GPA and provide assistance as they fill out housing and financial-aid forms. Follow up visits to see LISD graduates on their college campuses to check on them and refine the district network's college-prep programming will be a part of this Alumni Office. While most college freshmen struggle with the first semester of college, LISD graduates will have another hometown connection besides a family member who will be an adult advocate for them.

The extent that the applicant has the resources to operate beyond the grant

In preparing this proposal, Longview Independent School District has developed a cost-effective budget for sufficient start-up funds to implement the creation of the five magnet schools in a manner that will assure accomplishment of their magnet project objectives, so that when

funding ends, the district can, in good faith, pledge to continue support. Because this is the vision for the district, LISD has aligned each of its project schools' School Improvement Plans to this proposal. Basic instructional supplies have been provided from the general fund. Local funds will be used for personnel (administrators and teachers), supplies and equipment necessary to implement Texas' required curriculum. The MSAP funds will be used to supplement existing local funds and allow LISD to increase capacity. The schools' existing budgets will supply such equipment and supplies as: copy machines, fax machines, telephones, classroom furniture, electricity and climate control. The district will also provide transportation services to the magnet schools and pledges that this proposal will be sustained beyond the grant cycle. The five-year grant cycle will be sufficient time to institutionalize the key elements of this magnet vision so that the district will be able to systematically replenish and upgrade supplies and equipment and also to train and assimilate new staff members beyond 2022.

Multi-Year Financial and Operating Model: The three areas to be addressed with the multi-year financial and operating model are: Process and Technology, Work Structures, and Organization. A timeline of the multi-year activities can be found in the Quality of Management Plan section of this grant proposal. Cloud-based applications will be secured instead of capital investments in technology as much as possible. As the project campuses' magnet theme implementations are aligned with their Title I School Improvement Plans, a strong emphasis on organizational sustainability is being put in place. Classroom equipment and supplies, as well as the professional development for faculty and staff members will be the most significant costs of the Synergy project and these will be complete by the end of the grant cycle. Subsequent equipment acquisitions will be secured on a rotating basis to ensure that technology needs are

maximized over time. LISD will follow a systematic process of planning, communication, professional development, assessment, evaluation, and leadership support.

At the upper elementary level, students start to transition from consuming content to creating it. They multitask more and increasingly use the Internet to research information. Having devices that help create flexible learning environments is critical. Chromebooks at this age offer immediate access to cloud-based documents. Students and staff members will operate within the Google ecosystem. **At the high school** learning devices for this age must be powerful enough to run multiple applications and support software that can run more complex multimedia applications. High school students learning to develop iPhone apps in elective coding classes will use the 11-inch Macbook Air. This will enable students to use 3D-animation software programs that simulate activities such as a frog dissection. It will also allow doing fieldwork and connecting probes to the device to collect data, then with a robust Wi-Fi connection collaborate with classmates or students thousands of miles away. The magnet campus positions will be used to support and foster faculty and staff development and will be phased out at the end of the five-year cycle. While the grant management will abate at the end of the grant cycle, the work of guiding and supporting the magnet schools through ongoing curricular and instructional improvements as well as parental choice and student recruitment efforts will be ongoing as part of the district vision. This is not an add-on program for Longview; this is the district vision.

Members of the business community and higher education educators were a part of the development of the Synergy project and focus groups were held at various schools with families and students to create this magnet theme. Currently, LISD is a part of the **Chamber of Commerce's Partners in Education**, which is made up of business leaders of companies in the Longview area. Additionally, a **Magnet Advisory Council** made up of educators, parents, and

community members will meet regularly to provide input and feedback on the educational programs at the magnet schools. State and local leaders are committed to this vision.

The extent to which the training and professional development services are of sufficient quality, intensity, and duration:

Work toward **becoming self-sustaining schools** is all-important. Training for magnet administrators will be secured since the management of a magnet school requires a unique set of skills. The National Institute for Magnet School Leadership (NIMSL) offers a network of selected, top performing magnet school principals as mentors and coaches to the project administrators. Transforming the project schools' cultures will happen over time as faculty members develop into **effective, responsive teachers** who use their deep literacy and knowledge of their students to **make wise curricular decisions**. The project schools will be schools where teachers **routinely visit other classrooms, observe each other's teaching, and examine student work samples** as part of respectful relationships built from a strong foundation of trust. **PLCs focused on student achievement** and where **collegial conversations** about literacy, teaching, assessing, learning, and advocacy will permeate the school culture. Teachers will readily **transfer and apply their knowledge of literacy across the curriculum and across grade levels**. Students can explain what they're doing and why. **Student data and current research will inform and guide instruction**. Staff members will constantly strive to **improve and enhance their practices** while also nurturing **caring and trusting relationships** with colleagues, students, and their families; but ultimately, where **joy in teaching and learning is evident** throughout the schools.

Ongoing **professional learning communities** (PLCs) are the basis of the work that creates a whole school of effective teachers. In order for professional development to be successful and

positively affect student learning, professional development at these magnet campuses will be **job-embedded, ongoing, coherent, and intense** with follow up and coaching throughout the school years. The **development of a shared belief system and vision for the schools** began as teachers challenged each other's ideas and values to hone their vision for their schools. Successful literacy coaching will ensure that the PLCs positively influence student achievement. Each of the schools will have Magnet Specialists in place as instructional coaches in place who have developed trust with their faculties over the years. With the new trainings and focus at the schools, the instructional coaches will **demonstrate and model effective teaching** to teachers in their classrooms, as well as conduct **side-by-side guidance** as teachers teach their lessons. The coaches and teachers will collaborate in planning decisions, in on-the-spot teaching and assessing activities, in specific questioning to check for evidence of learning, and how to use that evidence to shift instruction. Professional development will be ongoing and occur throughout the school year. Cohorts of educators will be formed for networking and support as they enhance their expertise.

Resources and Training: While administrators and teachers, over the years, have had some great professional development trainings there hasn't been the critical mass of teachers trained in a shared vision of evidence-based research teaching methods and strategies as they will now have with the Synergy project. Additionally this training must include follow up and coaching to ensure that the training is consistent and implemented into the classroom. Since the Synergy project is the next phase of the district vision for improving its schools, administrators, teachers and staff members are working together. The implementation of the training techniques into the classroom instruction will be ensured because of the magnet personnel in place at each campus to provide just-in-time coaching and support but also because administrators will also be trained

and coached so that there will be a whole campus emphasis on improving classroom instruction. MSAP funding will be used to secure authentic curriculum development and instructional methodologies training with nationally recognized consultants, with higher education professors in STEAM fields, as well as at premier conferences and training centers nationwide. It will be important to give the very best professional development in the core disciplines as well as PBL, financial literacy, computer science, arts integration, interdisciplinary curriculum, and the strategies/best practices for these project schools. **Equipment and materials** must be state-of-the-art and staff must be trained to effectively use these equipment and materials if diverse groups of students are to be attracted. Teachers will be given the time and resources necessary to develop curriculum that is truly innovative, meets the needs of their students, and utilizes the full potential of modern technology. It will also be necessary to train all faculty members on the various equipment and software applications that will be purchased in support of thematic curriculum and instruction. The specialized equipment and supplies listed in the school budgets are costly and they require on-going training on how to use them effectively and efficiently. The potential value for students cannot be realized without authentic and extensive training for teachers on specific pieces relative to the magnet theme. Teachers in the magnet schools will receive initial training and then on-going just-in-time coaching and support to implement a high-quality STEAM program using personalized and interdisciplinary PBL teaching techniques that align to their schools' magnet themes.

LISD is requesting adequate funds to cover start-up costs of collaborative activities with the science, math, engineering, arts, and business departments at the higher education institutions in the Longview area, summer enrichment, as well as other expenses necessary to achieve the goals of this project. The magnet activities will be delivered efficiently and effectively through

aggressive marketing and recruitment, comprehensive and targeted professional development, thematic curricular design and development, alignment to the Texas state standards, thematic curriculum document writing and publishing, interactive evaluation and personnel improvement plans, recruitment of highly qualified personnel in specific thematic areas, instructional and marketing/recruitment materials, and upgrading of supplies and equipment. All will be taken to a new level of excellence.

High costs are associated with higher levels of integration and educational quality. District officials realize that to establish these new magnet schools in order to raise educational quality, as well as to attract affluent students to the district, the startup cost will necessarily be high. For start-up costs of a carefully designed program of this high caliber, and in a system that is in need of intervention, this per pupil cost is extremely reasonable.

The extent the proposed project is supported by strong theory

Magnet schools are recognized as a systemic reform model and, as noted in the Logic Model, the outcomes will transform the district and the project schools. The objectives with the respective performance measures are noted in the Plan of Operation section and will benchmark progress toward achieving the outcomes. Each theme is using project-based learning, a heavy emphasis on STEAM education, personalized learning strategies, as well as evidenced-based interventions to ensure each school's climate is conducive for all students to be supported and nurtured to become successful scholars. Based on the White House Summit on Redesigning America's High Schools findings, it was determined that Longview High School would be remade to be more tech-savvy, hands-on, career- and college-focused, more personalized in order to be more interesting and exciting for students to allow them to explore wonderful possibilities for their futures. This also meant that the project elementary and middle schools

would also need to be tech-savvy, hands-on, career- and college-focused, and more personalized as well.

School Climate Theory: One theory that offers insight into working with students is from New York University's Research Alliance, which assessed school climate and student achievement over time at 278 middle schools because they tend to have challenging school climates and serve students at a crucial time in their social and academic development. Based on 31,000 responses to surveys between 2008 and 2012, the authors focused on four measures of school climate: school safety and order, leadership and professional development, high academic expectations, and teacher relationships and collaboration. The study found that if a school improved from the 50^{th} percentile across the study's four measures of school climate to the 84^{th} percentile, teacher turnover declined by 25%. A similar percentile increase in measures of school safety and high academic expectations boosted math scores enough to account for an extra month and a half of instruction. Improvements in school climate also boosted language arts scores on state tests AND these gains were statistically significant. A teacher at one of the schools in the study, states that teacher retention and certain test scores have improved since the school started encouraging one-on-one coaching for every teacher and offered opportunities for them to take leadership positions. While more research is needed, this study validates the theory that addressing school climate data is valid as an assessment tool. Further justification for assessing student perception of a school's climate comes from Mary Helen Immordino-Yang, an associate professor of education, psychology, and neuroscience at the University of Southern California. In an interview with *Education Week,* Immordino-Yang states that, "Emotional thought is the platform for learning, memory, decision-making, and creativity, both in social and non-social contexts." The NoVo Foundation is funding her research on the social and emotional implications on

learning (www.novofoundation.org). While definitive results have yet to be published, it validates Longview's use of this theory to justify the 'high-touch' needs of students. LISD will monitor the perspectives of each school's climate from students, families, and teachers using a School Improvement Survey from the U.S. Department of Education's bank of questions on school climate. (See appendix.)

Project-Based Learning Theory: The Synergy project will be using project-based learning theory to upgrade the teaching and learning at the project schools. This teaching model organizes learning around real-world and authentic projects or complex tasks, based on challenging questions or problems. These interdisciplinary tasks involve students in design, problem-solving, decision making, and/or investigative activities. PBL offers students the opportunity to work relatively autonomously over extended periods of time, which then culminate in realistic products or presentations where students reveal their evidence of learning. The five criteria that distinguish PBL from discovery learning or other less-didactic teaching models are: 1. *Centrality* (not peripheral to the curriculum)—Students learn the central concepts of the discipline via the project. 2. *Driving questions*—The project must be crafted in order for students to make a connection between activities and the underlying conceptual knowledge that the teacher hopes to foster. 3. *Constructive investigations*—An investigation is a goal-directed process that involves inquiry, knowledge building and resolution. 4. *Learner autonomy*—PBL projects do not end up at a predetermined outcome or take predetermined paths. 5. *Realism*—This refers to topic, the tasks, the roles that students play, the context within which the work of the project is carried out, the collaborators who work with students on the project, the products that are produced, the audience for the projects' products, or the criteria by which the product or performances are judged.

The article, "Classrooms: Goals, Structures, and Student Motivation" in the Journal of Educational Psychology (1992), states that students who possess a motivational orientation that focuses on learning and mastery of the subject matter are more apt to exhibit sustained engagement with schoolwork than students whose orientation is to merely perform satisfactorily or complete assigned work. Accordingly, PBL designs, because of their emphasis on student autonomy, collaborative learning, and assessments based on authentic performances are seen to maximize students' orientation toward learning and mastery. In another article found in the Educational Psychologist (1991) entitled, "Motivating Project-Based Learning: Sustaining the Doing, Supporting the Learning" by Blumenfeld, Soloway, Marx, Krajcik, Guzdial, and Palinesar states that the way to insure students become more proficient at inquiry and problem solving is to simulate the conditions under which experts master subject matter and become proficient at conducting investigations. By shifting the major portion of instruction in schools from teacher-directed, teacher-assigned "schoolwork" with its emphasis on comprehension, to student-initiated, goal-driven, independent, "intentional learning" with an emphasis on knowledge building, learning is more likely to be retained and applied. PBL coupled with using technology makes the learning environment more authentic to students because the computer provides access to data and information, expands interaction and collaboration with others via networks, promotes laboratory investigation, and emulates tools experts use to produce artifacts. This is why Longview has selected to use PBL.

Infusion of the Arts Theory: In searching for how to improve learning for all students, but especially for minority and poor students, various studies on the arts pointed to their benefits: Elliott Eisner's work, *The Arts and the Creation of Mind* (New Haven, Conn: Yale University Press, 2002), John Dewey, "Art as Experience," in Jo Ann Boydston, Ed., *John Dewey: The*

Later Works, 1925-1953, vol 10 (Carbondale: Southern Illinois University Press, 1989), and Richard Siegesmund, "Reasoned Perception: Art Education at the End of Art" (Doctoral dissertation, Stanford University, 2000) all show strong theory for infusing arts throughout the core curriculum.

Jessica Hoffman Davis, who is a cognitive development psychologist and the founder and first director of the Arts in Education Program at the Harvard Graduate School of Education states that, in the process of creating, artists reflect on their work, consider alternative points of view, try out changes, and begin the cycle of revision again. She argues that teachers and students in all subjects would benefit from engaging in this reflective process. The achievement gap in the U.S. between minority students and non-minority students, as well as low-income and high-income students, also applies to equity and access. Artistic literacy will be infused throughout the core curriculum and throughout the day in the project magnet schools. The foundation for this thinking is taken from the work of the National Coalition for CORE ARTS standards: 1) In today's multimedia society, the arts are the media, and therefore provide powerful and essential means of communication. They provide unique symbol systems and metaphors that convey and inform life experiences as ways of knowing. 2) Participation in each of the arts as creators, performers, and audience members enables individuals to discover and develop their own creative capacity, thereby providing a source of lifelong satisfaction. 3) Understanding artwork provides insights into individuals' own and others' cultures and societies, while also providing opportunities to access, express, and integrate meaning across a variety of content areas. 4) Participation in the arts as creators, performers, and audience members or responders enhances mental, physical, and emotional wellbeing. 5) The arts provide the means for individuals to collaborate and connect with others as they create, prepare, and share artwork that brings

communities together. Each of the arts has common characteristics that make them powerful preparation for college, career, and a fulfilling life for all LISD students.

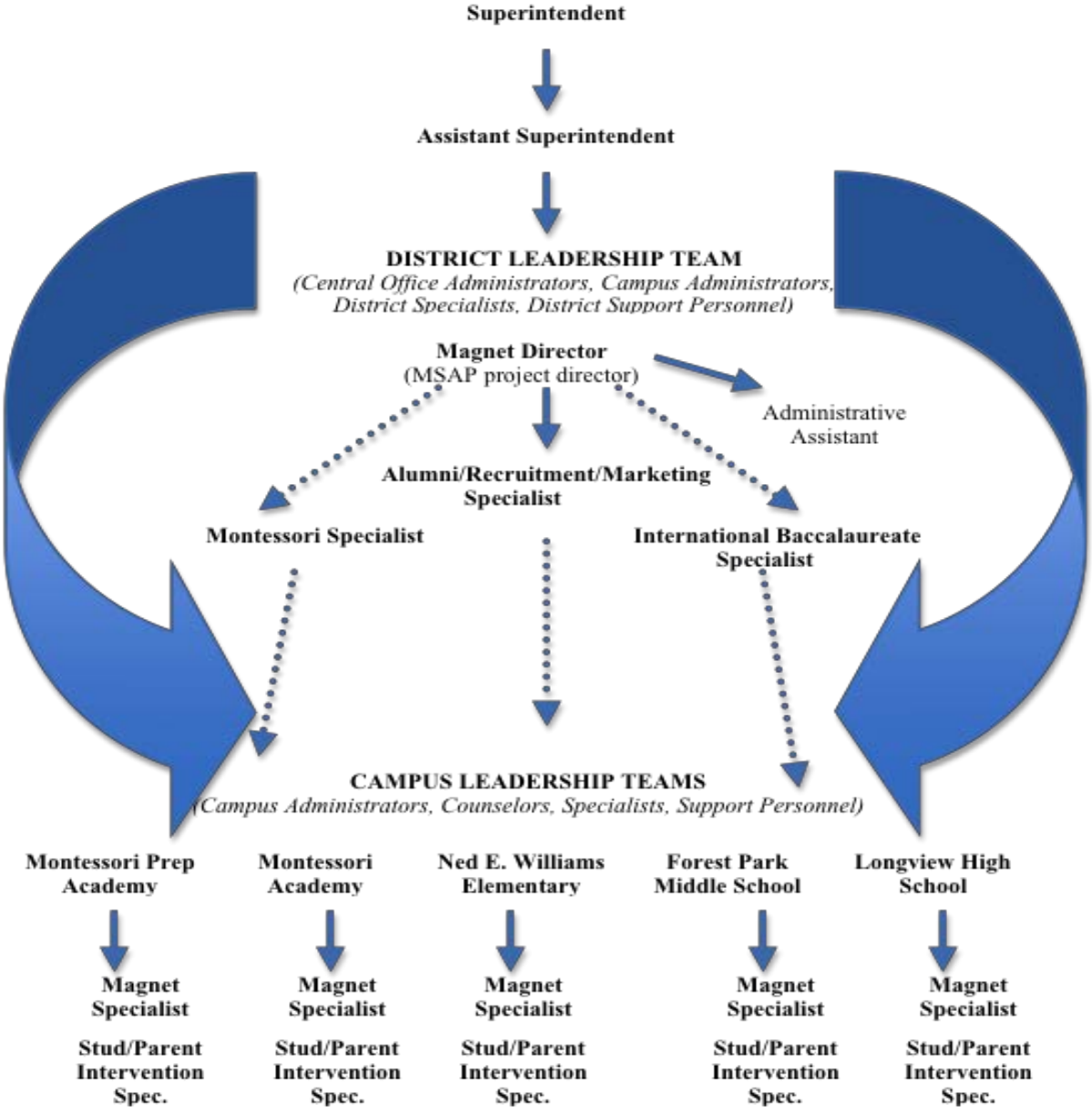
This MSAP proposal is the next step in the district's master plan for improving and integrating these project schools. Students of various races and ethnicities growing up *together*, performing *together* on stage, heads huddled *together* around a science experiment, planting decorative plants *together* in the flowerbeds along the school walking trail, or *together* designing a machine to meander down a winding path for a robotics competition will become the adults who carpool *together* to work, who gather *together* for a Friday night concert at the symphony, and who *together* make a difference for their community. This project design is the next step in that master plan.

Quality of Management Plan

The LISD management plan has been developed to be effective and efficient. This plan incorporates the sentiments and desires of various stakeholders in the community including students, families, business leaders, and post-secondary educators. The management plan is headed by a management team of high quality personnel who will provide administrative leadership, instructional guidance, and curricular support for the implementation of all aspects of the magnet school programs at the proposed sites. The LISD management plan incorporates best practice project management strategies to ensure that all local, state, and federal requirements are met with fidelity, both programmatically and financially; and to ensure that timelines and procedures are followed.

The Assistant Superintendent, the project's External Evaluator, and the LISD Magnet Director (project director) will work collaboratively to ensure timely compliance and monitoring of all components of this multi-phased project are achieved. A clear task workflow of all collaborative

partners, campus and district employees, advisory boards and committees will be established to ensure that all interface seamlessly for effective implementation of the LISD Synergy project and to provide performance snapshots to help evaluate performance measures. From planning to implementation and reporting, the Magnet Director will coordinate, track and monitor all aspects of the project, ensuring clear communication, not only among the management team and regional partners, but also with the LISD School Board. Internal control measures offering a checks and balances perspective on local, state, and federal finances and compliance will be a part of the district Finance Department with oversight from the LISD Assistant Superintendent's Office.



At the campus level each project principal will head his/her campus leadership team comprised of the assistant principal(s), counselor(s), media specialist, student/parent intervention specialist, instructional technology specialist and magnet specialist. The locally funded campus IT specialists will oversee the day-to-day technology needs of the faculty, modeling software and hardware just-in-time professional development for teachers and staff, as well as troubleshooting technology issues for the campus. The campus magnet specialists will oversee the magnet theme curriculum implementation and work with grade level/subject area professional learning committees (PLCs) and individual teachers. All magnet purchase requests will ultimately be approved by the campus principal before going on to be approved by the Magnet Director and finally to the Assistant Superintendent. The campus principals as well as the student/parent intervention specialists and magnet specialists will meet monthly with the Magnet Central Office personnel to network and troubleshoot issues common to the project schools.

Adequacy to achieve the objectives of the proposed project on time and in budget

A leadership and accountability structure is already in place within the district that holds all administrators to rigorous performance standards. The staffing and management structure of the Synergy project within the existing staffing and management structures of the project schools, include reporting and accountability mechanisms that will ensure the timely and efficient implementation of the key project activities. A detailed project implementation plan has been developed to achieve the project's objectives and performance measures; and is supported by a reasonable and cost-effective budget. In-kind resources designed to promote capacity building beyond the grant cycle are being leveraged to ensure sustainability of the project. The five yearly audits of the grant project will create a continuous improvement process that will engage stakeholders in ongoing feedback, assessment, and adjustments of project activities.

The following key personnel will ensure that the needs of the separate and distinct stakeholders are maintained. *(See the section on Quality of Personnel for additional information on each key staff member.)*

Oversight and Compliance: The oversight of the MSAP project will be the LISD's **Assistant Superintendent** who will ensure that the LISD project operates according to all established guidelines and procedures, including local and state requirements and regulations, and will ensure continuous academic growth and high levels of student achievement. The Assistant Superintendent will oversee the district magnet office and the campus leadership teams. A **Magnet Advisory Council** will be established to include parents, community leaders, as well as leaders from post-secondary institutions. Each of these individuals, under the Assistant Superintendent and Magnet Director, will ensure that the real world needs for employment and post-secondary education are aligned with the magnet curricula and content in the project schools and that the students in the project schools receive the social and emotional support to thrive and excel upon graduation.

Campus Leadership: **Each magnet school principal** will be responsible for the day-to-day operations of their campuses and will supervise their **campus leadership teams** in the implementation of the Synergy project at their individual schools. At each school, the magnet grant will cover the salary of a full-time campus Magnet Specialist and a full-time Student/Parent Intervention Specialist. In collaboration with the Magnet Director, the Montessori Specialist (for the Montessori academies), the IB Specialist (for the IB campuses), and the locally-funded district level subject-area specialists (Science, Math, Reading, Writing, Technology) the campus leadership teams are responsible for ensuring that each student is provided the necessary instruction and supports to be ready for success at each succeeding year of the student's

academic progress. Campus teams will be charged with upgrading the academic program at each project school and transforming their campus culture to one that is truly learner-centered. Activities will include the development of curricular units and materials, providing teacher training, designing and providing evidence-based instructional interventions, participating in the Synergy project's planning committee and/or Magnet Advisory Council, participating in professional development activities specific to their campus' needs, and overseeing magnet-related parent involvement activities.

Sustainability and Continuous Improvement: This magnet project is the vision of **Superintendent Dr. James Wilcox and Assistant Superintendent Horace Williams**, in collaboration with regional and LISD educators, families, business leaders, and the Longview, Texas community. It is setting the work for the project schools for the next five years and will continue beyond the grant years. To ensure the sustainability of the project, the **Assistant Superintendent**, with the LISD Finance Office, will be responsible for ensuring that all funds are expended appropriately and according to the ED Grant application. The **Magnet Director** (who will take the reins as Project Director) will be responsible for coordinating all of the MSAP proposed activities, interfacing with the Longview ISD Executive Team, and ensuring that all MSAP contracts are completed on time and within budget. The LISD Magnet Office, headed by the **Magnet Director**, will include a **Montessori Specialist and an International Baccalaureate Specialist** (to lead and support the magnet curriculum and instructional implementations at the Montessori and IB campuses). These two positions will be locally funded. Additionally, an **Alumni/Recruitment/Marketing Specialist** (to market and recruit students to the project schools as well as to develop and manage an alumni office) will be hired. To help complete the required evaluations and assessments, including the ongoing quantitative

and qualitative data analyses of the project's performance and outcomes, the project will contract with an **External Evaluator**. The district will develop a Request for Proposal (RFP) covering all five years of the project's grant period, based on district contracting procedures, to contract with an organization or person(s) to conduct the independent and external evaluation. The External Evaluator will be responsible for performing process and outcome evaluations using both quantitative and qualitative data required for both formal and informal reporting. Implementation visits will occur monthly in the first year and then no less than quarterly in subsequent years to document the progress made towards the stated goals and objectives and to indicate any areas of concern. To maintain the LISD Magnet Office, an **Administrative Assistant** will be hired. The Administrative Assistant will report to the Magnet Director and will compile student level performance and outcome data (i.e., enrollment data, state testing results, attendance, discipline data, parent engagement, and other designated data), process all magnet travel, contractual forms, and purchasing in order to assist the Magnet Director in the day-to-day operations of the District Magnet Office.

The TASD project's plan of operation is efficient and effective because it will use highly skilled and trained personnel to ensure the smooth operation of this innovative educational vision for area youth. The Magnet project is flexible enough to allow for parent, community, and business input via the Magnet Advisory Council; to handle state and local queries via the district oversight and compliance staff; to support high-level curriculum and instruction via the district Curriculum and Magnet Offices as well as campus leadership teams; to address federal queries as well as questions and concerns from collaborative partners via the Magnet Director, Assistant Superintendent, and Superintendent; and to produce frequent and informative reports that detail

the successes and challenges of the project's implementation via the External Evaluator and district Magnet Office.

Clearly defined responsibilities, timelines, and milestones

Throughout the grant cycle, the Magnet Director will hold data-rich bi-monthly group meetings with campus principals to ensure the smooth administrative implementation of the Synergy project. Monthly group meetings will be held with the campus magnet and IT specialists, the Montessori Specialist and IB Specialist, as well as with the district subject-area specialists under the guidance of the Magnet Director to ensure the smooth implementation of instructional strategies, PBL curricular development, and instructional technology implementation. These meetings will be held at the different magnet project schools on a rotating basis, which will open opportunities for magnet campus' leadership teams to experience each school's implementation efforts. Meeting agendas may include, but are not limited to the following: effective outreach and recruitment strategies, curriculum development, professional development resources, successes and challenges, partnership development and barriers, family outreach and engaging hard-to-reach as well as non-English-speaking parents, evaluation activities and findings, and campus' web page development. The A/R/M Specialist, as well as other district or regional personnel as necessary, will be guest speakers and participants in these meetings as well. At each meeting the host site will provide an update of the schools' progress in implementing the various program components and solicit solutions to implementation challenges. Because the project schools are whole school magnets, classroom teachers along with all campus personnel, will be responsible for providing students with all components of the magnet project, including counseling and social services to meet students' health, social, and emotional needs. Campus Student/Parent Intervention Specialists will develop parent outreach activities with other members of the

campus' teams and be an advocate for parents' needs and interests on campus planning teams to ensure parents on the planning teams exercise their voice. Each school building has been updated and, except for magnet theme modifications, is a sound facility with no need for repairs and renovations. Each campus has existing equipment and supplies that will be available to support the implementation of the magnet programs.

The LISD management plan of operation is well designed to attain the specific outcomes of the MSAP statutory purposes: **Desegregation and Choice** by successfully attracting a diverse population of students and families to the LISD schools through providing innovative programs of study, **High Academic Achievement** by implementing sound instructional programs using evidence-based research and best practices, and **Developing Capacity** to sustain the project by ensuring that the campus faculty and staff as well as the district personnel are well trained to continue the magnet programs beyond the funding cycle. The Magnet Director, under the guidance of the Assistant Superintendent will initiate a series of activities after planning with appropriate personnel from the district and campuses. **Each year the following timeline of activities and procedures** (by month) will be instituted to ensure efficiency and effectiveness in implementing the categorical outcomes of the MSAP statutory purposes:

YEARLY Timeline of Major Activities	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**
Magnet debrief & orientation for MSAP project											X	
Teacher workdays before opening of school	X											
Orientation for all personnel	X	X	X									
Professional development and coaching	X	X	X	X	X	X	X	X	X	X	X	
Order equipment and materials (during the year)	X	X	X	X	X	X	X	X	X	X		
Parent Involvement Activities	X	X	X	X	X	X	X	X	X	X	X	X

Magnet Tech Team and Site Team meetings	X	X	X	X	X	X	X	X	X	X		
Curriculum project development sessions	X				X	X					X	X
Review and edit of units and projects	X										X	X
Collect, analyze, & disseminate MSAP formative data		X	X						X	X		
Develop and implement marketing campaign	X	X				X	X	X	X		X	X
Monitor project activities	X	X	X	X	X	X	X	X	X	X	X	X
Collect and analyze MSAP summative data			X						X	X	X	X
MSAP formative and summative report to Sch. Bd.					X						X	
MSAP Annual Progress Report & Ad Hoc Report			X							X		
Magnet Principals Meetings		X		X			X		X		X	
Magnet Curriculum Meetings	X	X	X	X	X	X	X	X	X	X	X	
Magnet Technology Meetings	X		X		X	X		X		X	X	
Project Campus technology & curriculum coaching		**(**	**W**	**E**	**E**	**K**	**L**	**Y**	**)**			
Magnet Advisory Council Meetings			X			X			X		X	

Progress toward quality education begins at the building level in the individual classrooms. The Student/Parent Intervention Specialists at each campus will track student attendance and monitor family dynamics to ensure individual student needs are addressed. Working closely with the campus Guidance Counselors, campus administrators, and classroom teachers, these family liaisons will, many times, be the first line of contact for students to access needed resources. Campus Professional Learning Communities (PLCs) will be set up to ensure classroom teachers and support staff have the scaffolds they need to enhance their expertise in curricular and instructional matters. Lead teachers will be identified as peer leaders at each grade level and within subject area disciplines so that these PLCs represent both horizontal and vertical learning

needs and will be guided by the campus Magnet Specialist. The principal of each campus will oversee the magnet implementation at each project school using his/her leadership team. Magnet meetings with various members of the campus leadership teams will be held monthly so the Magnet Director is able to intervene to offset barriers and stumbling blocks that the magnet campuses encounter throughout the school year. Additionally, the campus principals and the Magnet Director are also a part of the Central Office Executive Team that meets with the Superintendent and Assistant Superintendents each month. Through partnering with the regional higher education institutions, the regional medical facilities, as well as with area businesses, this MSAP project will be a collaborative effort. LISD's plan of operation is designed to support and ensure that each magnet school will be a humane enterprise as it deals with internal and external evaluation processes and accountability requirements. It is this successful plan of operation that guarantees all outcomes of the MSAP will be accomplished.

This project was developed to ensure that the goals and objectives of its vision are attained within the project period. The Assistant Superintendent will be the Project Director until a full time Magnet Director is hired. This ensures that the Synergy project is seen as the key work for the project schools at its inception. Stringent schedules and precise job descriptions for key personnel will ensure that outcomes are attainable within the project period. The Magnet Office, with oversight from the Assistant Superintendent, will operate with a Magnet Director, a Montessori Specialist, an IB Specialist, as well as an Alumni/Marketing/Recruitment Specialist. The Magnet Administrative Assistant will ensure that the clerical duties of maintaining a smooth functioning office will be in place. These staff members are charged with establishing the magnet office in order to **provide the direction and support** needed to effectively market the

magnet schools, ensure diversity enhancement throughout the project campuses, and raise the academic achievement level of all students in the five project schools.

The **Magnet Director** will spend *fifty to sixty percent of school hours on magnet sites,* observing in classrooms and conferring with the campus leadership teams and other campus staff members to gain a thorough working knowledge of each magnet school's implementation. The remaining time will be dedicated to managing budget matters, working with the external evaluator and other consultants, magnet principals, conferring with community contacts, and attending civic and business meetings to share the latest news and publications about the schools. The Magnet Director will supervise and guide the quality of the work accomplished by the Magnet Alumni/Recruitment/Marketing Specialist as well as all aspects of the project implementation on the magnet campuses in collaboration with the subject area and magnet theme specialists, with oversight by the Assistant Superintendent.

The locally funded **Montessori and IB Specialists** will work closely with expert content and process education consultants in order to facilitate all aspects (curricular, instructional, and assessment) of the implementation of the Montessori and IB curricula and coordinate the PBL, Technology (including Computer Science coursework), Leadership Development, Engineering, Science, Math, and the Arts with the district subject area specialists at their project school. They will spend *eighty to ninety percent of time at their respective magnet campuses*, distributing the time equitably as needed. Approximately ten to twenty percent of the time will be devoted to office duties. The **campus Magnet Specialists** will work closely with the Central Office Magnet and Subject-Area Specialists as the campus faculty and staff members enhance their expertise in all aspects of the Synergy project including the use of technology tools and software to assist the faculty and staff members at their respective magnet campuses. These specialists will spend *100*

percent of the school day at their specific project sites. These staff members will ensure their individual magnet campus' websites are maintained and updated regularly. The **A/R/M (Alumni/Recruitment/Marketing) Specialist** will work with outside advertising agencies, as well as the LISD public relations director to develop an effective marketing and recruitment plan in order to target the populations of students needed to result in a truly diverse student population, conduct the magnet student application process, and then monitor the student selection lottery. This specialist will also develop and head the Longview Alumni Office in order to monitor graduates for five or more years after graduation. This unique position will be instrumental in bridging students' pathways from middle school through graduation and on to post-secondary education and/or employment, while also coordinating the marketing and recruitment to the project schools. This specialist will be housed at Longview High School in order to create and build the Alumni Office (with locally funded clerical support) but will spend *twenty to fifty percent of time* at the project sites (in order to better understand the unique programs and build relationships with students from each school) and at least *forty to fifty percent of time* will be spent designing marketing brochures and campaigns, conferring with advertising agencies as well as community recruitment efforts. The **Magnet Administrative Assistant** will possess outstanding telephone skills, inter-office and intra-office communications, and generally ensure the smooth interface of duties among the specialists and the campus personnel on a daily basis. This staff member will spend *one hundred percent of the time in the magnet office* facilitating the work of its personnel, securing student level performance and outcome data (enrollment data, state testing results, attendance, discipline data, parent engagement, and other designated data), and processing all magnet travel, contractual forms, and

purchasing requests. This is a key position as the Administrative Assistant is the first line of contact parents and families will have with the LISD Magnet Office.

This comprehensive vision for improving the educational opportunities for Longview, Texas' constituents was created using the six legislative purposes of the U.S. Department of Education Magnet Schools Assistance Program. The outcomes for the project goals and objectives are measurable and quantifiable and over the course of this multi-year project can be used to determine the district's progress in meeting its intended outcomes. The LISD Magnet Office, working closely with the External Evaluator, will be responsible for tracking and reporting monthly progress of the Synergy project in achieving each goal, objective, and performance measure. The magnet project schools are whole school magnets meaning all students will have access to theme-based curriculum and enrichment opportunities. The campus' programs will align with other services in the schools to address the needs of students, including language needs, learning needs, economic needs, behavioral needs, as well as any other special needs. The instructional staff who provide services to students with disabilities and ELLs at the project schools will participate in magnet curriculum development to ensure that instructional units and materials are designed to meet the learning needs of all students.

As noted in the Project Design section of this application, partnerships with community and business entities will provide students with opportunities to gain real world experiences. Many of these experiences will be scheduled during the school day, while others will occur in out-of-school-times: after school, weekends, and summers. These experiences help students to apply and bridge the content knowledge learned in coursework while also building their soft skills such as communication, collaboration, ethics, persistence, and digital literacy. Educators and staff will also take advantage of out-of-school partnerships by working in externships with key partners,

especially in STEM fields, in order to better understand how to facilitate student learning with real world PBL projects. These partnerships, which include mentoring opportunities, will be especially important for minority and low-income students to increase their understanding of careers.

Capacity building of the school leaders, staff, and community to sustain this high-quality project is an integral part of the project management. There is a critical mass of district and campus educators who have an understanding of the power that a magnet project brings to changing and improving schools from the inside out. Their expertise will be leveraged to ensure that the project schools are successful in sustaining the Synergy project after federal funding ceases. The management plan has also built in various mechanisms to insure success for the LISD project implementation. These mechanisms include a strong plan of professional and curriculum development to enhance the knowledge and skills of all instructional staff members and all school leaders in the theory-based magnet themes at the project schools, as well as the evidence-based instructional interventions to bring all students to a high level of achievement both personally and collectively. District level and campus level efforts will include annual curriculum planning institutes, monthly study groups on relevant research topics, summer workshops, on-going follow up and coaching on a daily and weekly basis, as well as training and technical assistance in specific theme and related instructional strategies being delivered at each school. Professional Learning Communities serve as a powerful mechanism that will be in place at each campus so that colleagues collaborate and improve their instructional repertoire throughout their teaching careers at LISD.

The Synergy project leadership team, in conjunction with the Magnet Advisory Council and campus parent and student groups, will follow a continuous improvement framework to insure

project integrity. The key elements in the continuous improvement framework are timely and regular feedback of implementation efforts with monitoring and measurement of program activities will be ongoing. This will allow for continuous improvements and corrections to project activities and investments with input from all stakeholders. Furthermore, the project's external evaluator will conduct formative and summative evaluation of the project to provide external feedback on the implementation and effectiveness of program activities. (See the Evaluation Plan section.)

The following goals, objectives, and performance measures constitute the work for the next five years in shaping this new and dynamic vision for LISD. The parties with major responsibility for implementing each objective are italicized, recognizing that ALL staff members in the central office and at the project campuses have onus for the successful implementation of the Synergy project in the magnet schools.

Longview Texas Synergy Project		
Legislative Purpose #1: Elimination, reduction, or prevention of minority group isolation		
GOALS	**OBJECTIVES**	**PERFORMANCE MEASURES**
#1: Reduce Black minority group isolation, as well as low-income SES student populations in the project magnet schools	1.A Attract non-Black students from surrounding affluent, White suburban district schools. *(Project Director, A/R/M Specialist)*	1.A.1 By the annual April application deadline, each project magnet school applicant pool will have at least 10 applications from regional feeder schools outside the LISD school district. 1.A.2 Each project year (2017-2022), the October 1st enrollment snapshot for each project magnet school will indicate a 2% reduction of Black minority group isolation

from the October 1, 2016 enrollment snapshot without negatively impacting diversity at the feeder schools.	1.B Increase minority group representation at the feeder schools *(Project Director, A/R/M Specialist)*	1.A.3 Each project year (2017-2022), the October 1st enrollment snapshot for each project magnet school will indicate a 2% increase of non-low income SES students 1.B Each project year (2017-2022), the October 1st enrollment snapshot for each feeder school will indicate the Black enrollment will be within ± 10% of the feeder school district's Black student population
Legislative Purpose #2: Assist LEAs in achieving systemic reforms and meet challenging State academic content standards and student achievement standards		
GOALS	**OBJECTIVES**	**PERFORMANCE MEASURES**
#2: Build capacity of all student groups to meet or exceed Texas state standards in Reading, in Mathematics, and in Science by using rigorous,	2.A Implement rigorous and highly engaging magnet school themes at the project schools that are identified through a strong theory base as viable systemic reform models. *(Project Director, Dist. Subj. Area*	2.A.1 By September of each project year, the number of students at each of the project schools scoring proficient or advanced on the Texas State Accountability Test for **Reading** will increase by at least 2% from the Spring 2016 baseline. 2.A.2 By September of each project year, the number of students at each of the project schools scoring proficient or advanced on the Texas State Accountability Test for **Mathematics** will increase by at least 2% from the Spring 2016 baseline. 2.A.3 By September of each project year, the

evidence-based strategies, and highly engaging programs at each project school and implementing inclusive parent involvement programs at each project school that include district-wide community services and family resources.	*Specialists, Campus Magnet Specialists)* 2.B Implement an academic engagement program at each project campus *(Principals, District Subject Area Specialists, Campus Magnet Specialists)*	number of students at each of the project schools scoring proficient or advanced on the Texas State Accountability Test for **Science** will increase by at least 2% from the Spring 2016 baseline. 2.B.1 By May 2018, each campus will have an academic engagement program including "acceleration academies" in place providing small-group instruction under the guidance of high-performing teachers outside of the daily class times such as before school, after school or during lunch periods as well as during scheduled school breaks and weekends with baseline data of students serviced for 2017/2018. Each subsequent project year, the percentage of students serviced in these acceleration academies will increase by at least 2%. 2.B.2 By May 2018, a peer-to-peer support system will be developed and in place whereby students will be identified and trained to work as peer leaders. A high-school readiness metric will be used to assess students' attendance, grades, and history of suspensions from school since these are proven indicators of success. Intervention events and social activities using student peer leaders will be

		used to upgrade students' lives both academically and socially. A student survey each spring will ascertain students' perception of the school culture and their own self-assessment. By May 2018, at least 60% of the M.S. and H.S. students will indicate a positive perception of the school culture and by May 2019, at least 75% of the M.S. and H.S. students will indicate a positive perception of the school culture. Each subsequent year of the grant, the percentage of students indicating a positive perception of the school culture will increase by 5%: 80% by May 2020, 85% by May 2021, and 90% by May 2022.
	2.C Implement a parent involvement program at each magnet campus *(Project Director, A/R/M Sp., Principals, Magnet Specialists, Student/Parent Inter. Specialists)*	2.C.1 By May 2018, each campus will have in place a Parent Involvement program with baseline data from each school of parent involvement in day-to-day school activities (such as Second Cup of Coffee with the Principal, Parenting Workshops, technology workshops, parent use of Parent Resource rooms, etc.), school events (such as Math/Science Nights, Fall Festivals, Holiday Extravaganzas, etc), and parent involvement in mentoring and/or classroom volunteering activities as well as participation in

		various decision-making entities such as campus and/or district steering committees. By May of each subsequent project year, the percentage of parent involvement will increase by at least 3% from the May 2018 baseline data. 2.C.2 Throughout the summer of 2018 (and each subsequent summer of the grant cycle), every student in the entry year of the project campuses (K at Montessori Prep, 1st graders at Montessori Academy, 6th and 7th graders at Forest Park Middle School; 9th graders at Longview High School) will receive a home visit before entering the upcoming school year at the respective project school.
	2.D. Implement a district family resources program *(Project Director, A/R/M Sp. Principals, Magnet Specialists, Student/Parent Int. Specialists)*	2.D.1 By May 2018 each project campus will have a Community Services plan in place so that each youth has the opportunity for a healthy and secure life (i.e., vision, hearing, and dental screening, flu and other communicable disease vaccinations, and family counseling services), as well as community resources such as Big Brothers/Big Sisters, and volunteers to connect with students and families. By May 2019 each campus will collect baseline data on student/family accessibility of said services and by

		May 2020, and each subsequent year of the grant, student/family use of said services will increase by at least 5%. 2.D.2 By May 2018 a Family Outreach Office will be in place and by May of each subsequent project year, increased family participation in these educational supports (including finding jobs, getting affordable housing, enrolling in higher education and/or vocational classes, and scholarship attainment) will increase by 5% from the baseline in May 2018. 2.D.3 By May 2018 a technology mobile lab that acts as a digital connectivity bridge for neighborhoods lacking internet access will be in place within the Longview area as well as mobile Wi-Fi hotspot devices for student checkout at each project school. By the end of the grant cycle (2022), an additional technology mobile lab and Wi-Fi hotspot devices will be in place to assure all students have access to the internet.
Legislative Purpose #3: Development, design, and expansion of innovative educational methods and practices that promote diversity and increase choice		
GOALS	**OBJECTIVES**	**PERFORMANCE MEASURES**

#3: Design and develop innovative educational methods and practices that personalize learning using project-based learning that is both interdisciplinary and real-world, as well as through hands-on inquiry, that encourages and enhances design and creative thinking.	3.A Students in each project school will participate in project-based learning (PBL) units that are inter-disciplinary, real-world, and aligned to the Texas state standards. *(M & IB Specialists., Subj-Area Specialists, Magnet Specialists.)*	3.A By May 2018, each project school faculty will have completed basic PBL training and have developed at least one inter-disciplinary PBL unit per grade level that is aligned with the school's magnet theme. By May of each subsequent year, each project school will have two additional theme-based PBL units (one/semester/grade level) bringing a total of 9 PBL units/grade at each project school by the end of the MSAP cycle in 2022.
	3.B Students in each project school will have student-centered classroom teachers who facilitate and design high-interest and engaging learning while preserving the dignity of the child.	3.B By August 2018, project campus teachers and staff members will be trained in the basics of student-centered classroom pedagogy (such as, inquiry questioning techniques, Steven Covey's The Leader in Me, etc.) and district wide curricula (such as PBL, technology applications, computer science, hands-on science, engineering design thinking). -By August 2019, project campus teachers and staff members will have been trained in the basics of student-centered classroom pedagogy and district

	(Principals, M & IB Specialists, Subject-Area Specialists, Magnet Specialists)	wide curricula and pedagogy at each project school with **60% of classroom teachers at each campus implementing** the curriculum and techniques in the classroom as reported by campus administrators. -By August 2020, all new project campus teachers and staff members will have been trained in the basics of student-centered classroom pedagogy and district wide curricula and pedagogy at each project school with **75% of classroom teachers at each campus implementing** the curriculum and techniques in the classroom as reported by campus administrators. -By August 2021, all new project campus teachers and staff members will have been trained in the basics of student-centered classroom pedagogy and district wide curricula and pedagogy at each project school with **85% of classroom teachers at each campus implementing** the curriculum and techniques in the classroom as reported by campus administrators. -By August 2022, all new project campus teachers and staff members will have been trained in the basics of student-centered classroom pedagogy and

		district wide curricula and pedagogy at each project school with **100% of classroom teachers at each campus implementing** the curriculum and techniques in the classroom as reported by campus administrators.
	3.C Students in each project school will have access to high-interest and engaging co-curricular and extra-curricular activities. *(Principals, Magnet Specialists, M & IB Specialists.)*	3.C.1 By June 2018 student participation in specified co-curricular and extra-curricular activities (such as Chess Club, Stock Market Entrepreneurs, Biomechanical Engineering Club, Environmental Science Club, Robotics, golf, tennis, Leader in Me Club, and Graphic Arts) will be within ± 10% of each school's ethnicity enrollment; and, maintain this participation throughout 2018/2019, 2019/2020, 2020/2021, and 2021/2022. 3.C.2 By June 2018 Low-SES student participation in specified co-curricular and extra-curricular activities (such as Chess Club, Stock Market Entrepreneurs, Biomechanical Engineering Club, Environmental Science Club, Robotics, golf, tennis, Leader in Me Club, and Graphic Arts) will be within ± 10% of each school's SES enrollment; and, maintain this participation throughout 2018/2019, 2019/2020, 2020/2021, and 2021/2022.

Legislative Purpose #4: Courses of instruction that substantially strengthen the knowledge of academic subjects and the attainment of tangible and marketable career, technological, and professional skills		
GOALS	**OBJECTIVES**	**PERFORMANCE MEASURES**
#4: Strengthen student knowledge of academic subjects as well as attain tangible and marketable career, technological, and professional skills through increasing the number of students taking advanced academic, Pre-AP and AP courses by	4.A Students in each magnet school will be taught 21st Century Soft Skills development (communication, collaboration, creativity, and professional ethics) *(Mag. D, Principals, M&IB Specialists, Magnet Specialists)*	4.A.1 By June 30, 2018 LISD will have developed a district wide 21st Century Soft Skills scope and sequence for K-12 (with rubrics). By June 30, 2019 each project school will have a baseline assessment by grade levels, of 21st Century soft skills attainment for their student populations and by June 30, 2020 documentation of the 21st Century soft skills attainment for each project school's student populations will increase by 3% for each economic and racial student category each subsequent year of the grant cycle.
	4.B Increase the number of students who take advanced coursework in middle school and high school.	4.B.1 By May of each project year, student participation in advanced academic coursework at Forest Park Middle School will increase at least 2% for each economic and racial student category from the current percentage of 6th-8th students taking advanced academic courses in 2016/2017:

developing partnerships with post-secondary institutions and local businesses for mentoring opportunities, as well as for field trips, internships, apprenticeships, shadowing, and enrichment activities.	*(Principals, IB and Subj-Area Specialists, Magnet Specialists)*	Forest Park M.S. Algebra 1/PreAP: 68% Low SES, 22% Black, 28% Hispanic, 0%Native Am., 0% Asian, 8% White Forest Park M.S. Pre-AP Science: 85% Low SES, 15% Black, 69% Hispanic, 0%Native Am., 0% Asian, 12% White Forest Park M.S. Computer Design: will be a new course offering in 2017/2018 4.B.2 By May of each project year, student participation in advanced academic coursework at Longview High will increase at least 2% for each economic and racial student category from the current percentage of high school students taking advanced math and science courses in 2016/2017: AP Calculus: 18% Low SES, 9% Black, 18% Hispanic, 0%Native Am., 0% Asian, 24% White AP Physics: 67% Low SES, 42% Black, 39% Hispanic, 0%Native Am., 0% Asian, 19% White Princ of Engineering: 21% Low SES, 8% Black, 13% Hispanic, 0%Native Am., 4% Asian, 75% White
	4.C Develop	4.C By June 2018, each project magnet school will

	partnerships with local educational institutions of higher education, medical institutions, and with local businesses for field trips, internships, apprenticeships, and shadowing activities. *(Magnet Director, Principals, A/R/M Specialist)*	have developed formal partnerships with area businesses, educational institutions of higher education, medical institutions, and with local businesses for field trips, internships, apprenticeships, and shadowing opportunities as appropriate for the particular needs of the campus' students. By June 2019, each project school will collect baseline data on the types and numbers of field trips, internships, apprenticeships, and shadowing opportunities taken by students at each grade level so that by June 2020, an increase of 3% in student participation in job shadowing, apprenticeships, and internships will occur at Forest Park Middle School and 5% at Longview High School, with a 2% percentage of increase in participation each subsequent year of the grant cycle.
	4.D Provide opportunities for students to engage in mentoring and college enrichment activities.	4.D By June 2018 the project magnet schools will have mentoring and college enrichment plans in place so that each student has the opportunity to enhance tangible and marketable career as well as technological and professional skills. By June 2019 baseline information on student participation in

	(Magnet Director, M&IB Specialists, Principals, A/R/M Specialist, Magnet Speciailists)	mentoring and college enrichment activities will be collected and by June 2020, and each subsequent year of the grant cycle, an increase of 10% in student participation in mentoring and college enrichment activities will occur at each of the project schools.
Legislative Purpose #5: Build Institutional capacity to continue operating magnet schools at a high performance level after funding is terminated.		
GOALS	**OBJECTIVES**	**PERFORMANCE MEASURES**
#5: Access top quality curricular and instructional professional development in order to develop highly qualified learner-centered teachers who use evidence-based instructional	5.A Ensure a highly qualified, learner-centered teacher is in each magnet classroom, who uses evidenced-based instructional methods designed to create open, student-centered classroom environments. *(Principals, M & IB Specialists, Subj-area Specialists, Magnet*	5.A.1 By March 2018 a professional-learning-communities (PLC) model plan for each project magnet school will be in place ensuring classroom teachers have time for practice, reflection, and innovation using techniques such as peer-coaching, lesson study, and lesson planning. By August 2018, the campus PLCs will be in place and teachers will indicate at least 50% are satisfied with the school culture on a School Climate Survey. By August 2019, teachers will indicate at least 70% are satisfied with the school culture on the School Climate Survey. By August 2020, teachers will indicate at least 80% are satisfied with the school culture on School Climate Survey. By August 2021, teachers

methods and aspire to improve their own professional expertise.	*Specialists)*	will indicate at least 85% are satisfied with the school culture on the School Climate Survey. By August 2022, teachers will indicate at least 90% are satisfied with the school culture on School Climate Survey. 5.A.2 Each year of the grant cycle, at least 5% additional teachers at each project school will be in process or have secured advanced certifications or post-baccalaureate degrees from the baseline number for the school in August 2018: 5% more than the baseline number in 2019/2020, 10% more than the baseline number in 2020/2021, and 15% more than the baseline number in 2021/2022.
Legislative Purpose #6: Ensure students have equitable access to succeed academically and continue with postsecondary education or productive employment.		
GOALS	**OBJECTIVES**	**PERFORMANCE MEASURES**
#6: All students will have equitable access to be successful academically to continue to their next level of	6.A Develop a Magnet Advisory Council made up of members from local businesses, community members, and post-secondary	6.A By January 2018 the district Magnet Advisory Council (MAC) will be in place; by March 2018 MAC by-laws and governing structure will be in place; and by June 2018 the MAC will be fully functioning, so that by June of each subsequent year of the grant cycle, the MAC will meet quarterly to review magnet school progress and to provide

endeavor without need for remediation.	institutions, including Longview High alumni and student representation. *(Magnet Director, Ass't Supt, A/R/M Specialist)*	varying perspectives on overcoming any obstacles or challenges in ensuring all students have equitable access to high quality education at Longview Schools.
	6.B Establish a Longview High Alumni Office to track graduates over 5-10 or more years beyond graduation. *(A/R/M Sp, High Sch. Principal, Magnet Director)*	6.B By January 2018 a Longview High Alumni Office will be in place so that by June 2018 the Longview High Alumni Office will be fully functioning. By September of each grant cycle year and beyond the Longview High Alumni Office will present a "Status of Longview High School Graduates" report to the LISD Superintendent and to the LISD's School Board.
	6.C All district administrators, faculty, and staff members participate in a cultural competency program throughout the grant	6.C By January 2018 a cultural-competency training program will be contracted and by April 2018 all district personnel will privately take an implicit association test to become aware of individual interracial discriminatory behavior. By June of each subsequent year of the grant cycle (2018-2022), school personnel will complete four hours of

	cycle to ensure that bias is not embedded in the system and the daily practices of the schools and district. *(Magnet Director, Ass't Superintendent, Principals)*	cultural competency training and hold one student cultural competency activity at each project campus each year on some aspect of cultural competency.

The LISD Synergy project management plan has measurable and quantifiable objectives that were built directly on the MSAP statutory purposes of ensuring desegregation and choice, developing capacity, and improving academic achievement.

Desegregation and Choice: Each school year minority/non-minority enrollments will indicate to what extent the LISD desegregation goal is being met. The **Magnet Director and A/R/M Specialist** will monitor enrollment applications to make adjustments in the marketing and recruitment plan. Majority students will be attracted from the surrounding affluent non-minority suburban school districts as well as from private and parochial schools. In addition, home-schoolers will also be a target market for the Synergy project. Magnet campus personnel will participate in Magnet community activities and events to showcase each magnet school. **Principals and campus personnel** will ensure that students are encouraged and supported to take higher-level academic coursework and to participate in co-curricular and extra curricular activities. By monitoring and analyzing the participation of minority populations and low SES populations in the higher-level coursework and in the co-curricular and extra curricular activities, adjustments to enhance a supportive and culturally relevant environment will ensure that

substantial progress is made toward achieving equitable opportunities for all diverse student populations and that re-segregation within the schools is not occurring.

Developing Capacity: **Campus administrators** will monitor the implementation of the innovative methods and practices in the classroom using the Texas teacher evaluation system. By May 2018, each campus will have completed basic professional development in the district wide focus on the following: PBL (project-based learning), STEM, inquiry learning, and technology training. Summers will be used for curriculum development as teams of teachers work together to develop and create their interdisciplinary magnet themed units and lessons, which will be aligned to the Texas State Standards. Additionally, the physical design and layout for each magnet campus will be in place by Fall 2018, so that each campus "screams its theme." The 2018/2019 through 2021/2022 school years will be ongoing professional development and instructional coaching to enhance the implementation of project-based learning using STEAM topics and incorporating financial literacy and computer science lessons, as well as the use of new technology tools and software. The final year of the grant will be used to further embed the magnet theme into the daily curricula of the schools as more and more teachers assume collaborative leadership roles. The goal is to have a flattened organization at each magnet campus so that classroom teachers, staff, and administrators work as a well-oiled team and student-centered learning is facilitated throughout the schools.

Academic Achievement: The vision of the LISD Synergy project is that the focus of every classroom is student-centered rather than teacher-centered, with a heavy emphasis on personalized learning opportunities. The campus leadership team composed of the Principal, Assistant Principal(s), Magnet and IT Specialists, Student/Parent Intervention Specialist, Media Specialist, and Counselor(s), along with the District Specialists (Montessori, IB and Subject-

Area) will work to develop a school culture that fulfills students' four psychological needs: 1) a sense of belonging, 2) autonomy or freedom to make choices, 3) a sense of fun and joy, and 4) individual power or feeling of success. Classroom walk-throughs, weekly cognitive coaching with teachers, teacher peer mentoring sessions, analysis of student achievement data, benchmark assessments, and ongoing lesson study activities will determine the progress that each campus is making toward high academic achievement. Monthly district magnet meetings will also allow the leadership team members to network, troubleshoot, and collaborate with other project school personnel with like positions.

Teachers, in anticipation of the grant award, are already moving toward project-based learning and STEM curricular enhancements using book studies and discussion groups. This is creating a 'happy tension' as these professional educators gear up for this dynamic opportunity to work smarter in truly innovative and cutting-edge magnet schools. LISD will utilize all MSAP grant funds to provide special magnet personnel, curriculum, professional development, supplies, materials, equipment, travel, and contractual services necessary to implement an effective magnet schools program capable of achieving the goals established by the U.S. Department of Education's MSAP. The Magnet Program Funding Requests (ED FORM 524) summarize the way in which funds requested in this proposal will be utilized. The **investment in personnel** is critical to achieving the objectives of the program. The funds will cover salaries and stipends for needed personnel for magnet theme development, provide adequate stipends for curriculum development and extensive professional development in instructional strategies and interdisciplinary curricular teaching, provide release time in order for teachers to serve as observers, mentors, and peer coaches, and cover salaries and extra duty pay for enrichment and after-school programs and tutoring for students. Magnet support personnel are needed for each

project year; however, training and extra duty assure progress is made toward developing teacher competencies in the implementation and ultimate sustainability of the MSAP goals. These magnet support personnel will be phased out or absorbed locally over the five-year grant cycle as expertise and leadership depth is developed at each magnet school and within the administrative ranks.

Equipment will be one-time purchases. **Equipment** purchases are detailed in the individual school budgets. Supplies and materials, including technology tools such as classroom projection systems and software applications, computers and personal digital devices, along with instructional supplies and materials will be purchased to implement the themes at each magnet school. Approximately 3% of this budget will be spent on advertising and marketing. The majority of the **supplies and materials** budget will go directly into the classrooms for instructional purposes. Under the contractual category, funds will be expended for top consultants to work with teachers for **specialized training, curriculum integration and alignment to the Texas state standards**. Using a **Trainer of Trainers model**, these consultants will give teachers the tools and expertise for creating special learning activities and academic opportunities, which will be sustained as campus teachers gain the necessary skills to coach and train additional hires over the ensuing years. The **Other budget category** reflects costs for student admissions for field trips which include trips such as those to local and regional science, art, and history museums, medical facilities, the Texas state capitol, historical sites, the Museum of Natural History, the medicinal value of herbal gardens at the Native American Environmental Center, the Dallas Patent Office, and the Dallas Botanical Gardens to offer students learning that extends and enhances learning beyond formal classroom learning. Travel funds are also critical to enable teachers to make site visits to other schools where model programs that feature

instructional best practices are available, to attend institutes to receive specialized training, and to attend the U.S. Department of Education meetings and conferences.

The **Magnet Director** is a key person and will be directly under the supervision of the **Assistant Superintendent**. The Magnet Director will oversee every aspect of the Magnet project. He/she, with the **A/R/M Specialist** will work with the campuses to develop ongoing strategies for year-round recruitment: such as, hosting rotating monthly Real Estate meetings at each project school in order to familiarize real estate agents to the wonderful qualities of the project schools, staying 'in the news' with activities and events at the project campuses, speaking engagements at service organizations such as Kiwanis or the Chamber of Commerce, hosting parent meetings, producing Magnet PSAs on TV and radio, along with coordinating shopping mall events featuring live performances and magnet student displays.

The Executive Director of the National Staff Development Council states that, "[Instructional] Leadership development is an essential and often-neglected task in the process of creating schools in which all students and teachers learn and perform at high levels." Professional development will include **campus teachers and support personnel, as well as administrators** who will incorporate evidence-based innovative teaching best practices such as Project-Based Learning, Brain-Based Learning strategies, Gifted and Talented training, Sheltered English techniques, Reality Therapy, the Leader in Me, Conflict Resolution, technology integration, Gardner's Multiple Intelligences, Generational Poverty training, team teaching and co-teaching, constructivism and inquiry learning, Socratic questioning techniques, portfolio assessment, and field science investigations into the school culture and into the classroom instruction, as well as instructional interventions selected using evidenced-based research studies. The district-funded **Montessori and IB Specialists** (along with district-funded Subject-Area Specialists) will assist

in the identification of appropriate consultants as well as master teachers in the schools who are already using some of these instructional practices in their classrooms to spread the depth of instructional leadership throughout the Synergy project. Through site visits and cognitive coaching feedback with campus mentor teachers, principals, and the campus Magnet Specialists, the Magnet Director with the External Evaluator will monitor the progress of teachers incorporating innovative methods and practices into their classrooms. Clear evidence of student creativity and enjoyment will abound in these magnet schools where students are involved and challenged, projects link to real life issues, and student interests are expressed above and beyond the dictates of the classroom. The campus **Magnet Specialists** with the district-funded Instructional Technology Specialists will ensure that the technology tools and software purchased with MSAP funds are used effectively at each of the project schools and that the campus teachers and administrators are supported over the grant cycle years in developing IT expertise to continue using the technology resources beyond the grant cycle. Over the next five years the **Magnet Alumni/Marketing/Recruitment Specialist** will develop a comprehensive district plan that connects recruitment of families to the magnet program, nurtures and documents LISD students' paths through the magnet program, and then follows the graduates as they continue in post-secondary employment or further education. This will forge a positive community perception of LISD's magnet schools throughout the region. The resources and personnel needed to address the **objectives of desegregation and choice, capacity development, and high academic achievement** will sustain the high performance level of these magnet schools and determine the project's progress.

How the plan will ensure that a diversity of perspectives are heard

"When schools, families, and community groups work together to support learning, children tend to do better in school…" That's the conclusion of a 2002 report from Southwest Educational Development Laboratory entitled, "A New Wave of Evidence." This Synergy project is a collaborative effort with the Longview community, higher education institutions, and businesses throughout the city and region. **A Magnet Advisory Council,** made up of parents, students, community, and business leaders, as well as key district and campus educators and headed by the Magnet Project Director will be formed to meet regularly and provide input and a diversity of perspectives on the governance of the schools. Families will be encouraged to attend Magnet Advisory Council meetings and, if interested, to run for positions on the council.

Schools play an important role in determining the levels of parental involvement in the school. Each campus will have a **School Leadership Team**, made up of the Principal, PTA President, School Counselor, campus Magnet and IT Specialists, and campus Student/Parent Intervention Specialist along with at least four elected parents and two students representing the campus' student body, to assist in the evaluation and assessment of a school's educational programs and their effects on student achievement. Specifically, the school PTAs will be used to outline parent expectations for the magnet program and policies of the school. District and campus websites and social media will provide interactive venues for outside input. The schools will provide opportunities for parents to talk with school personnel about their role in their student's education through home visits, family nights, and well-planned student-led parent/teacher conferences and open houses. Parent and community members will be welcome as volunteer partners in the schools and these programs will invite **parents to act as full partners in making school decisions** that affect students and families.

Joyce Epstein's Framework of Six Types of Involvement will be used to guide parental decision-making and involvement in the project magnet schools. The six types of involvement are: 1) **Help all families establish home environments to support children as students**. Student/Parent Intervention Specialists at each school will be the direct contact with families and will also coordinate campus parent meetings and workshops. These parent activities will have babysitting services for younger children and some will be held in community centers, apartment common areas, and libraries to ensure families feel comfortable in attending. 2) **Design effective forms of school-to-home and home-to-school communications about school programs**. Parents who do not speak English well or are non-English speakers, who do not read well, or who need larger print will be considered when developing any type of communication. There will be clear two-way channels for communication from home to school and from school to home. 3) **Recruit and organize parent help and support**. It is important to recruit volunteers widely so that families know that their time and talents are welcome. Flexible schedules for volunteers, assemblies, and events will enable more parents who work to participate. 4) **Provide information and ideas to families about how to help students at home**. Each school will design and organize a weekly schedule of interactive homework that gives students responsibility for discussing important things they are learning with their families. 5) **Include parents in school decisions, developing parent leaders and representatives**. It will be especially important to include parent leaders from all racial, ethnic, and socioeconomic groups in the school. Training will be offered to enable these parent leaders to serve as representatives of other families, with input and communication to all parents. 6) **Identify and integrate resources and services from the community to strengthen school programs, family practices, and student**

learning and development. Each campus leadership team will ensure equity of opportunities for students and families to participate in community programs and/or to obtain services.

One strategy to engage families of English learners in order to build a strong and trusted relationship with bilingual families is to develop Family Academic Literacy Projects. With this strategy, after-school learning spaces for EL students and their families are created as intentionally bilingual learning spaces. Participants include teachers, administrators, students, and family members. At a Family Academic Literacy project, participants connect academic literacy to family experiences, including social and community projects such as the planting of a garden. As families and students watch teachers take risks in Spanish, they find ways to jump in to help translate, answer questions, or offer encouragement. Food will be provided at these gatherings to ensure the social nature of the learning event is enhanced. Each family academic literacy event will provide scaffolding for language-learning students by teaching new literacy strategies to them and to their parents. As a result of this type of project, families gain confidence participating in and speaking their home languages at school events; and, by having the school value the home language parents conversely, gain confidence in giving input and voicing their opinion in school decisions. This is especially true for low-income families whose voices are typically not heard. These types of projects demonstrate to parents that working alongside their children and in partnership with teachers is a powerful piece of the magnet program.

Quality of Personnel

The Longview ISD Synergy project holds great promise for upgrading academic opportunities for youth throughout the Longview area. Staff members associated with the project schools and district office are “highly qualified, and highly effective” professionals who have had input into the development of this vision. They are committed to the enormous task these magnet programs

represent and are anxious to secure the specialized thematic training that they need to improve the curriculum and instructional delivery in these schools. The LISD personnel are committed to the fulfillment of the responsibilities as articulated in the grant application and will ensure that the MSAP purposes are realized. The central office, under Superintendent Wilcox's leadership, is streamlined and ready to ensure that communication across departments is maximized and that this MSAP project is fully realized. In the central office, at the project schools, and throughout the district are many seasoned staff members with direct experience working and supporting the design and delivery of academic programs for minority and low-income students. Many of these seasoned staff members were a part of the magnet project design development. Their expertise and guidance will be invaluable in the delivery and assessment of the project, as well as infusing the magnet philosophy to others.

The project director is qualified to manage the project

Assistant Superintendent Horace Williams will serve as **Interim Project Director** until a suitable Magnet Director candidate is hired. With over thirty years in education, Mr. Williams has an impressive record in transformative educational leadership. Prior to coming to Longview, Mr. Williams successfully developed multiple STEM academies and magnet programs in the Dallas, Fort Worth, and Houston areas. He is a proponent of technology, project based learning, and supplying students with opportunities to develop "soft skills" which are desperately needed in today's workforce. Mr. Williams began his career as a middle school teacher at Houston ISD and later served as an Instructional Coordinator. In 1992, he moved into administration as Principal at Harris County Youth Village serving adjudicated youth in the greater Houston area. While advocating reform in the pipeline to prison, he researched and deployed multiple strategies to reach at-risk minority students. He continued such efforts as a high school principal in

Houston ISD and late in Yonkers Public Schools in New York. Horace Williams is a visionary leader with a commitment to student growth, development, and academic excellence. He has attended Model-Nectics systems and executive training, the Harvard Principal Academy, and the International Conference for the Treatment of People of Color. As an African American educator, he knows first hand the challenges and barriers that impact student learning for minority and low-income children and youth. His experience in metropolitan, suburban, and rural public school districts is an invaluable asset to Longview ISD. With his collaborative leadership style and robust knowledge of curriculum and instruction, LISD student achievement in making unprecedented gains and will continue with this Synergy project. Even as he is able to release the full management of the project to the magnet director, the MSAP Synergy project will continue to take at least 30-40% of his time. The hiring of a project director will relieve him to focus on his Assistant Superintendent duties without the day-to-day magnet grant duties, even as he maintains oversight of the program.

Magnet Director: Following notification of an MSAP award, a magnet director will be selected and will take over as the **MSAP project director**. He/she will be a seasoned certified educator with specialized magnet school knowledge and achievement who has at least a Master's degree in education and at least three years in the classroom as well as two years of educational administration/leadership experience with Texas administrative certification. The person who assumes this position must have demonstrable verbal and written communications skills; have excellent supervisory, organizational, and training skills; have competent technological orientation; have skill in program development and execution with the ability to work independently with minimal direction coordinating activities, evaluating data, and establishing priorities. This person must have the ability to interact confidently and sensitively with various

groups and to analyze problems and make well-reasoned, sound decisions. The Magnet Director will serve on the Central Office Executive Team to ensure clear communication among all members of the Management Team. The Magnet Director will head up the Magnet Advisory Council and will oversee all aspects of the day-to-day magnet schools program implementation including 1) the effective management of the Synergy program development, including overseeing marketing and recruitment efforts 2) oversee budget and ensure financial accountability for appropriate purchases 3) participate in the hiring of magnet personnel for the Synergy related positions 4) supervise program delivery according to the project design 5) assess needs and monitor improvements with the external evaluator in order to complete the yearly MSAP annual performance and ad hoc reviews 6) establish operating procedures for campus projects that meet program goals, and 7) provide program content expertise, which may include delivering in-service training and/or arranging appropriate consultant training and coaching. This position requires the ability to coordinate a range of activities and to ensure that all are completed in a timely manner. The Magnet Director will oversee the curricular implementation and instructional delivery of the programs at each of the magnet schools and serve as the first line advocate for the magnet campuses in order to remove any barriers at the central administration. The Magnet Director will keep the Board of Education and the community apprised of the gains made by the magnet schools in reaching their goals. Fifty to sixty percent of the Magnet Director's time will be on campuses monitoring magnet activities and events, 25% in the community at events to highlight the magnet project, and only 15% of the time will be spent in the office. (See full job description in the Appendix.)

Other key personnel are qualified to manage the project

LISD Superintendent Dr. James E. Wilcox has spent his entire forty plus years in education working in schools with a high poverty rate as an advocate, special education teacher, principal, and superintendent. Since arriving at Longview ISD in the 2006/2007 school year Dr. Wilcox has been instrumental in developing a strategic vision that stipulates all students are valued, respected, and given the opportunity to succeed. This has not been a "one phase" approach. Wilcox continually challenges staff members to develop innovative and rigorous initiatives geared to cultivating 21st century productive citizens and critical thinkers. During his tenure, he has implemented successful programs, including universal Montessori for PK and K with a newly constructed campus (opening in Fall 2017) for early childhood students as well as expanding Montessori through 6th grade with the Montessori Academy opening as well in Fall 2017. In addition, Career and Technology programs leading to industry certifications are now in place at the high school. A Young Entrepreneurs program in conjunction with local industry/business partners is in place. Also in place is a strong high school Advanced Placement program. Dr. Wilcox's acumen in creating learning environments, which celebrate diversity and instill high expectations for all students and staff members, is unparalleled. With minority groups representing 80% of the student population in Longview ISD, his intense focus on academic performance and increasing graduation rates by narrowing achievement gaps among student populations has increased standardized test scores by over 40% for African American and low-socioeconomic students. Subsequently, the student dropout rate has decreased from 6.5% in 2006/2007 to 1.5% in 2015/2016. As a former president of the Texas Association of School Administrators and having served on the Governing Board for the American Association of

School Administrators, he has been appointed to multiple Texas' committees to research and recommend policy reform for school revenue and funding, testing and accountability, and the mentoring of aspiring administrators. Dr. Wilcox co-founded the Texas School Superintendent Development Program and is the Chairman of the Bill Ratliff Academy of School Executives.

Montessori and International Baccalaureate Specialists (These district funded positions will be hired.) will devote 100% of time to this magnet project. These certified educators will have a master's degree and have at least five years classroom teaching experience with experience in Montessori teaching and International Baccalaureate teaching respectively. These persons will be responsible for overseeing the planning and implementation of the specialized curricula and professional development at the Montessori and IB magnet schools with the district subject-area specialists, campus administrators and campus magnet specialists. Coordination with higher education institutions, medical community, business partners, magnet education consultants, resource persons, and community organizations will be essential in developing the sustainability of this instructional program beyond the grant cycle. Qualifications include expertise in curriculum writing, cognitive coaching (with sensitivity to adult learners), and professional development, as well as working knowledge of the Texas State Standards, as well as the Montessori and IB certification requirements respectively. The Montessori and IB Specialists will spend 85-90% of their time in the field working with their respective campus teachers and specialists to ensure success of the curricular theme and only 10-15% of his/her time will be spent in the office. (See full job description in the Appendix.)

Magnet Alumni/Recruitment/Marketing Specialist (to be hired) will have responsibilities that include overseeing the recruitment and marketing of the magnet program. A highly qualified certified educator with expertise in advertising and marketing and at least three years of teaching

experience, as well as one of absolute integrity and empathy with magnet guidelines will be sought to fill this position. This position will also be responsible for developing a high school Alumni Office and collaborating with middle school and high school counselors. This individual must possess strong human relations skills, precise knowledge of the Magnet Schools Assistance Program, and an understanding of the IB, Early College, and AP aspect of the pathways to graduation. Multi-tasking and communication skills are of paramount importance. Fifty to 60% of time will be working with project campuses, the district public relations office and agencies on marketing and recruitment events at the schools and the relationships needed to excite students and parents with the magnet pathways this project opens for them. This leaves approximately 40% to 50% of time to develop and oversee the high school Alumni Office and to compose and ensure that marketing and recruitment information for families is kept current. (See full job description in the Appendix.)

Magnet Administrative Assistant (to be hired) is the front line contact with parents and also interfaces with campus faculty, staff, and administration and must have excellent telephone and computer skills in order to support the daily operations of the magnet project. This position is vital. The Administrative Assistant supports the application and lottery process and coordinates the logistics of the Magnet Director, the Montessori and IB Specialists, and the Alumni/Recruitment/Marketing Specialist. In order to maintain communication between and for the Magnet District Team, field questions and concerns of parents and campus personnel, and to process the magnet paperwork and reports, this person will devote 100% of time in the office. This will ensure the smooth functioning of the magnet project. (See full job description in the Appendix.)

School Leadership: The **magnet school principals** are all 'highly qualified' and **will receive extensive training in all MSAP statutory purposes**. All principals hold Texas administrative certifications and have experience in their respective school levels. Each principal has exhibited enthusiasm for the Synergy project and has generated faculty and staff support. Since all of these are school-wide magnets, every staff member will devote 100% of time to the project.

James Brewer is the **Principal of Longview High School** (9-12) and has been in this position since 2010. Mr. Brewer is VERY aware of the issues students from low socio-economic levels face, especially poor minority students. He works daily to empower all his students and challenge them to overcome the barriers that they encounter along the way. As principal of Longview High, Mr. Brewer has led the effort to align the high school curriculum with the Texas state standards and with the end of course exams. This develops communication between staff members so they know what each are teaching at every level and creates strong vertical and horizontal alignment practices, which are necessary for continuity and student academic success. It also enhances teachers' use of teaching strategies, interventions, and lesson planning that relate to state accountability assessments. As a member of the Black Educators Association as well as the Youth Director of his church, he continues to advocate for youth in every aspect of his life.

Shay Thompson is **Principal of Forest Park Middle School** (6-8). With experience spanning over two decades, Ms. Thompson stepped forward in 2016 to serve as Forest Park's principal. She is committed to the International Baccalaureate-Middle Years Program (IB-MYP) and is well versed in IB instructional best practices. Prior to coming to LISD in 2014, she served as a lead teacher at Hallsville ISD where she had extensive experience in Marzano's high yield strategies and instructional leadership development. She is diligent in her approach to ensure high quality instruction and leadership capacity in her staff. Ms. Thompson has a strong

background in literacy, having served as a Reading Interventionist at the Hallsville Intermediate School in 2011/2012. Ms. Thompson started her education career in Early Childhood, which means she sees teaching from the whole child perspective. Her high-energy focus is to remove stress and barriers for her teachers and staff so they can nurture the students. Her tongue-in-cheek mantra is, “Feed the teachers so they don’t eat the children.”

Dr. Cynthia Wise is Principal of **Ned E. Williams Elementary School** (1-5). This quiet and forceful African American educator is a dynamic role model for young students. With more than twenty years of experience in a Title I educational setting, Dr. Wise has learned that the application of state standards must be coupled with emphasis on life-long learning for all students. In order to foster high standards of achievement, Dr. Wise has dedicated her career to establishing a consensus of vision, communication of that vision with all stakeholders (including students), empowering others to act on that vision (including planning for professional development of staff), measuring the short-term gains, and institutionalizing new approaches that prove to be effective. Under her leadership, the campus has received the Texas Region VII High Performing and High Progress School awards for the past four years. She was also recognized as the 2014 Texas Association of Black School Board Members Outstanding Administrator of the Year.

Dr. Jacqueline Burnett will step in to lead the **E. Texas Montessori Prep Academy** (PK/K) as well as the **E. Texas Montessori Academy** (1-5) until principals are hired. Dr. Burnett is currently the Director of Early Childhood and Montessori programs for LISD. Her passion for Montessori education and the benefits it provides to all students; but especially for giving low-income minority students a significant boost is quite evident. She has trained over eighty staff members on the Montessori philosophy and continues to provide rich professional development

to serve the teachers and over 1000 early childhood students in the Montessori program at LISD. She has been a teacher, assistant principal, and principal, as well as an adjunct professor at Kilgore College. She is affiliated with the American Montessori Society, the Texas Association for the Education of Young Children, the Association for Supervision and Curriculum Development, and the Texas Elementary Principal and Supervisors Association. In 2015, Dr. Burnett received the NAACP Longview Chapter Educator of the Year award.

The **campus Magnet Specialists** (to be hired) at each magnet school site are key individuals, who will spend 100% of their day at their respective campuses, are needed during the ongoing implementation of this project. These staff members will be certified master teachers selected based on their expertise in curriculum development, instructional delivery, interpersonal/intergroup relations, and team building. Their goal is to **empower teachers** and to build the faculty's capacity to operate high functioning and academically rigorous magnet programs. As the entire faculty gains expertise and confidence as education professionals, the entire governance of the schools will flatten. This relieves the campus administrators to pursue other duties that are often pushed aside because of the intense workload that comes with being an instructional leader of a campus with few supports. Specific duties for these specialists include, but will not be limited to: coordinating the curriculum writing process with the respective district Montessori, IB, and Subject-Area Specialists, coordinating the instructional delivery professional development and cognitive coaching for their respective campuses, working with the leadership team and staff to implement the PBL unit development and the STEAM interdisciplinary instruction, overseeing the design and implementation of summer programs to ensure thematic integration and standards practice, participating in collaborative efforts with the higher-education institutions and community business partners as these experts-in-the-field provide mentoring and

resource opportunities to the schools, helping with budget and processing of the theme related supplies and equipment requests, and participating in the observation process with the internal and external evaluators. The persons identified as Magnet Specialists must hold a Texas teaching certificate, possess a minimum of three years teaching experience, including experience in schools with diverse populations, experience in curriculum and instructional delivery development, ability to be a team member and work well with all staff members and student families, ability to work effectively with diverse populations, and possess excellent writing and communication skills. (See full job description in the Appendix.)

The campus Student/Parent Intervention Specialists (to be hired) will devote 100% of time to this magnet project. These persons will have one year in prevention/intervention counseling and two years in social work. Each person will work directly with campus students and families to ensure each child has the supports and resources necessary to overcome academic, emotional, and social barriers. One aspect of this position will be to work with the classroom teachers at each campus while advocating for students and families in order to bridge academic issues. Each Student/Parent Intervention Specialist will spend 40-50% of the day in classrooms at the campus, 40-50% of the day working with and for families, with only 10% of the day in the office. (See full job description in the Appendix.)

Teachers who will provide instruction are qualified

Magnet classroom teachers are keys to the success of each magnet school. All of the teachers at each magnet school have valid Texas teaching certificates. The following charts provide an indication of the expertise that many campus personnel have. While it is extensive, the specialized training that this MSAP project will make possible is highly anticipated. As the following charts indicate, training has occurred; but the coaching and infusing of the training

throughout the faculty, as well as bringing in the specialized STEAM training at these campuses is vital to this project. **Coaching and infusing the training will be the key to ensuring that best practices are happening** throughout the schools and that the school cultures become truly student-centered over the next five years. The core teachers at each of the magnet project schools are content experts and are each highly qualified in their field of study. Advanced science and mathematics courses, including physics and engineering, are already in place. Additional specialized STEM coursework and certifications for teachers at the schools is being developed with the University of Texas-Tyler and LeTourneau University. The Synergy project has put into place the **ongoing and just-in-time professional development** to ensure that the training really takes hold and builds the capacity of the schools to continue the project beyond the five years of the grant cycle. As vacancies occur during the grant cycle, the Principals, working with the Magnet Leadership team and following all LISD contracting rules, will make every effort to recruit staff members who bring relevant experiences as well as passion for the magnet project.

The following charts summarize the teaching experiences and special trainings that teachers in the project schools possess. LISD will continue to recruit professionals from diverse backgrounds, including minorities and men (since they are a scarcity in education), to ensure that students have dynamic role models in the classroom.

Longview High School (9th-12th)
Of the 114 teachers: 16 have Masters and 60 are male. There are 74 Caucasians, 7 Hispanics, 0 Native American, 0 Asian, and 33 African Americans. **Special training includes**: Biology, EOC Success, Purposeful Planning Tools, Examining Science Instruction, Successful Skills in Secondary Science, Inquiry-based Science, Technology and Student Responsibilities, Career and Technology Integration, Cross Curricular Learning

Opportunities, Teaching with the End in Mind, Post Secondary Readiness Measures, College and Career Readiness Skills, Differentiating the Needs to Diverse Populations, Dyslexia Identification, Accommodating Students with Special Needs, IB: Language A: English Literature, IB: Language B: Spanish, IB: Language B: French, IB: Language B: Latin, IB: History of the Americas, IB: Psychology, IB: Biology, IB: Chemistry, IB: Physics, IB: Math Studies, IB: Math Standard Level, IB: Math Higher Level, IB: Visual Arts, IB: Film, IB: Music, IB: Theory of Knowledge, IB: Extended Essay, IB: Creativity Action Service, IB Administration, IB: Coordination, IB: Counseling, IB: TOK Across the Curriculum, IB: Approaches to Teaching and Learning, IB Texas IB Schools Roundtable trainings, Gifted and Talented, Data Driven Decision Making, Planning with the End in Mind, Unpacking Texas Standards, Progressive Discipline, Intra-District Student Transfer training, Racial and Ethnic Diversity training, Effective Professional Learning Communities, Gifted and Talented Training for Cross Curricular Teaching, STEM Integration, Utilizing Science Fairs to Extend Learning, Response to Intervention, Utilizing Google Apps to Engage Students, Including Special Needs Students, Texas Teacher Evaluation System, Department of Justice Desegregation Training, Critical Thinking, Intro to Project Based Learning

Of the 43 paras: 4 have Masters, 2 have Bachelors, and 1 has Associates and 6 are male. There are 19 Caucasians, 2 Hispanics, 1 Native American, 1 Asian, and 20 African Americans.

Special training include: Gifted and Talented, Progressive Discipline, Intra-District Student Transfer training, Racial and Ethnic Diversity training, Working with At-Risk Students, Assisting with Poverty in Mind, Differentiating Instruction, Diversity, Response to Intervention, Including Special Needs Students, Department of Justice Desegregation training

Forest Park Middle School (6th-8th)

Of the 47 teachers: 9 have Masters, 2 have Doctorates and 15 are male. There are 32 Caucasians, 1 Hispanics, 0 Native American, 0 Asian, and 14 African Americans.

Special training include: IB: Middle Years Programme Tier One training, IB: Language and Literature, IB: Language Acquisition, IB: MYP Science, IB: Individuals and Societies, IB: Math MYP, IB: Implementing Middle Years Programme, IB: Visual Arts, IB: One-Site Unit Planner training, IB: Evaluating Your MYP, IB: Interdisciplinary Teaching and Learning in the MYP, IB: Physical Education, IB: Areas of Interaction, IB: Design & Unit Planner Writing, Visual Literacy in Science, Inquiry-based Science, Interactive Word Walls, Successful Skills in Secondary Science, Examining Science Instruction, Purposeful Planning Tools, Classworks, Gifted and Talented, Data Driven Decision Making, Planning with the End in Mind, Unpacking Texas Standards, Progressive Discipline, Intra-District Student Transfer training, Racial and Ethnic Diversity training, Effective Professional Learning Communities, Gifted and Talented Training for Cross Curricular Teaching, Working on Writing, Utilizing Science Fairs to Extend Learning, Vertically Aligning Writing TEKS, Understanding Dyslexia, Differentiating Instruction, Diversity, Effective Strategies for Increasing Student Learning and Achievement, Response to Intervention, Utilizing Google Apps to Engage Students, Including Special Needs Students, Texas Teacher Evaluation System, Department of Justice Desegregation Training, Critical Thinking, Intro to Project Based Learning, Teaching with Poverty in Mind, Meeting the Social and Emotional Needs of Economically Disadvantaged Students

Of the 13 paras: 1 has Bachelors and 2 are male. There are 4 Caucasians, 3 Hispanics, 0 Native American, 0 Asian, and 6 African Americans.

Special training include: Classworks, Gifted and Talented, Progressive Discipline, Intra-District

Student Transfer training, Racial and Ethnic Diversity training, Working with At-Risk Students, Assisting with Poverty in Mind, Differentiating Instruction, Diversity, Response to Intervention, Including Special Needs Students, Department of Justice Desegregation training

Ned E. Williams Elementary School (1st-5th)

Of the 37 teachers: 11 have Masters and 5 are male. There are 10 Caucasians, 3 Hispanics, 0 Native American, 0 Asian, and 24 African Americans.

Special training include: Gomez & Gomez Dual Language Model, Kilgo Math, Reading, Science training, Guided Reading, Meaningful Engagement Through Math Stations, Classworks, Gifted and Talented, Data Driven Decision Making, Planning With the End in Mind, Unpacking Texas Standards, Progressive Discipline, Intra-District Student Transfer training, Racial and Ethnic Diversity training, Kunjufu training on Working with Students of Color, Effective Professional Learning Communities, Gifted and Talented training for Cross Curricular Teaching, The Writing Academy, Working on Writing, Math Screeners, Utilizing Science Fairs to Extend Learning, Create It Math, Writing Portfolios and Vertically Aligning Writing TEKS, Texas Primary Reading Inventory, Intro to SAMR, Smart Start: Waterford, Understanding Dyslexia, Intro to CLI Engage Assessment, Differentiating Instruction, Diversity, Expanding the Google Experience, Effective Strategies for Increasing Student Learning and Achievement, Response to Intervention, Apple Connect Ed, Google Hangouts and Video Conferencing, Utilizing Google Apps to Engage Students, Including Special Needs Students, Texas Teacher Evaluation System, Department of Justice Desegregation training

Of the 12 paras: 3 have Bachelors 0 have Associates and 1 is male. There is 1 Caucasian, 3 Hispanics, 0 Native American, 0 Asian, and 8 African Americans.

Special training include: Gomez & Gomez Dual Language Model Assistance in the Classroom, Classworks, Gifted and Talented, Progressive Discipline, Intra-District Student Transfer training, Racial and Ethnic Diversity training, Kunjufu training on Working With Students of Color, Math Screeners, Utilizing Science Fairs to Extend Learning, Differentiating Instruction, Diversity, Expanding the Google Experience, Response to Intervention, Including Special Needs Students, Department of Justice Desegregation training

E. Texas Montessori Prep Academy (PK/K) PROJECTED for 2017/2018

Of the 53 teachers: 11 have Masters and 2 are male. There are 16 Caucasians, 14 Hispanics, 1 Native American, 0 Asian, and 23 African Americans.

Special training include: Montessori 101 by Southwest Training Center, Capturing Kids Hearts, Waterford Smart Start—Early Literacy, Conscious Discipline, Balanced Literacy with the Daily 5 CAFÉ, Texas Education Agency Kindergarten Reading Academies, Children Learning Institute CIRCLE training, Gomez & Gomez Dual Language Model Assistance in the Classroom, Classworks, Gifted and Talented, Progressive Discipline, Intra-District Student Transfer training, Racial and Ethnic Diversity training, Kunjufu training on Working With Students of Color, Math Screeners, Utilizing Science Fairs to Extend Learning, Differentiating Instruction, Diversity, Expanding the Google Experience, Response to Intervention, Including Special Needs Students, Department of Justice Desegregation training

Of the 25 paras: 3 have Bachelors and 2 are male. There are 0 Caucasian, 7 Hispanics, 0 Native American, 0 Asian, and 18 African Americans.

Special training include: Childdren Learning Institute CIRCLE training, Gomez & Gomez Dual Language Model Assistance in the Classroom, Classworks, Gifted and Talented, Intra-District

Student Transfer training, Racial and Ethnic Diversity training, Kunjufu training on Working With Students of Color, Differentiating Instruction, Diversity, Expanding the Google Experience, Response to Intervention, Including Special Needs Students, Department of Justice Desegregation training

At this time the **E. Texas Montessori Academy** (1st-6th) has not been staffed. Interviews for the campus are in progress. This magnet project will connect faculty and staff and deepen their understanding as they revisit the conceptual ideas inherent in these trainings and then deepen their understanding through the continuous and ongoing coaching and feedback that comes from having a common vocabulary and school-wide sensitivity to make the implementation viable and effective. This same common vocabulary and focus will be manifested as the faculties engage in STEM and arts instructional trainings and professional development. Advanced STEM coursework professional development has been sporadic; but this Synergy project will focus and reinforce this training so that STEM learning, as well as arts-infusion is evident throughout the schools.

Personnel qualifications related to the project objectives, as well as key personnel's knowledge and experience in curriculum development and desegregation strategies

The key personnel in this Longview proposal are highly experienced educators. Many of them were children during the turmoil of the Civil Rights Movement of the Sixties and ushered in a new era. Many of these key people still hold the vision of what magnet schools can do for young children and youth who are trying to break the grip of poverty and move upward into adulthood. These key personnel are strong instructional leaders who will mold and guide the implementation of the curriculum and instructional aspects of this project. Under Superintendent Wilcox's guidance, LISD has developed a tight vertical team effort to articulate standards based

curriculum development from K-12 as well as horizontal grade-level teams to articulate curriculum at each level. With the establishment of Professional Learning Communities (PLCs) to refine and replicate the best practices and interventions with this Synergy project, student achievement will be enhanced. Using the magnet personnel to focus the campus efforts will ensure that teachers stop to 'sharpen the axe.' It will also ensure that the training becomes institutionalized and the Synergy project effects continue beyond the grant cycle. Assistant Superintendent Horace Williams' experience in developing and implementing STEM academies and magnet programs in the Dallas, Fort Worth, and Houston areas will be invaluable in helping the project schools' principals to develop their campuses. Dr. Jacqueline Burnett has been a strong proponent of Montessori for LISD for years and her support and advocacy will be invaluable as these two new magnet schools develop. The key personnel as well as key master teachers at the project campuses have wonderful educational backgrounds and many years of instructional leadership and curriculum development, grounded in working with minority and low income students. Being on the ground floor of a new project is exciting and exhilarating. The five magnet campuses' faculty and staff members have crafted their dreams for their schools in the pages of the project design of this MSAP proposal and the key personnel are in place to ensure that these dreams become reality.

Longview Independent School District, as part of its non-discriminatory employment practices, will ensure that its personnel are selected for employment without regard to race, religion, color, national origin, sex, age, or disability. The table below presents an overview of the composition of the workforce in LISD in terms of numbers of employees, minority staff, and gender.

Classification	# Personnel	% Af. Am.	% Female
Teachers	569	35%	76%

Administrators	45	51%	64%
Clerical	102	28%	96%
Non-Certified Instructional Staff	150	74%	90%
Non-Certified Admin. & Support	100	37%	83%
Buildings & Grounds	61	52%	30%
Cafeteria	.78	62%	96%
Transportation	56	77%	64%

LISD actively implements strategies that ensure that all employees and potential employees have equal and fair treatment, as well as non-discrimination on the basis of race, color, religion, sex, age, handicap, or national origin in all areas and phases of employment. This includes hiring practices, job assignments, upward mobility, transfer and demotion, layoff, and termination. In doing so, the district provides a wide dissemination of job advertisements and broadly stated job specifications to include a wide range of education and work experience.

LISD's key personnel are knowledgeable and well versed in desegregation efforts, as well as, developing curriculum, curriculum mapping, and its use throughout the schools to ensure students are not missing key conceptual ideas as they progress through the grades. With the Texas State Standards, work has already begun on upgrading the curricular units and instructional practices throughout the district that will ensure LISD students have the 21st Century skills to be college and career ready. This project will bring all of this together under the Synergy Project. These new magnet schools will truly excite families searching for a value-added education. From technology integration (using state-of-the-art technologies and media to support instructional practices), to working with diverse learners (including students with special needs and ELLs) to the use of the arts to support, and extend STEM classroom learning, the

combined expertise of the district and school based staff members in fields related to the objectives of the magnet project will ensure the Longview Synergy project is effective in making progress in the areas of systemic reform.

Quality of Project Evaluation

The district will select an **external evaluator with an educational background, experience in evaluation of magnet schools, and expertise in desegregation efforts** in accordance with the requirements of the US Department of Education and the Texas Department of Education who will **conduct formative assessments** (Annual Performance Report) to observe, interview, and analyze both quantitative data and qualitative data in order to provide feedback and suggestions for improvement in each school and for continuous program improvement toward meeting the performance objectives. (See the goals, objectives, and performance measures in the Project Management section of application.) In addition, the external evaluator will also collect and analyze both qualitative and quantitative data to provide **summative evaluations** about each school meeting its performance objectives and the program attainment of outcomes (see logic models in the project design section) at the end of each grant cycle year (Ad Hoc Report) as well as at the **end of the 5-year grant cycle**. The formative and summative assessments will be done through the focused lens of increasing desegregation, improving student achievement, and developing capacity for sustaining the project beyond the grant period. Analysis of the data from all sources will enhance the capacity of the magnet team members and project school staffs to make informed and timely decisions about program development and implementation. Findings will be shared with school and district personnel and an **executive summary of the annual report** will be presented to the School Board as well as distributed to parents and the community.

The evaluation plan for the LISD Magnet Schools Assistance Program has been designed to provide **information for decision-making and action**. It will focus on complying with EDGAR, the U.S. Education Department General Administrative Regulations, by providing a formative evaluation (the **Annual Performance Report**), and a summative evaluation for each year (the **Ad Hoc Report**), as well as the **Five-year Summative Report at the end of the grant cycle** which will use both quantitative and qualitative information to determine: 1) effectiveness of the project in meeting the statutory purposes of the Magnet Schools Assistance Program, 2) progress in meeting approved project objectives, and 3) effectiveness of the project on the participants being served. **Formative assessments throughout each year will be on-going in order to make project improvements as necessary.** The external evaluator, the Assistant Superintendent, and the Magnet Director will meet monthly during the first year of the grant cycle and then bi-monthly during the ongoing years. These meetings will include **periodic visits to each project school, soliciting feedback from students, faculty, and campus administrators,** and reviewing the MSAP project objectives, the level of their implementation, and student achievement in regards to them. Additionally, **family input** and guidance will be solicited through annual **parent and student surveys** as well as through periodic **focus groups**. **Qualitative as well as quantitative methods** will be used with ongoing collection of data occurring from a variety of sources, as detailed in the Goals, Objectives, and Performance Measures chart (see Quality of Management Plan section); and, by a variety of assessors (internal and external) who have expertise in the specific area. Yearly collection of data such as enrollment snapshot information (by race and by SES) for each campus and feeder schools will be used to assess desegregation efforts. Student achievement (by race and by SES) on state tests for Reading, Mathematics, and Science will be used to assess academic achievement. A high

school readiness metric will be developed to assess student indicators of success. A student survey will ascertain students' perception of the school climate and their own self-assessment of learning, as well as any possible cultural biases embedded in the system or the daily practices of the schools and district. Parent participation in school parent involvement activities, in community services, and educational supports from the Family Outreach Office, will be documented and parents will be surveyed to ascertain parent comfort and participation in their student(s)'s learning. Documentation of interdisciplinary and STEM PBL units of study designed and developed by grade level teams will indicate application of the campus instructional training, its integrated technology tools use, infusion of the arts, and progressively more student-centered goals into the magnet curriculum. A school survey will indicate teachers' satisfaction with the school climate health. Data on student participation in co-curricular and extra curricular activities, as well as in advanced academic coursework, disaggregated by race and economic levels will indicate whether students are re-segregating within the schools. Data on student attainment of 21st Century soft skills as reported by campus teachers will be collected to ascertain student development toward being career- and college- ready. Documentation of campus' formal and informal partnerships with area businesses, educational institutions of higher learning, medical facilities, and with local businesses will be collected and focus group interviews with adults within the organizations, teachers, students, and parents will qualitatively be assessed as to the partnerships' effectiveness. Anecdotal documentation of the development of the professional learning communities at the project schools will be collected and analyzed to ascertain their impact on teachers' career satisfaction as well as their effectiveness on student achievement. Teachers working toward advanced certifications or post-baccalaureate degrees will ascertain the professional self-efficacy of teachers in the project schools. Magnet Advisory

Council meeting agendas and minutes will be analyzed to qualitatively ascertain the Council's varying perspectives on the Synergy project's progress. By September of each grant cycle year, the A/R/M Specialist will present a "Status of Longview High School Graduates," with anecdotal accounts to ascertain the effective support for graduates into the real world of work or on to post-secondary education. The Synergy project will be fully evaluated from the start of the initiative through the five-year project period in order to become self-sustaining.

Extent the methods of evaluation will produce evidence of promise

Research and Evaluation are processes that both use systemic inquiry, which entails: collecting data, analyzing data, interpreting data, and finally, using the data. The evaluation of the Longview Synergy Magnet project will use the four steps of systemic inquiry to understand, describe, and/or empower informed decisions about the project annually. The research implications of this systemic inquiry will be to understand, describe, and/or empower the Longview magnet project results as evidence of promise for similar districts and/or schools across the nation.

As part of the partnership with the University of Texas-Tyler, rigorous evaluation designs will be carried out by superintendent-candidates in the UT-Tyler Superintendents' certification graduate program as part of their coursework, under the guidance of their University research and statistical analysis professor(s). A mixed method approach, which uses a combination of quantitative and qualitative methods from multiple data sources, will be used to measure the impact of various components of the magnet program. To assess the statistically significant impact of the project's interventions, a well-designed, quasi-experimental evaluation that uses clustered regression design (RD) methods, was selected because its theory is grounded in causal inference and hierarchical-linear-modeling (HLM) literature and because RD is a commonly

used design in education research to test intervention effects. Additionally, RD designs are less intrusive on campus staff. The goal of these graduate research studies will be to measure aspects of the project's impact on student academic achievement with the statistical rigor of high-quality quasi-experimental design. Comparable Texas school district campuses (***comparison***) will be identified to compare with the project campuses (***intervention***). Each comparison group site will be matched to an intervention group site based on covariates such as ethnicity, gender, minority isolation, past academic achievement, socioeconomic status, family structure, etc. Because regression design does not require that needy or deserving students get assigned to a no-treatment or comparison group, there is an ethical advantage over other experimental designs for assessing treatment effects. The evaluation team will collect student-level data that allows one to compute the student-level "pooled within-group standard deviation" as well as to control for the covariates, which is important as they may have confounding effects on the results. The research will utilize an *analysis of covariance* (ANCOVA) to assess the magnet program effect while controlling for covariates. By using this comprehensive approach to evaluation, greater assurances can be gained as to **what is and what is not happening (evidence of promise)** among students, teachers, staff, and the community. The superintendent candidates, conducting the research studies as part of their coursework, will be exposed to 'action research techniques' in an authentic educational setting and be more likely to replicate the "evidence of promise" aspects of the Synergy project when they are in a position to head their own districts.

Extent the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project

LISD will produce and provide quantifiable data. The LISD Synergy project has identified six major overarching outcomes, which are embedded in the MSAP statutory categories of Ensuring

Desegregation and Choice, Developing Capacity, and Improving Academic Achievement. These are detailed in the Project Design section of the application in the **Logic Models with short-term, mid-term, and long-term outcomes**. These six overarching outcomes by category are: **Ensuring Desegregation and Choice**: **1)** effectiveness of racial integration in the designated project magnet schools, feeder schools, individual classrooms, as well as during school activities and events **2)** ability of the project campuses to attract students from differing racial, ethnic, social, and economic backgrounds **Improving Academic Achievement**: **3)** improvement of magnet school student achievement so all students successfully advance to the next level of educational endeavor **4)** effectiveness of instruction to raise student performance and close the achievement gap for all populations **Developing Capacity: 5)** development of school cultures that promote rigorous, engaged learning and that sustain systemic reform, and **6)** improvement of parent involvement and participation in the schools

In order to track and study the rate of progress the Longview magnet project makes toward its stated outcomes, several evaluation instruments will be used to track this progress. (See the Goals, Objectives, and Performance Measures chart in the management plan section to see the **benchmarks** of this progress.) These evaluation instruments include: 1) The snapshot data on the LISD **Ethnic Percentage Report**, which measures the racial and SES composition of students enrolled in the district schools, will be **collected annually in October**. Additionally, the racial and SES composition of the applicant pool for each magnet campus and feeder campuses will be monitored and reported. 2) **Local surveys** will provide parental and community feedback on local needs and desires and will be developed using the **Inventory of Present Practices of School, Family, and Community Partnership** found in the appendix. This will ensure that the best practices reported by school and district personnel align with parent and community

perceptions. 3) Parent **magnet application comments** will provide feedback on effective recruiting methods. This is simply a checklist, with a comments section, of how families heard of the magnet program and became interested in enrolling (i.e., billboards, TV commercial, radio commercial, newspaper inserts, magnet fair, word-of-mouth, other). 4) **Applicant pool reports** will disaggregate the number of applicants applying to the magnet schools from the various populations as defined by the federal legislation. 5) **Marketing effectiveness** will be monitored to ensure that the student applicant pool for the magnet schools reflects a racial and ethnic composition that, in relation to the total enrollment of the school, reduces minority group isolation. 6) Each campus's **Student Participation Report** will measure the racial and SES composition of students participating in designated core classes, as well as in extra- and co-curricular activities. 7) Each campus's **Family Involvement Report** will measure the parent and family participation in daily school activities and at school events using Joyce Epstein's six categories of involvement. 8) A **Student Survey** to gain students' feedback on the school culture and their own self-assessment each year will be used to determine the overall safety and climate of each magnet school from the students' perspectives. 9) The LISD **Personnel Report** will be used to ensure that all teachers hired at the magnet campuses meet the highly qualified designation for the state of Texas, as well as to track the number of teachers from each campus pursuing certifications or advanced degrees in Math, Reading, or Science. 10) LISD **professional development logs** and then subsequent **Teacher Reflective Coaching logs** will be used to monitor each teacher's completion of the yearly required training and coaching on PBL, science, technology, engineering, math, arts-infusion and entrepreneurship. 11) Campus **PBL units of study** will be compiled electronically by the Magnet Office to share on the district website. 12) A campus **Student Technology Use Report** will be used to monitor core teachers'

implementation of technology and training into the classroom instruction to show how students are using technology to show their evidence of learning. 13) **Student achievement data** will be analyzed from the **Texas State Accountability testing program**. Benchmark tests, checklists, and rubrics will provide a **stream of formative assessment information** as basis for **personalizing instruction**. Pupil profiles will also be used for **trend analysis** to assist planners with instructional decisions. 14) **Collaboration, Communication, Creativity, and Professional Ethics Skills Rubrics** will be created and then used to assess the student development of these 21st Century 'soft skills.' The development of these rubrics will enhance the professional expertise of the project campus faculties as they work together to ascertain what these soft skills are and how to articulate them across the grade levels and throughout the content areas. 15) **Student enrollment in advanced classes** such as Algebra I, Geometry, Biology, Physical and Science classes at the middle school levels as well as at the high school will be documented as evidence that positive and effective supports are in place for more LISD graduates prepared to be college and career ready. In summary, the Synergy project will have a rigorous, ongoing assessment and reporting system that includes regular monthly and quarterly data collections, along with semi-annual and annual evaluation reports.

Objective and quantifiable measures have been put in place to guide the attainment of the six outcomes in the Plan of Operation. **The methods that will be used to collect the data on these six components are objective and quantifiable**. The **centralized magnet school personnel and campus leadership teams** will carry out necessary work as outlined in the MSAP grant application. The **Magnet Director and the external evaluator** will be responsible for ensuring the objectivity of the evaluation plan. The external evaluator will assist the project director with **monitoring and documenting instructional activities** that support all components of the

programs and implementing an **evaluation design** that will measure the project's attainment of its goals. The external evaluator will assist the project director in preparing the prescribed charts that will result in data for the final performance reports. Individual school sites will be advised of **expectations relative to evaluation plan schedules and procedures**. The prescribed data collection charts and procedures will be shared with the project campuses in workshops at the site. A **timeline for evaluation activities** will be set on the district and school calendars at the beginning of the 5-year cycle, and updated at the beginning of each school year so that the **timely collection of data and debriefings at periodic points** throughout the year are set in advance and do not slide. **Site visit reports** are opportunities to provide feedback based on data related to the implementation of the project. After each site visit, a report will be written by the assessor and submitted to the Magnet Director. It will summarize the findings of the visit and recommendations for improvement. Assessors will orally discuss the proposed recommendations with the school and magnet staff during an **Exit Interview** at the end of the site visit. Adherence of activities implemented on schedule, the amount of time grant activities are occurring, as well as the quality of the grant activities occurring will all be documented and shared through the site visit reports as well as through **quarterly documentation reviews** to the Magnet Central Office team in September, December, March, and May of each year. The site visit reports and documentation reviews summarize how much progress is being made toward performance measure attainments and fidelity of project implementation. The reports help all to understand where they are on attaining the intended project outcomes and, if not, why and how the project activities can be improved.

The extent to which the costs are reasonable in relation to the objectives, design, and potential significance of the proposed outcomes

The costs of the Longview Synergy magnet project are reasonable in relation to the systemic reforms that will be enacted over the next five years. This is a comprehensive project that will take a great deal of effort and resources to put into motion. Changing a community's perception about their schools is paramount and that goes beyond marketing. While marketing is expensive, it is a necessary expense to 'tell the story' of the wonderful changes taking place within the schools. Students' attitudes and aspirations are directly tied to their sense of worth and belonging. The costs to refurbish tired buildings, to outfit them with educational supplies and equipment that make learning fun and exciting, and to create an environment of collegiality and professionalism is paramount for a young person to realize that he/she is capable and able to achieve a full life upon graduation in whatever endeavor he/she desires. The key costs will be advancing and developing the teaching faculty and staff, including administrators, and are VERY reasonable because these adults hold each child's future in their hands. The objectives, design, and potential significance of this proposed LISD magnet project will ensure that this comprehensive vision is implemented well.

While campuses were involved in the initial planning of the LISD Synergy Project, if funded, additional planning is needed for its implementation since this is a comprehensive initiative. Every school, under the guidance of the Assistant Superintendent will create an implementation plan based on this proposal application and the logic models. The process will start with revisiting the project activities, why they will result in the expected outcomes, as noted on the logic models, and the theory behind the application activities so that all stakeholders understand what is being implemented and why. Using the grant application, school staff members will then

list and clarify the activities to be implemented and the timeline for implementation, as well as how the personnel will be responsible for the activities.

Ensuring desegregation and choice objectives and outcomes will be assessed against the baseline enrollment data of 2016/2017. This data is used to establish the target for the outcomes for each objective developed relative to desegregation and choice. Magnet staff trainings at the beginning of each school year will orient staff and administrators to the importance and function of the applicant pool in achieving a diverse population at each school and in bringing students back to Longview ISD. Applicant pool information will be archived for data analysis as a part of the MSAP Annual Performance and Ad Hoc report completion. Marketing venues will be monitored to ascertain their effectiveness on family choice. These marketing venues include: billboards, television, radio, promotional items, public events, as well as district and campus websites. Quantifiable data of actual enrollment will demonstrate the ability of each school to recruit and retain new applicants, thereby reducing racial and economic isolation. Family/parent involvement at school activities and events will measure increased interaction among families of differing socio-economic, ethnic, and racial backgrounds. Log in sheets will be disaggregated to monitor this objective. Student assignment to core classes, as well as voluntary student participation in co-curricular and extra-curricular activities and events will be monitored to show quantifiable data to see if any student populations are re-segregating within the schools. The high school readiness metric will reveal quantifiable data to indicate students who are at-risk of dropping out and/or disengaging. The annual student survey will then ascertain students' perception of overall school safety and whether the school culture is conducive for all students to feel welcome and engaged.

Improving academic achievement objectives and outcomes will be assessed against the baseline achievement data of 2016. These data are used to establish the target for the outcome for each objective developed relative to improving academic achievement in language arts, mathematics, and science. Technology and software implementation into the core curriculum will be assessed by quantifying the types and categories of technology and software used by students in creating projects for the project-based units. As part of the learning impact documented with the teaching of the PBL units, rubrics measuring creativity, collaboration, communication and professional ethics skills (along with critical thinking design skills) will assess the student attainment of these 'soft skills.'

Developing capacity objectives and outcomes will be assessed against the baseline personnel data of 2016/2017. These data are used to establish the target for the outcome for each objective developed relative to developing capacity in order to sustain the magnet school project beyond the five years of the grant cycle. Data will be collected of teachers working toward advanced certifications and/or advanced degrees in particularly Math, Science, and Reading as a way of quantifying the number and percentage of teachers increasing their content expertise. The number of hours of training and coaching sessions will be documented using the teachers' reflective logs to provide each teacher with the quality direction and support to build instructional capacity throughout each project school. The project-based units, as well as the course syllabi in advanced academic offerings will be digitally submitted to the LISD curriculum department and uploaded to the LISD website. The district specialists and the campus magnet specialists will then use these units and courses (including teacher video modeling of key lessons) **for lesson study and analysis**, which will further extend the instructional capacity and expertise of faculty members at each school.

As stated before, this evaluation plan for the LISD Magnet Schools Assistance Program has been designed to provide **information for decision-making and action**. The methods employed are appropriate for determining that the project is successful in meeting its intended outcomes, including its goals for desegregating and increasing student achievement, and that these methods are objective and the data are quantifiable. **This evaluation plan will produce evidence of promise** by indicating aspects of the project that are most effective and viable, as well as stumbling blocks to be avoided. The Longview ISD magnet project is a comprehensive and articulated vision for the project schools in Longview, Texas and holds great promise for our students and community; but it also may hold evidence of promise for similar communities across the nation.