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***Competitive Preference Priority 1--Need for Assistance (0 or 2 additional points).***

The regional (multi-district) application *Equity. eXcellence & Pride across Eastern*

*Connecticut (EXPECT)* being submitted by LEARN on behalf of six schools

- Regional Multicultural Magnet School, K-5 International Baccalaureate [significant revision];
- Cutler Middle School, 6-8 International Baccalaureate/Arts & Humanities [new];
- West Side Middle School, 6-8 International Baccalaureate & STEM [new];
- Teachers Middle School, 6-8 Global Studies/World Languages [new],
- Kelly Middle School, 6-8 STEAM [new]; and
- CT River Academy, 9-12 Sustainability and Advanced Manufacturing STEM [significant revision]; will serve more than 2,900 students.

These six schools represent a wide range of high-quality thematic and pedagogical integration, as well as extensive and rigorous professional learning opportunities for the faculties of the EXPECT schools.

As the Regional Educational Service Center for southeastern Connecticut, LEARN has the capacity and experience to effectively carry forth the proposed plan, which fully supports the State of Connecticut's desegregation plan. The Connecticut Supreme Court decisions of 1996, 2003, 2007, and 2015, ordered that the state create a plan to address segregation in Hartford schools, as well as across the entire state of Connecticut. Based on legislation passed in 1996, 2003, 2010, 2012 and 2015, the State Department of Education has created and implemented a plan for **public school choice** that includes a number of critical elements. Since 1996, when the Connecticut State Supreme Court determined in *Sheff v. O'Neill* that public school students in Hartford were attending schools that were economically, ethnically, and racially isolated, in a

clear violation of Connecticut's constitution, the entire state has been under **mandatory court order** to remedy the statewide experience of racial isolation. In so doing, the court ordered the Connecticut General Assembly to address these disparities. Additional desegregation plans and legislation included full parent choice across the state for magnet schools.

Forced by the Supreme Court's **mandatory order for a response** to the situation identified in *Sheff v. O'Neill*, laws were enacted that offering both suburban and urban students the opportunity to attend schools of choice in an effort to ameliorate the racial isolation of all students. However, the State of Connecticut does not supply funds for magnet school **program development and planning**. There continue to be great disparities in the funding structures for magnet schools not located in the Greater Hartford area. For example, the per pupil magnet reimbursements are higher in the Hartford area and significantly less in the rest of the state. For the Hartford region, schools receive either 10,000.00 or 13,000.00 per student depending on the location of the school. For the eastern region of the State, magnet schools receive on a sliding scale anywhere from 3,000.00 to 7,800.00. Again, the state has created its own disparities. Furthermore, the schools in the Hartford region receive dollars for planning and opening new schools, while the schools in this proposal do not. Additionally, the current discussion at the State Department of Education centers around decreasing the reimbursements to school districts for interdistrict magnets over the next five years; a way to balance the CT budget on the backs of students and the towns – the result of which might be an increase of tuitions charged to feeder schools/districts.

The EXPECT schools and the partner districts will move ahead at a much slower pace should these funds not be awarded. Norwich Public Schools needed a 6% budget increase to support on-going planning and development of innovative practices; yet they expect to receive less than a

2% increase for the efforts. The Groton Town Council approved a 0% increase for the education budget and they are projecting as high as a **19.4% decrease in funding from the State of Connecticut for the 2017-2018 school year**. Clearly, MSAP funds being directed to planning, capacity building, fidelity of implementation, and professional learning will ensure a fast track to magnet school implementation, a decrease of racial and socio-economic disparities, and high quality innovative practices.

One of the primary pieces of Connecticut's School Choice Plan has been the development of new inter-district magnet schools. These magnet schools, created when two or more districts combine their ideas, skills, and resources to create a new school, center around a unique or unusual theme specifically designed to foster both excellence in academics and the reduction of racial, ethnic or economic isolation. Both the state and the Sheff v. O'Neill plaintiffs (whose lawsuit led to the 1996, 2003, 2010, and 2015 legislation) recognized that magnets school are an excellent method of reducing this isolation. School districts additionally have the option to create intra-district magnet schools, to further decrease the racial isolation of students within their communities. Charter Schools and Open Choice options complete the picture of Connecticut's plan to improve racial isolation and student achievement across all of the state's LEAs.

Connecticut has long been recognized as a state of many contradictions, exemplified by the characterization of the "*Two Connecticuts*": extreme wealth and deep poverty; wide racial diversity and significant isolation; large divides between student achievement and failure. Connecticut's children have vastly different educational experiences marked by significant disparity in available resources. According to a January 2015 report by the Economic Analysis and Research Network, Connecticut's top 1% earned an average of \$2.7 million, compared to an average of \$52,000 for the rest of its taxpayers – a ratio of about 51:1. In Connecticut, the top 1%

saw their incomes grow by 35% between 2009 and 2012, while remaining 99% of taxpayers saw real income decline by 5.4% during that same period. TRENDCT.org reported in a May 2015 online article, that “Connecticut has more concentrated poverty (and wealth) than most metros.” According to this article, “Wealth and poverty are highly concentrated in Connecticut — more so than in many other large metropolitan areas. And often, those neighborhoods are racially and economically segregated from each other.” The article goes on to state that poor residents in Connecticut’s urban centers are just as likely to live in extremely poor, predominately minority neighborhoods as those in greater Detroit or greater Philadelphia. And TRENDCT reports that there are *two times as many affluent and segregated neighborhoods in Connecticut as there are poor, segregated ones*, highlighting the extreme minority and socioeconomic isolation of the four host communities for this EXPECT proposal.

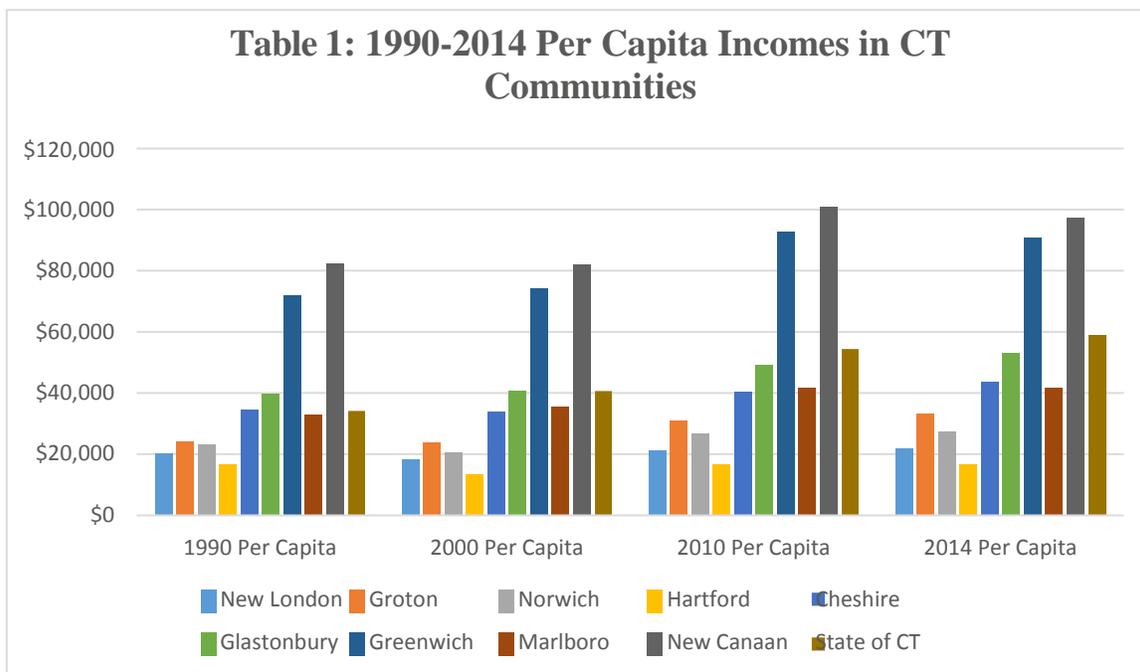
The essay “*Two Connecticut*” (by Gerald Tirozzi, former Connecticut State Education Commissioner from 1983-1991) described Connecticut as **two communities – one largely white, suburban/rural, and affluent with strong educational systems, and the other largely low-income, minority, urban with poor educational systems.**

By 2002, the Norwich Bulletin article “Tale of Two Connecticut” continued to make this case: “*In eastern Connecticut towns and cities, Connecticut’s status as the richest state based upon per capita income is known but not seen . . . The median household income of families in the New London metropolitan region increased by just \$1,200 from 1999-2000, or \$1,800 less than the national rate.*”

Today, the picture remains grim. An alarming danger signal for the four EXPECT magnet communities (New London, Norwich, Groton, and East Hartford) continues to be the combination of poor performance and the low economic base of their students and their families.

Not only are students not performing well on the battery of standardized tests administered, but the community and state resources to support education are a major contributor to this disparity.

As documented in the Table 1, which looks solely at the change in per capita income among the four host communities and several of key comparison communities over a 24-year time span, it is clear how the ongoing disparities and inequities continue to increase.

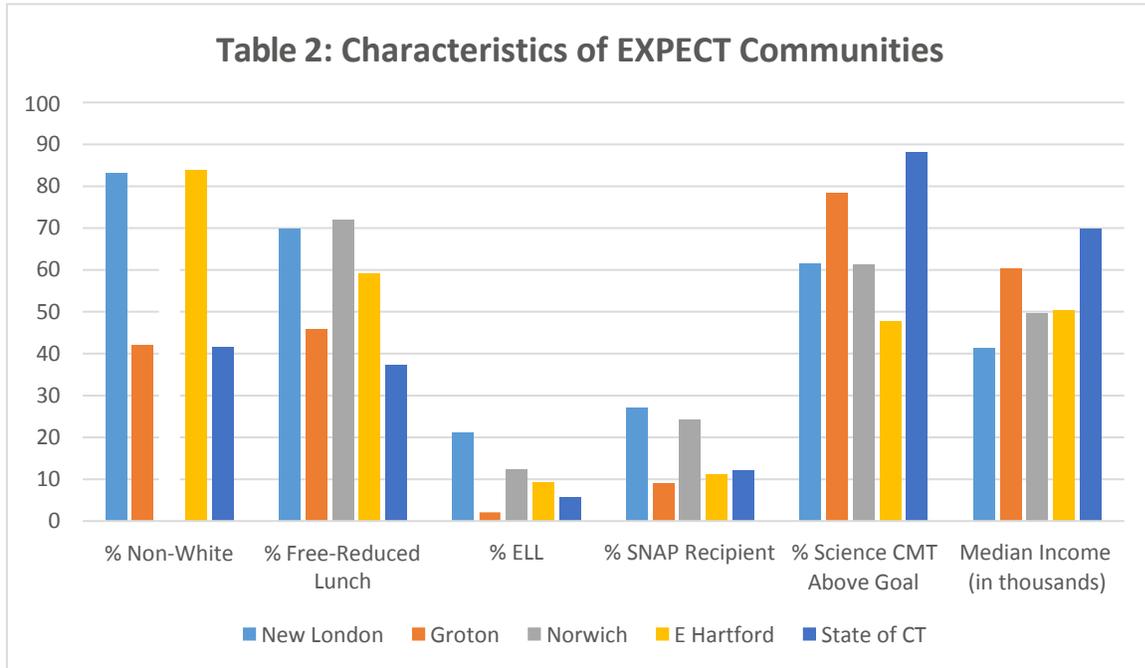


Source: CT Economic Resource Council, 2016

As demonstrated in Table 1, average per capita income for the four EXPECT communities rose an average of 17%, while five wealthy comparison communities saw an average increase of 25% over the reported 18 years. While the percentage increase may not seem as dramatic as one would expect, in dollars the average increase for the four EXPECT communities was only \$3,614, while the increase on the other end of the spectrum was \$12,911 or a difference of more than **257%**.

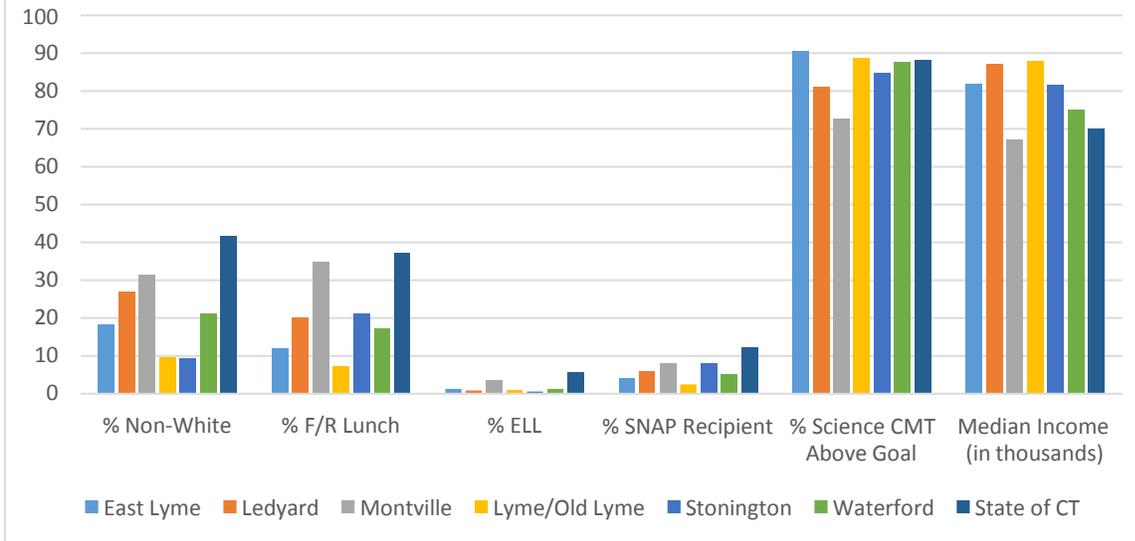
Tables 2, 3, and 4 illustrate the additional disparities among the four communities where EXPECT schools are located and their feeder/neighboring communities and districts. Again, the

differences are stark, illustrating a **persistent and challenging need** to bring students of different backgrounds and cultures together in an intentional and meaningful manner. By nearly every metric, the four EXPECT communities are significantly worse off than their feeder/neighborhood districts. Students have fewer resources, their outcomes on standardized tests are lower, and their needs are higher.



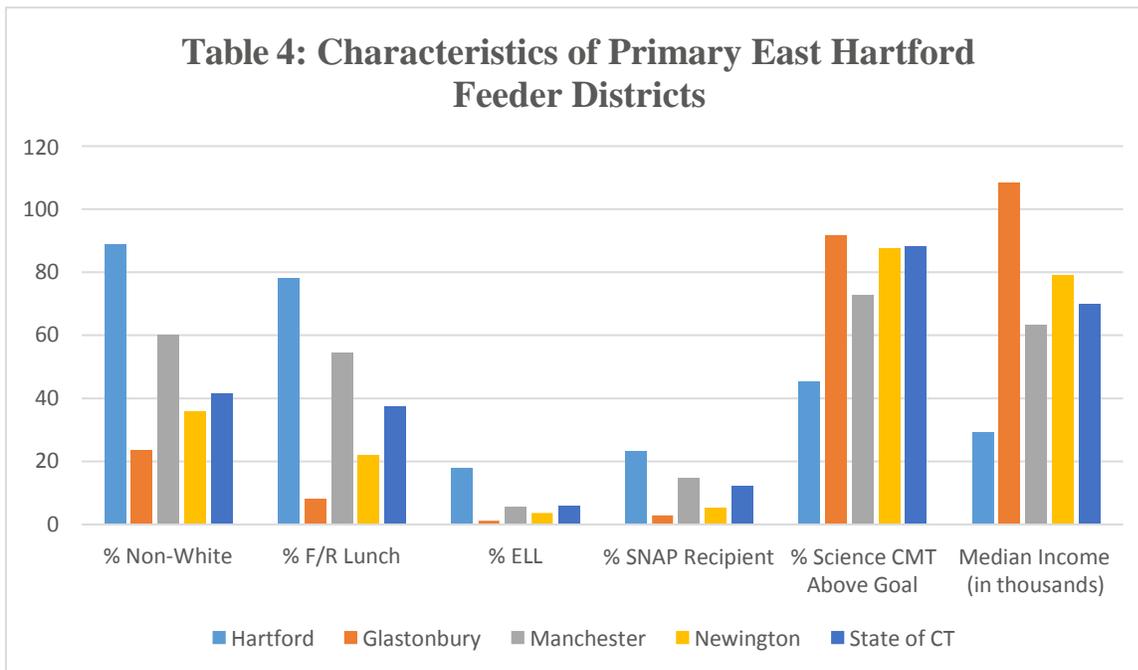
Source: CT State Department of Education, District Profile & Performance Report, 2014-2016

**Table 3: Characteristics of Primary SE CT Feeder Districts**



Source: CT State Department of Education, District Profile & Performance Report, 2014-2016

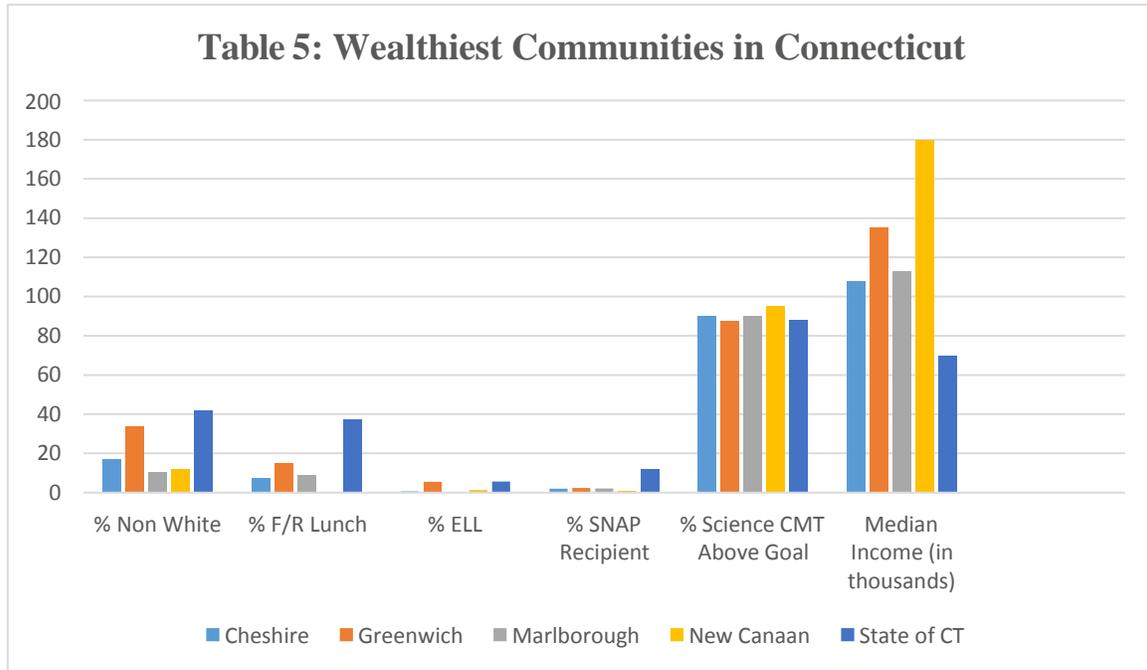
**Table 4: Characteristics of Primary East Hartford Feeder Districts**



Source: CT State Department of Education, District Profile & Performance Report, 2014-2016

These demographic and achievement differences are even more bleak, when compared to Connecticut’s wealthiest and most segregated communities – which contribute to the most often-

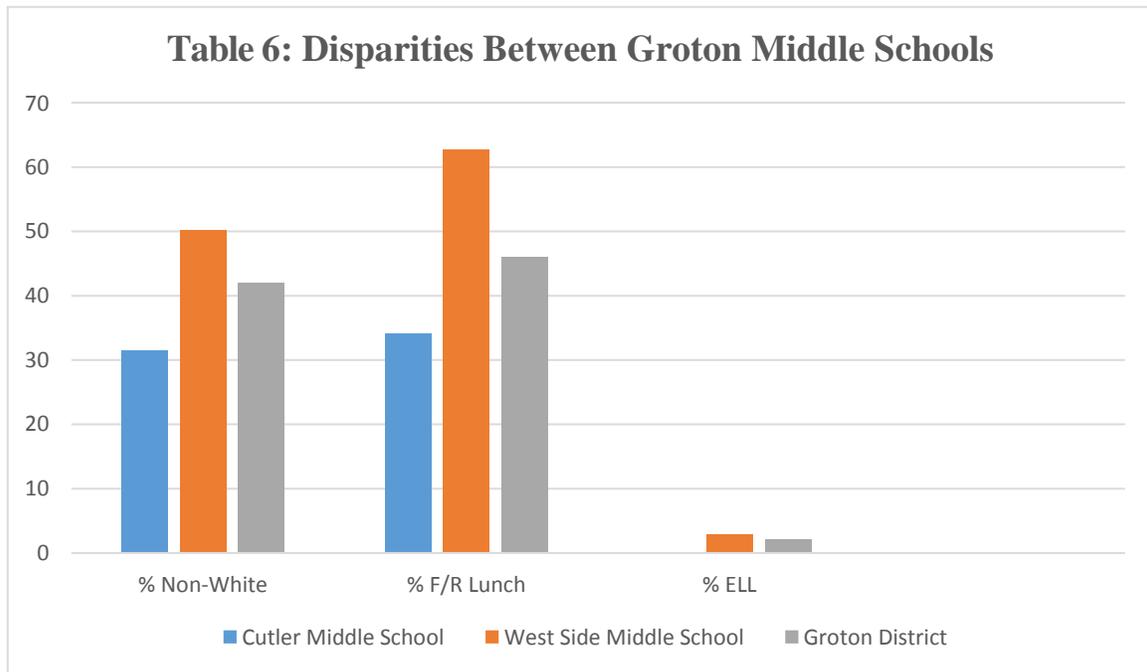
believed image of Connecticut, its communities and its students. Table 5 provides evidence of these stark disparities by showing the wealth, segregation, and achievement of students in four of Connecticut’s communities on the opposite end of the spectrum.



Source: CT State Department of Education, District Profile & Performance Report, 2014-2016

In June 2014, the CT State Department of Education cited the Groton Board of Education for minority group isolation and crowding in one elementary school, following a previous notice of the same isolation in another elementary school. While the previous isolation at Catherine Kolnaski Magnet school was reduced substantially, a second elementary school (Claude Chester) had become isolated. In that same notice from CSDE, three additional schools were designated as having “pending imbalances.” Groton is working hard to diminish the isolation at its elementary schools; and therefore its decision to turn both of its middle schools into magnets, serves to address the critical issue of maintaining the racial/ethnic equity created at its K-5 schools into the middle grades.

In their current configuration as “neighborhood schools”, there is a stark difference between the two middle schools in terms of the racial/ethnic numbers and their free/reduced eligible students. Table 6 illustrates these differences and one of the primary reasons why Groton has made the decision to move to a system of intra-district magnets at its middle schools.



Source: CT State Department of Education, District Profile & Performance Report, 2014-2016

As can be seen in Table 6, under Groton’s current “neighborhood school” structure, Westside Middle School has nearly 20% more non-white students as does Cutler; and 36.6% more students who are eligible for Free/Reduced Lunch. Even the ELL students are isolated at one middle school, with Cutler having NO English Learner students. It is clear that even as the district has re-structured its elementary schools to be more racially diverse, there is still important work to be done at the middle school level. The EXPECT proposal is one important step for Groton in equalizing these disparate enrollments.

Additionally, Groton’s high military population makes it unique. For over 100 years, Groton Public Schools (GPS) has proudly served military-dependent students affiliated with the Naval

Submarine Base New London. Only **0.5% of the US population is military**; of Groton’s total student population serving 4,494 students in preK-12th grade in 2015-2016, 1,297 (**or 29%**) were children of military dependent families. The Department of Defense Education Activity (DoDEA) does not run a school on the base, so affiliated families rely on the local school systems. Military-dependent students attend all district schools, however the majority attend the three elementary schools and one middle school (West Side) within close proximity to the base.

Norwich is a community of tremendous transience. Many families move three-four times each year, often because they can’t pay their rent and need to find new residence. With traditional attendance zone schools, this has meant that students may find themselves in a different elementary school every few months, necessitating a fresh start and likely loss of academic progress. In a recent article, the Norwich Bulletin reported that: “From the beginning of the academic year through Feb. 19, several schools have seen big changes in their student populations. Uncas Elementary has had 60 new students over that time, and 39 have left. Of Huntington's 117 new students, 113 have rotated out of the school, according to statistics provided by [Superintendent] Dolliver on Tuesday. And of Stanton Elementary's 67 fifth graders, just 17 have been there since kindergarten.” This is NOT the case with the two intra-district elementary magnet schools (Moriarty and Wequonnoc), which were created using 2013 MSAP funds. Those two schools report much more stable populations, as a result of the magnet school process.

Currently all of the grade 6 students in the district attend The Sixth Grade Academy at Teachers’ Memorial and all of the district’s 7<sup>th</sup> and 8<sup>th</sup> grade students attend Kelly Middle School. These two schools are applying for MSAP funding to create two distinct 6-8 middle schools both with clear magnet themes, allowing for more stable student enrollments and a

seamless transition for students in grade 5 (especially those in the districts two existing elementary magnet schools) to move into one of two magnet middle schools.

Considering attendance zone enrollments for Teachers' Memorial and Kelly Middle Schools, there are significant differences in their demographics, compared to each other as well as to overall Norwich enrollments. Specifically, at Kelly there is a non-white enrollment of 57% while at Teachers, the non-white enrollment is 70%. Overall, Norwich Public Schools has a non-white enrollment of 65.4%.

As with Groton, by moving to a full-choice option at the middle school level for students and their families, Norwich Public Schools can begin to move the needle to a more equitable enrollment distribution. The creation of these options for students and families in Norwich, will allow students to move across attendance zone lines to attend a theme-based school that meets their interests and educational needs. High quality educational opportunities coupled with rigorous and engaging curriculum taught by teachers who have participated in intensive and meaningful professional development will allow families to make choices based on what is best for their children and not have to be limited by the neighborhoods in which they live. *The full implementation of this plan will only be feasible with the infusion of these MSAP-requested funds.*

It is clear that the four EXPECT communities and their six schools continue to experience a number of critical educational challenges and needs, including low-income families, high percentages of families for whom English is not their primary language – all of which contribute to low rates of success on Connecticut's standardized tests. The schools in the EXPECT communities have fewer resources to provide critical services and opportunities for their students

because of weaker tax bases than their surrounding suburban districts – **and this work cannot be successfully implemented without the support of the requested MSAP funds.**

***Competitive Preference Priority 1: Need for assistance***

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

The EXPECT project is the result of comprehensive and in-depth research, needs assessment and planning by district leaders, teachers, parents, and community stakeholders. In early 2016, conversations began in anticipation of the 2016 MSAP competition. Each of the participating LEAs (LEARN, Norwich, and Groton) as well as our higher education partner, Goodwin College, created teams to discuss school needs, community and family interest, student risk factors, and other issues critical to the success of their students. A systematic process was developed to identify discrepancies between the current set of interacting forces and the desired future, that will include increased diversity, enhanced school climates, and improved student outcomes. Using this process, each magnet school included in the EXPECT proposal is being organized around providing high quality educational experiences through the development of rigorous and engaging theme-based curricula, extensive and meaningful professional development, and wide-ranging parental/community engagement.

The greatest costs in developing magnet schools are experienced at the beginning. The EXPECT budget for each school will cover the start-up costs related to the complete change-over of four middle schools from being high-needs, racially/ethnically/SES isolated schools to high-quality and successful magnet schools that have the ability to attract students and their families of diverse ethnic/racial/SES backgrounds through engaging and rigorous theme-based instruction. The budget of \$14,991,098 will serve 2,979 students at a cost of \$1,006 per student per year. The primary costs associated with EXPECT include staff at both the project

management level and the school level to guide the implementation, including Project Coordinators, Magnet Theme Coaches, recruitment and retention activities, curriculum development and coordination, as well as an external evaluator to manage the on-going project evaluation as well as the rigorous evaluation of the five-year project. **All of these costs are essential and reasonable to the fidelity of implementation of the proposed activities in order to meet the goals of reducing minority group isolation and increasing socioeconomic integration, and raising academic achievement.**

All costs associated with the EXPECT project were developed and planned to support the implementation of the project and are clearly explained within the budget narrative. This budget directly supports the desired outcomes for the six EXPECT schools and is directly related to the project objectives and directly aligned with the MSAP purposes.

***Competitive Preference Priority 1: Need for assistance***

*(b) The resources available to the applicant to carry out project, if funds...were not provided;*

If funded, the three LEAs (LEARN, Groton and Norwich) are committed to adequately sustain the quality of this new and revised magnet school programming beyond the five years of the project funding, including transportation, replacement and maintenance of equipment, ongoing professional development and other expenses related to the unique and engaging themes at each of the six schools. Without these funds, however, the Districts will be unable to move the proposed changes forward to the extent required to create these new and revised public schools of choice. The implementation of these themes is expensive, requiring in-depth and on-going professional development, the purchase of new technologies and instructional equipment, and the onboarding of new staff to do the work at each school. Once the schools are operational and

secure, each district will find the necessary resources to continue the high-quality education that will be experienced at each school.

Due to the challenges each LEA in the EXPECT proposal is facing in the current budget climate in Connecticut, these requested MSAP funds are critically needed to implement this proposal. Three of the six schools are Title 1 schools and receive additional funding to address those issues. While Title funds cannot support magnet school start-up expenses, they can be leveraged in combination with MSAP funds to ensure that the project goals of increased student achievement are met.

If funded, each LEA and school will provide in-kind support to the project. LEARN has decided that its Associate Executive Director for Magnet Schools, Katherine Ericson, will serve as Project Director, due to her experience in instructional leadership and the development and implementation of magnet schools. Ms. Ericson's time will be considered in-kind to the project and no MSAP funds will be requested to cover this amount. Additionally, LEARN's Business Office staff and Director of Finance, Lynn Nenni, will provide in-kind support to the financial management of the project, including the processing of invoices, managing A/P and A/R systems, and ensuring that all activities related to the disbursement of funds to partner schools and districts are in accordance with federal and MSAP guidelines. (See *Quality of Personnel* on page 114 for more information.)

During the planning process for the EXPECT proposal, a great amount of interest, commitment and support was generated from a range of community stakeholders and partners. eight partnership letters are included with this application, demonstrating the variety and reach of these partnerships. The project has prompted significant enthusiasm from stakeholders, including business and corporate partnerships, non-profit organizations, parents, faculty, staff, students,

and many more who are committed to providing a wide range of authentic learning opportunities to the students and families in the EXPECT communities. As the project continues to grow and develop, the schools anticipate strengthening and expanding these partnerships.

***Competitive Preference Priority 1: Need for assistance***

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

The costs to implement the theme-based programs, activities, and curricula outlined in the EXPECT proposal are high and surpass the project LEAs' available resources. Without these MSAP funds, the three LEAs do not have the ability to continue planning and implementing the highly specialized curricula, professional development activities, and acquisition of appropriate technologies and equipment. In fact, these LEAs are facing significant challenges related to simply meeting the existing needs of their school populations.

Connecticut schools are state-funded through the Educational Cost Sharing (ECS) formula. Funds raised through local property taxes are sent to the state for re-allocation to communities using this formula. According to an editorial on *The Day* (New London) newspaper on January 31, 2017, "Many were confident in 1977 that the court ruling would end the educational gulf between the state's poorest communities and its wealthiest. We now know, however, that despite this ruling and many subsequent ones, Connecticut continues to struggle with a significant educational achievement gap." With the state facing a projected \$1.7 billion budget deficit and a recent judge's ruling that elements of the funding system are unconstitutional, legislators are under pressure to restructure the 28-year-old Education Cost Sharing grant. According to a March 5, 2017 article in "The Day", "With limited financial resources, the General Assembly is grappling with how to meet Connecticut's state constitutional obligation to provide all students with adequate education." How this issue plays out during the 2017 CT legislative session

remains to be seen; however it is clear that the funds allocated to local districts for their educational needs will likely be reduced, perhaps significantly. One proposal has the **Groton Public Schools receiving the largest cut in the state**, just over \$14 million dollars. An article in “The Day” on February 21, 2017, claims that this proposal revision in ECS “unjustly punishes Groton for hosting a military base...’With the biggest (dollar amount) cut of any municipality in the state, it seems the governor is turning his back on everyone in Groton, not only its citizens but also its economically important military community,’ Town Mayor Bruce Flax said. ‘Groton is a town with a significant portion of its residents with low income, high unemployment and high rate of poverty,’ Groton Schools Superintendent Michael Graner said. ‘Any formula that concludes Groton is an affluent town that can afford huge tax increases is simply wrong.’”

In addition to the highly-likely restructuring (and reduction) in funding for schools across Connecticut, the two existing interdistrict magnet schools that are proposing significant revisions through this proposal (RMMS and CTRA) are facing a 3.8% reduction in state magnet school funding for the 2016-2017 school year and an additional 8% cut in 2017-2018.

Finally, meeting the educational needs of eastern Connecticut’s increasingly diverse population means an ongoing increase in pressure on district budgets. The metropolitan area of New London and Norwich (two host communities for the EXPECT schools) have been recognized as among the slowest communities to rebound from the 2008 recession. The Hartford Courant stated in a September 16, 2014 article that “Southeastern Connecticut’s recession goes on and on and on, as the rest of the state sees a moderate recovery in the value of goods sold and salaries and bonuses paid...The Bureau of Economic Analysis released preliminary estimates on GDP by metro area...and the New London-area economy continues to contract, though less dramatically that in previous years.” As late as April 6, 2015, the New London Day newspaper

stated, “More than five years after the Great Recession started receding in the rearview mirror of the nation, southeastern Connecticut is still looking for the exit ramp... a report late last month by www.areadevelopment.com indicated economic conditions in the Norwich-New London area still are among the most challenging in the nation. **The region ranked 364th in terms of economic growth out of 379 metropolitan areas nationwide in the website's ranking of urban areas' attractiveness to businesses as a location.**” (emphasis added.) With this stagnant economic environment, it is increasingly challenging to raise funds through increased taxes and/or bonding measures.

Compounding these fiscal challenges, the student populations in the four EXPECT communities present greater pressure with increased numbers of English Learners, economically disadvantaged students and families, and higher numbers of students presenting complex needs. In order to fully implement the programs outlined in the EXPECT proposal, it will call for deeper financial resources in excess of those currently available to the EXPECT partner LEAs.

**Without these MSAP dollars, the EXPECT schools will not meet the goals set forth in this proposal nor those from the State of Connecticut. Efforts to effectively recruit and retain students will be hampered; professional development activities will not be as robust and rigorous as needed; and meaningful assessments will be limited as the result of decreased resources.**

***Competitive Preference Priority 1: Need for assistance***

*(d) The difficulty of effectively carrying out the approved plan and the project, for which assistance is sought, including consideration of how the design of the magnet schools project...impacts the applicant's ability to successfully carry out the approved plan.*

With the receipt of the requested MSAP funds, the EXPECT proposal proposes the significant revision of two interdistrict magnet schools and the development and implementation of four new intradistrict magnet middle schools. This plan will convert some of the neediest minority group and socioeconomic isolated schools into school-wide magnet programs that provide high-quality, interest-driven theme-based curricula that will serve to increase student achievement and attract a diverse group of students to choose to consider, apply, and enroll, thereby reducing minority-group isolation and increase socioeconomic integration.

These six schools are located across Eastern Connecticut. Given that school choice is becoming more available and appealing to families, the partners recognize the two interdistrict schools (New London and East Hartford) need to ensure their magnet programs evolve overtime. The Regional Multicultural Magnet School (RMMS) community sees the IB implementation as the logical next step in the 25-year commitment to the global citizenry. The other two schools who are embarking on the IB authorization process are required to dedicate substantial funding and professional development. Groton Public Schools is excited to offer their military families the IB option that they may be familiar with in their various stations around the world. Whereas, CT River Academy's theme addition is a response to the economic demand for skilled laborers in Advanced Manufacturing field. Norwich Public School's magnet themes require a deep investment in educator professional development and equipment for the STEAM and Global Studies/World Language/Service Learning themes. The ability of all six of the schools to build innovative magnet programs that build the skills and knowledge of the students will be hindered greatly without the infusion of federal funds. Not only will the Districts have to reduce the rate of implementation significantly but also the scope of the programmatic offerings will not be as robust.

***Competitive Preference Priority 2: New or Revised Magnet School Projects and Strength of Evidence to Support Proposed Projects***

All six schools used research regarding best practice in education as well as data surrounding the needs of the communities in which they are located. After 25 years, as a multicultural themed school RMMS data indicated a need for increased rigor in their curriculum and instruction. A logical revision to their theme was to move toward the IB authorization. At the same time RMMS was carving out their school revision strategy, Groton Public Schools was also looking to build a stronger feeder program in to the high school IB diploma program. They selected the IB theme to implement into both middle schools to ensure all students have equal opportunity to take advantage of the high school diploma program. For RMMS, CAHMMS, and WSSMS, the IB approach raises the instructional rigor needed to address the needs of 21<sup>st</sup> century students. The IB combines the best research and practices from a range of national systems with a wealth of knowledge and experience from international schools around the world. In addition to influencing curriculum and instruction, becoming an IB school will also assist the schools in attracting a diverse population within an increasingly competitive magnet school marketplace.

Three schools (RMMS, WSSMMS, and KSMMS) are also looking to embed the STEM theme in their school programs. There is a strong desire in these districts for students to engage and apply skills and knowledge to real world challenges. STEM education at the elementary level is a critical step to the build a healthy workforce in the United States. The *U.S. News and World Reports* article, “STEM Education—It’s Elementary”, by Anthony Murphy on August 29, 2011 claims a STEM-educated workforce will enable business to meet the demands of technology-driven economy. *“The need is clear. If we want to create a robust and open*

*pipeline for STEM, we need to begin at the elementary level.*” The EXPECT project will strategically support these three schools in their work to educate diverse populations of students in STEM field.

Teachers’ Memorial Global Studies Magnet Middle School is positioning itself to prepare its students for a world that has become more interconnected and interdependent. Norwich is a by-product of globalization. The city has seen changing demographics and influx of immigrants from all over the world. According to World Savvy, leader in global education, students must be ready to navigate the plethora of digital information available at unprecedented rates. As stated on [www.WorldSavvy.org](http://www.WorldSavvy.org), *“the OECD’s Program for International Student Assessment (PISA) – the benchmarking standard for measuring student performance around the world—will for the first time in 2018 include global competence in its measurements, signaling yet again how critical it is for graduates to thrive in the 21st century. For our society to collectively confront challenges that are global in scope, all sectors require globally literate and culturally competent employees, citizens, and leaders.”* With this move to a Global Studies magnet school, TMGSMMS will afford its students a new and innovative exposure to curriculum that builds global competence.

The EXPECT grant also address the growing economic demand for skilled labor in the field of Advanced Manufacturing. With CT River Academy revising their current magnet theme to include Advanced Manufacturing, they have responded to the economic reality of the state of Connecticut. According to data from the National Association of Manufacturers CT, *“Advanced manufacturing is a significant part of Connecticut’s Manufacturing sector and economy—accounting for more than two-thirds of manufacturing jobs, more than one half of manufacturing GDP.”* (<http://capitalworkforce.org/sector-focus/manufacturing/>). CTRA will graduate students

from their Advanced Manufacturing program with highly portable certificates from the Manufacturing Skill Standards Council (MSSC) and the National Institute for Metalworking Skills (NIMS). The MSAP grant will play a critical role in allowing CTRA to create sustainable employment opportunities for a diverse population of students.

### ***Competitive Preference Priority 3: Selection of Students***

The EXPECT project is committed to using a fair and fully transparent lottery system. Five of the six EXPECT schools will employ a very similar lottery process, with the use of a computer-based online system that randomly assigns students who have submitted an application during the school's recruitment period. The sixth school (CT River Academy) operates within the Sheff Region and their lottery is conducted by the CT State Department of Education.

The general process for the EXPECT lotteries is as follows:

#### **How to Apply**

- The recruitment period is typically from January 1 until March 31 for the upcoming school year.
- Applications are accepted throughout the recruitment period and school tours are offered.
- Applications are accepted online or by completing the universal paper application which is available at the school.
  - Families are strongly encouraged to submit an online application.
  - If a family submits a paper application, the Lottery Admin must enter the application into the online lottery system.

## Applicant Preferences

- EXPECT schools have a sibling admission policy designed to provide a cohesive experience for families, while maximizing the number of spaces available to the community for admission.
  - Sibling admission is provided for students entering kindergarten at the beginning of the school year, while their sibling is simultaneously enrolled in the school. Sibling applications must be received between January and March of the calendar year that the younger sibling will enroll in the school.
  - A sibling is defined as a child who lived in the same primary household with a current EXPECT student and shares a common legal guardian.
  - If a name is entered into the sibling preference field in the applicant's online application, a Lottery Admin must verify the sibling name for the preference to be applied during the lottery.
- A new family seeking admission for more than one child will receive one chance in the lottery per family, not one per child.
  - If a student who gains admission through the lottery has a sibling(s) in that same grade, then the sibling(s) will also be accepted.
  - If the accepted student has an upper level sibling(s), admission for the upper level sibling(s) would be based on availability of openings.
- If there is a staff preference at an EXPECT school, a staff preference is allotted to District employees working at or for that school.

- If a name is entered into the staff preference field in the applicant's online application, a Lottery Admin must verify the staff name for the preference to be applied during the lottery.

### **Monitoring Applications**

- Throughout the recruitment period it is suggested that at least once a week the Lottery Admin review the submitted applications for accuracy.
- If an application is submitted but does not meet the criteria for the school or has grade level information to be changed, the Lottery Admin must contact the family of the applicant to confirm the information and discuss the changes being made to the application.
  - This may result in deactivating the application because the applicant is too young, or changing the entering grade level because of the applicant's date of birth.

### **Lottery Date**

- Each school's lottery is conducted in April, typically within a week of the school's recruitment period end date.
- At the time of the lottery, the school has the number of available seats to accept with the breakdown of grade level and district.

### **Conducting the Lottery**

- At the time the lottery is run, applicants are immediately assigned a random lottery number and entered into one applicant pool.
- Applicants in the applicant pool are assigned an accepted seat based on the filter applied to the lottery and how many seats are available.

- Depending on the breakdown of available seats, the filters are changed to display specific applicant pools.
  - *For example, if at RMMS, there are seats available for five New London Grade K applicants, the filters within the lottery results are changed to display only Grade K applicants from New London. Then, the first five applicants in the Grade K New London applicant pool with the lowest lottery numbers are assigned to the accepted list one at a time.*
- All applicants are initially listed under “Waiting/Master Lottery Results” (which is the applicant pool).
- The applicant with the lowest lottery number is at the beginning of the applicant pool with an “assign” button in the left column next to her/his name.
- As soon as the lottery is run, the determined number of seats are filled, beginning with verified preference applicants.
- The applicant with the lowest lottery number is assigned first and then moved into the “Accepted/Assigned Applicants with a Slot” list.
  - The “assign” button will then move to the next applicant with the lowest lottery number in the applicant pool.
  - Applicants are assigned to the “Accepted” list one at a time and must go in order of lottery numbers.
- Since there is a sibling preference, there is also an “assign” button next to the verified sibling preference applicant with the lowest lottery number.

- Once that applicant is moved to the “Accepted” list, the “assign” button will then move to the next verified sibling preference applicant with the lowest lottery number in the applicant pool.
- If there is a staff preference, there will also be an “assign” button next to the verified staff preference applicant with the lowest lottery number.
  - Once that applicant is moved to the “Accepted” list, the “assign” button will then move to the next verified staff preference applicant with the lowest lottery number in the applicant pool.

## **Reports**

- Once all available seats are filled with accepted applicants, data reports are run to display the breakdown of grade level, town, gender, ethnicity, and race.
  - Data reports are run for the accepted applicants and for the entire applicant pool.
- A spreadsheet containing information on all accepted applicants is exported from the lottery system and saved.
- A spreadsheet containing information on all applicant pool applicants is exported from the lottery system and saved.

## **Notification of Lottery Results**

- Within two weeks of the date the school’s lottery is conducted and with permission from the Connecticut State Department of Education, applicants that have been accepted into the school through the lottery are notified via phone, email, and postcard.
- Within two weeks of the date the school’s lottery is conducted and with permission from the Connecticut State Department of Education, applicants that have not been accepted into the school through the lottery are notified via email and letter.

## Maintaining Accepted Lottery Results

- As confirmed acceptances and declines come in, each school updates the status of the applicants in the “Accepted” list.
  - When an applicant is moved into the accepted list, the default status is “waiting”.
  - If the applicant declines, the school changes the status to “declined” and the applicant is removed from the “Accepted” list and moved into the “Declined” list.
  - Once the applicant has officially accepted her/his seat by returning the completed registration packet to the school by the deadline, the school changes the applicant’s status to “accepted” in the “Accepted” list.

## Maintaining Applicant Pool

- If applicants decline and seats become available, the school sends a request to the Lottery Admin to assign a certain number of applicants to the accepted list, based on the filters to which the declined applicants were accepted.
  - *For example, if in the RMMS lottery, two New London Grade K applicants and one Ledyard Grade 2 applicant decline, then the next two New London Grade K applicants and one Ledyard Grade 1 applicant in the applicant pool will be accepted.*
- As requests are received to accept additional applicants, the Lottery Admin assigns the next applicants in the applicant pool (starting with the lowest lottery number) into the “Accepted” list.
- The list of newly accepted applicants and contact information is emailed to the school so they can call and notify the families of acceptance. The list will be sent within 24 hours of receiving the request from the school.

## Late Applications

- Late applications are accepted after the recruitment period has ended.
- In the event an applicant pool is exhausted within the on-time lottery and seats need to be filled, the “late” lottery is run and applicants are accepted through the late applicant pool.
- A “late” lottery is run as needed.

### ***Competitive Preference Priority 4: Increasing Racial Integration and Socioeconomic Diversity***

As described above in tables 1, 2, 3 and 4 the stark differences of the two Connecticut rear their heads in socio-economic disparities as well as racial disparities. The mix of intradistrict and interdistrict magnet schools lends the EXPECT proposal to positively impact the socio-economic segregation realities. In New London (where RMMS is located), 100% of students receive free meals; in Stonington, a mere 8 miles away, and in the same region, the average rate of students receiving free and reduced lunch is 21%. The schools and the themes chosen for the EXPECT proposal were specifically decided upon because of their ability to draw families from a variety of neighborhoods and communities. In Norwich the socioeconomic disparities are significant just from one side of town to the other, with Teachers’ Memorial’s free/reduced lunch eligibility at 80.7% and Kelly’s at 77.8%. Overall the percent of Norwich Public School students who are eligible for free/reduced lunch stands at 75%, compared to the state of Connecticut, which is 38%. EXPECT project partners anticipate that as the high-quality magnet-theme programs are implemented at Norwich’s two middle schools, increasing numbers of white, higher-income families will choose to bring their children back into district, thereby decreasing the segregation of minority/ethnic and low-income students.

As can be seen in Table 6 above, under Groton’s current “neighborhood school” structure, Westside Middle School has nearly 20% more non-white students as does Cutler; and 36.6%

more students who are eligible for Free/Reduced Lunch. It is clear that even as the district re-structures its elementary schools to be more racially diverse, there is still important work to be done at the middle school level. This proposal, EXPECT, is one important step for Groton in equalizing these disparate enrollments.

While attendance zone students will have priority in the intradistrict magnet lotteries there are enough open seats to decrease socio-economic segregation as per the performance measures. The elimination, reduction, or prevention of minority group isolation in ... schools with substantial portions of minority and low income students... **Logic Model Activity:** Desegregation – Student recruitment, application and selection activities; **Project Outcomes:** This proposal's outcomes are aligned with the six purposes of the Magnet Schools Assistance Program (MSAP) and the logic model for this project. **Program Purpose 1:** The elimination, reduction, or prevention of minority group isolation in ... schools with substantial portions of minority students: **Logic Model Activity:** Desegregation – Student recruitment, application and selection activities; **Benchmark:** for applicant pool - proportion of isolated students are 10 percentage points less than actual enrollment for each school. All proposed magnet schools will reduce minority group isolation and increase socioeconomic integration by decreasing the percentage of black or Hispanic students and increasing the percentage of white and middle class students. **1.7:** By October 1 of each project year, for each magnet school, the proportion of low income students will be reduced by at least 3 percentage points over the previous year.

To support the activities described in this proposal to reduce minority group isolation, the EXPECT proposal will also introduce an additional component to its work of selecting students for the six schools. In addition to focused recruitment activities in suburban communities and non-minority neighborhoods, the six EXPECT schools will use socioeconomic status as a

weighing factor in their lotteries for magnet school seats. This additional component will increase the chance of students who are not identified as low-income or eligible for free/reduced lunch to be selected for one of the magnet schools. To fully maximize the effect of this factor, the EXPECT proposal is contracting with Mid-Atlantic Equity Center (MAEC) to assist in the design of its socioeconomic integration plan.

Named in summer 2016 by the US Department of Education as The Region 1 Equity Assistance Centers, the Mid-Atlantic Equity Consortium recognizes that students deserve the opportunity to learn in an environment that provides them with a fair chance to reach their true potential. In this role, MAEC provides critical resources to districts and communities to ensure that their most vulnerable students have access to an equitable education. MAEC offers customized consultation to build the capacity of state departments of education, districts, schools, and communities to develop and implement sustainable and innovative approaches to close achievement and opportunity gaps. MAEC staff has national, regional, and local experience and a network of partnering organizations that informs their comprehensive and collaborative needs assessment, planning, progress monitoring, and evaluation to ensure success for every student. With this in mind, MAEC will help the EXPECT schools develop and implement the socioeconomic elements of the project's proposed student recruitment and selection processes and will assist in communicating the value of this work to the students, families, and stakeholders in the EXPECT communities. They will recommend a preferred balance of higher income and low-income students in light of the local demographic circumstances. In addition, MAEC will help identify appropriate and meaningful measures for determining student socioeconomic statuses that will look past simple free/reduced lunch

eligibility. [Please see the signed letter of commitment from MAEC, outlining their understanding of their work for the EXPECT project, which is included as an attachment.]

*1 (a) **Desegregation:** The Secretary reviews each application to determine the quality of the desegregation-related activities and determines the extent to which the applicant demonstrates: (1) the effectiveness of its plan to recruit students from different social, economic, ethnic, and racial backgrounds into the magnet schools;*

EXPECT sees the implementation of magnet schools as a critical piece of the puzzle to reducing isolation in eastern CT. With full parent choice in the context of magnet schools in CT coupled with the size of the state, it is not unheard of for a magnet school to serve students from more than 20 communities. Each of these communities have varying demographics. The four urban centers of New London, Groton, Norwich, and East Hartford have high populations of students of color and students living in poverty. Other surrounding communities (within a 15-mile radius of each community) are made up of mostly white residents, living middle and upper middle class existences. Interestingly, New London, Norwich and Groton have diverse populations across the community, but enrollment in public schools does not accurately reflect their overall community demographics. Each has sections of town that lend themselves to segregation via home values, proximity to waterfront or downtown, and subsidized housing. Groton as home to the Naval Submarine Base enjoys a very diverse community, however the diversity is segmented by neighborhoods and attendance zones. The Mystic River, military housing, Pfizer, and Electric Boat all impact residence patterns. East Hartford, mirrors its adjacent communities of Hartford and Manchester. Sections are minority and poor and sections are white and not poor. Given these proximities and a well-developed highway system, the EXPECT project's ability to impact minority group isolation is possible. The shifting landscape

of school choice in eastern CT lends itself to a shift across the region. This shift requires collaboration, patience, and a laser focus on equity.

The partners in the EXPECT grant also recognize that there is a need to broaden our goals around equity to encompass socioeconomic status. The intent is to increase knowledge around effective strategies to increase socioeconomic diversity. Not only are their positive outcomes for students who come from poverty, but new studies show that middle class students benefit from economically integrated schools. The new learning around this issue will support the grant participants in building new recruitment, enrollment and application policies and practices.

With a holistic ethos and equity-based practices that interact and respect the lives, stories, journeys, expectations, and learning for all students, minority group isolation and socioeconomic segregation will be reduced and a culturally responsive community further developed. Key to this is having students at the center of decision making, recognizing that an individual's context is important, and keeping instruction relevant/rigorous. Putting supports in place for students of all abilities, backgrounds, and language dominance is critical.

The region's theory of action with this proposal very prominently includes equity as a core component to assure excellence for all. Additional components are student learning, student ownership, culture and climate, leadership and innovation. Assuring coherence and connection to all elements of the theory is key to the goal of providing a system that results in *Excellence for All*. EXPECT has developed a comprehensive Magnet Recruitment Plan for the consortium. This plan is based on the region's experience of successful recruitment of students over 25 years for 11 schools. The region recognizes that as choice grows, the competition for schools will grow; driving excellence.

The EXPECT schools will also conduct extensive targeted recruiting in addition to the activities listed below:

Regional Magnet Open House – will be held and will be open to the entire regional community.

Each magnet program in the EXPECT consortium will be represented by school personnel including the magnet coordinator, administrators, teachers, and parents and students. Appropriate visuals, displays, and handouts are available for parents and students. EXPECT schools will be given a prime location and additional recruiting space at this event in order to encourage parent interest and to attract targeted students. In addition to individual school displays, there will also be a display promoting the EXPECT project schools as a whole. Tours will be available at every magnet campus as publicized by the school. EXPECT schools will publicize additional parent orientation meetings.

Magnet Outreach Program – In conjunction with the EXPECT’s marketing and social media efforts, staff recruitment materials and communications will be developed to assure “beyond the community” recruitment. Underrepresented students, such as girls in the STEM programs, ELL, students with identified needs, and non-traditional learners will be identified audiences for specific marketing. Personal visits to community programs such as child care centers, faith-based organizations, and health care sites will serve as recruitment tools for these under-represented populations. Specifically, outreach will be conducted to Head Start parent policy councils, church leader meetings, and local community health centers in New London, Groton, East Hartford, and Norwich. Materials will be available at planning meetings for students. School leadership teams will have materials available at all district schools for distribution at parent meetings and through the school office. Regional recruitment events will occur each fall in October/November. Each EXPECT school will have an individually designed recruitment plan

outlining their strategies to recruit students from throughout the region. A marketing and communications professional learning seminar series will be implemented for teachers, teacher leaders, and administrators from each school. This will be created in collaboration with magnet consultants, magnet school coordinators, and business partners.

Intra-Magnet Pathway Recruitment – In addition to regular recruitment activities, magnet coordinators will promote vertical alignment through focused activities at feeder (lower level) schools throughout the district. Particular attention will be paid to STEM activities and underrepresented populations. Middle schools will hold events for elementary students to visit the middle school campus and observe hand-on STEM activities and participate in STEM-related workshops, contests, and competitions. High school coordinators will do the same for middle school students. All EXPECT school campuses will build and maintain close relationships to ensure alignment, continuity, and guidance for students.

Parent Nights – Evening events will be designed for pre-k, fifth and eighth grade students and their families to inform them about school choice options for middle and high schools. These districtwide evening events will inform the families about the magnet application and lottery processes. While the focused audiences for these nights will be families of incoming grade students of Kindergarten, Middle School, and High School, all families will be welcome.

Goals include the recruitment of students from all neighborhoods (zip codes) across the region to create student populations that are racially and economically diverse. Critical to this will be the distribution of information in multiple languages. Current data would indicate translations will be needed in Spanish, Haitian Creole, Mandarin, and Arabic. Materials will be available in each language and the data for prominent languages will be reviewed annually to assure the best practice for the region. Materials will be translated by native speakers of the languages. In order

to reach all families, information will be distributed at area churches, community centers, parks, and shopping malls. Representatives from the Student Services Departments of each partner school and district will assist with recruitment in order to ensure that all students have access to these high-quality programs. Through use of district and school websites and social media outlets, parents will be able to download applications and access the latest magnet information. The EXPECT schools will be featured on these websites with their own graphics, link, and expanded information, making them easily accessible, immediately noticeable, and attractive to parents and students. EXPECT schools will also be promoted through traditional media outlets and through the production and distribution of a high-quality recruitment video for each school. The videos will feature a diverse group of students and faculty engaged in high-interest activities.

All partners will continue to or begin to implement an online application and lottery system, which is a valuable asset in managing a transparent process by which students apply to and are accepted into magnet programs. To accommodate the needs of families without access to technology or the internet, paper applications in multiple forms will be available throughout each community.

***1 (a) Desegregation***

*(2) How it will foster interaction among students of different social, economic, ethnic, and racial backgrounds in classroom activities, extracurricular activities, or other activities in the magnet schools (or, if appropriate, in the schools in which the magnet school programs operate);*

All partners agree that **fostering interaction** among all students in a school creates a climate of respect, safety, support, and caring. When these critical aspects are in place as part of the culture of the school, learning occurs. For the EXPECT schools, which will serve as vehicles

for reducing minority and socio-economic isolation and bringing innovative teaching practices, this work is paramount. The equitable learning environments begin with recruitment.

Demonstrating an inclusive learning environment and creating this culture of interaction and respect begins the moment a district or school has its first interaction with a potential student or family member. Having magnet students be part of the recruitment process allows for an initial, positive orientation to the school. Putting purposeful structures in place to bring students and families together begins the building of relationships. This does not mean forced or calculated interactions. It means having opportunities at parent meetings, for example, for people to get to know one another- to work together on a project. It means creating opportunities for students to share culture with one another. It means integrating teams through relevant and purposeful project based instructional strategies. It means having opportunities for ALL students to learn together. Former magnet school district director, Dr. Robert Brooks (2014 MSAP Directors' Meeting) shared that adding the elements of recruitment, relationship, and relevance directly correlates to retention of students. Schools with high levels of positive climate and culture know that low attrition supports the continued growth of said climate and culture.

***1 (a) Desegregation***

*(3) How it will ensure equal access and treatment for eligible project participants who have been traditionally underrepresented in courses or activities offered as part of the magnet school, e.g., women and girls in mathematics, science, or technology courses, and disabled students;*

EXPECT evaluators, American Education Solutions, support the importance of fostering interaction between and among students of diverse backgrounds, as well as ensuring access for all students to magnet school programs and activities. This recognition is evident in elements of the project's evaluation plan and processes. Site visitors report on enrollment in particular

classrooms, surveys are distributed that address school climate, interviews of students include discussions about friends (in and out of school), access to courses, supports for interacting with diverse student populations. One key element to this evaluation process is the assurance that each EXPECT school will strive to ensure heterogeneous class composition. **Performance Measure 6.1** states that the vast majority of magnet-theme classes at each EXPECT (70% in Year One and increasing to 85% by Years 4 and 5) will be heterogeneous and that *all* students will have access to high quality education.

Since all the proposed schools are whole school magnets, all students will have full access to the entire offering of instructional opportunity. Any school year co-curricular and extra-curricular opportunities will be offered to all students in a particular grade(s) or the school as appropriate. Summer activities that are magnet related will be offered to all students. Particular attention will be paid to the out of district students at the interdistrict magnets. Staff will support students to work with other students who have similar project interests, not just students from their home district. Formal orientation sessions for students and families will occur to support cross district/community opportunities. It is recognized that for some parents allowing their youngster to work in a different community on a project with another student when they do not know the other student may be stressful. Helping parents to get to know one another and the students can help to decrease this stress and hopefully support positive relationships among different groups.

The EXPECT consortium and the proposed magnet schools are committed to working together to address issues of diversity, equity, and cultural competence by **ensuring equal access and treatment for all project participants, including those who have been traditionally underrepresented**. This is inclusive of school climate, instructional leadership, classroom

instruction, assessment, and student achievement through a rigorous system of professional learning, parent engagement, and student activities. All schools will have equitable access to ALL students. Students with disabilities, students for whom English is not their first language, and students who have immigrated as refugees will all receive the supports necessary to make their academic and social/emotional success in school possible. They will receive the supports necessary to make their magnet experience successful. The members of the consortium have proven successful experience with recruitment of girls to STEM and project based programs. Science and Technology Magnet High School (STMHS), Marine Science Magnet High School (MSMHS), and Three Rivers Middle College Magnet School (TRMC) all have balanced female and male populations. These schools have been in existence for 12, 6, and 5 years respectively. A middle school event, “Girls in Science”, is a perfect opportunity to recruit students. The Connecticut Science Center, Mystic Aquarium, and Children’s Museum of Southeastern CT all provide opportunities to recruit students who may not see themselves at magnet schools in communities outside their residence. Throughout the recruitment season, attention will be given to developing a diverse applicant pool, through the use of an electronic lottery system. Furthermore, in school-pathway and course recruitment efforts will adjust as needed to assure heterogeneity across each school. All students will receive equitable treatment with respect to school policies and practices. Equity and implicit bias conversations will be part of professional learning. The evaluation plan and process includes a review of class enrollments, satisfaction surveys, applicant pool and actual enrollment data, and content of professional learning. Should the evaluators find concerns, adjustments will be made. Professional learning, specific to diversity and equity will be part of the 50 hours cited in the logic model. Detailed information on each school’s Professional Development plans to address school culture, inclusivity, supports for

students with special needs, and student engagement are included in the “Project Design” section of this proposal, beginning on page 84.

***1 (a) Desegregation***

*(4) The effectiveness of all other desegregation strategies proposed by the applicant for the elimination, reduction, or prevention of minority group isolation . . .*

The EXPECT project’s commitment to **desegregation is evidenced by its development of effective desegregation strategies for all populations**. Addressing the linguistic and socio-affective needs of English Learners (ELs), highly mobile families, and students of poverty has long been at the forefront of eastern CT’s focus. Eastern Connecticut is also home to families identified as refugees from Syria and other Middle Eastern countries. It is anticipated that this population will continue to grow.

Core initiatives include a highly qualified and effective teacher in every classroom, rigorous instructional standards and supports, student ownership, personalized learning, learner based assessments, equity, innovation, and culture & climate. As such, Sheltered Instruction Observation Protocol (SIOP) model professional learning (Center for Applied Linguistics) will be offered for all EXPECT schools. SIOP is an empirically-tested, research based model of instruction (Center for Applied Linguistics and California State University, Long Beach 2005-2010). The SIOP model shares many features recommended for high quality instruction for all students, such as cooperative learning, reading comprehension strategies, and student centered instruction. The model adds key features for the academic success of EL students such as including language objectives in every content lesson, developing background knowledge, and content related vocabulary. This has been proven to assist students particularly in Math and Science where the vocabulary may be challenging for a student who is just learning English.

All classrooms will use cooperative learning models for student collaboration. CTRA, specifically will use Kagan Structures of Cooperative Learning. Kagan Structures have been found in small research studies to support student interaction and engagement and to increase achievement (Keen C. University Student Finds Random Student Selection Keep Students Engaged. San Clemente, CA 2006.) As a significantly revised school (by adding Manufacturing to its theme), CTRA has been using Kagan Structures successfully for two years. This strategy is expected to grow with additional in-depth professional learning.

Given the mobility of the residents of some of the EXPECT districts in this proposal as a result of the Naval Submarine Base, Coast Guard Academy, and large corporations, “Welcome Orientation” plans are proposed for each school. A process to assure that highly mobile families are able to access magnet schools is in place and has been lauded by the Office of Military Affairs and CT State Department of Education. All partners assure that materials are translated. Translators are available at meetings for families. Academic, language, and behavior supports are in place at all schools with increased supports as needed in high need schools. These students will have equal access to the magnet schools. If additional personnel or resources are needed to assure equity, funds will be allocated to support this through the grant.

Representatives from each district’s Student Support Services Department will work with each school to assure that Individualized Education Plans support the inclusion of students in magnet schools. They, along with the Principal and magnet theme coaches, will assure supports are in place for all students to benefit from the theme-based instruction.

Professional learning, specific to diversity and equity will be part of the 50 hours of systemic reform PD cited in the logic model. EXPECT will continue on the path with regard to Cultural Competence and Equity through integration in all professional learning, and assuring full

participation and access to all whole-school activities. Yet even “when the term ‘cultural leadership’ is used (e.g. Glanz, 2006) it often refers to a set of practices that attend only to the organizational culture of the school” (Howley, Woodrum, Burgess, & Rhodes, 2009 p. 13). Giving explicit attention to culturally competent leadership Elam, Robinson and McCloud (2007) bridged cultural competent leadership to effective leadership (related to student achievement) and social justice leadership (related to equity) to reflect Glanz’s (2006) assertion that cultural competence leadership serves as the foundation for all other forms of leadership. They argued that cultural competence is necessary but not sufficient in raising achievement and suggested that school leaders use their attendant skills to ensure increased equity and high levels of academic outcomes for all students.

***Selection Criteria (b) Quality of Project Design (30 points):*** *The Secretary reviews each application to determine the quality of the project design.*

Equity, eXcellence & Pride across Eastern ConnecticuT (EXPECT) is a collaborative project designed to bring students from different social, economic, ethnic, and racial backgrounds together to experience high-quality educational programs. The themes for the six EXPECT schools all connect to high-interest, industry-specific areas and will be implemented through the use of intense, focused professional development, rigorous curricula and cutting-edge technology.

As outlined in this section, the EXPECT schools propose a range of activities that incorporate a focus on socio-economic diversity and its intersection with minority group isolation, including establishing voluntary inter- and intra-district transfer programs for students from varied neighborhoods. The EXPECT schools also propose implementing on-going and robust parent/family/community engagement activities that go beyond traditional open house

events and school fairs. Parents, family and community stakeholders are important partners in the education of young students and the EXPECT project is committed to expanding and deepening these relationships and experiences.

Differentiated instruction is a critical tool for educators, enabling them to respond flexibly to students' diverse learning needs. As described throughout this proposal, the professional development plans for the six EXPECT schools will prepare educators to modify their instruction to meet the range of their student's instructional needs, academic interest, and learning preferences; and to systematically use ongoing assessment so that students who need additional opportunities to strengthen and then build required skills and knowledge will receive the appropriate coaching and instruction. Differentiated Instruction, as practiced by the six EXPECT schools, is a framework or philosophy for effective teaching that involves providing different students with different paths to learning. This typically occurs in the same classroom and addresses needs to: acquire content; process, construct or make sense of ideas; and develop instructional materials and assessment tools so that all students within that classroom can learn effectively, regardless of differences in ability [Tomlinson, Carol (2001). *How to Differentiate Instruction in Mixed-Ability Classrooms*] Students vary in gender, race/ethnicity, socio-economic status, culture, language, motivation, ability/disability, personal interests and more, and educators must be aware of these variations as they plan their instruction. By considering students' unique qualities and needs, teachers at the six EXPECT schools will develop instruction that is personalized, allowing all children to learn effectively. Differentiated classrooms present varied approaches for students to take in, process, and produce knowledge. Therefore, differentiation is an organized, yet flexible approach to proactively adjusting

instruction and learning to support each child's learning preferences and needs to achieve maximum growth as a learner.

All six schools in the EXPECT consortium are committed to improving teacher quality. The Center for Advanced Studies in Teaching and Learning (CASTL) at the University of Virginia, has developed an interactive, web-based professional development format called, MyTeachingPartner (MTP), which the schools will utilize. “The CLASS™ instrument is a tool created to effectively measure teacher-student interactions in a classroom setting and offer resources for strengthening those interactions across any subject area or age group (<http://curry.virginia.edu/research/centers/castl/class>).” In this model, instructional coaches receive extensive training on how to support teachers’ ability to create meaningful and rigorous student-teacher interactions. Coaches collaborate with teachers to analyze video of exemplary teacher practice, moreover they then view recordings of their own practice and receive targeted feedback from the instructional coach on engagement. The result of this reform will be increasing the mechanisms in which teachers engage students in critical thinking, analysis, and problem solving. Research also suggests that this work will also reduce racial discipline disparity. The 2016 article, Closing the Racial Discipline Gap in Classrooms by Changing Teacher Practice (Gregory, Hafen, Ruzek, Mikami, Allen, & Pianta. *School Psychology Review*: June 2016, Vol. 45. No. 2, pp. 171-191), explains how “MTP is the first coaching model that has been rigorously tested using a randomized control trial and shown to reduce the racial discipline gap.” In summation, this systemic reform will support the development of instructional coaches, who in turn, will support the growth of teachers, who in turn will increase student academic outcomes and decrease racial disparity in discipline.

Finally, it is important to note that the philosophy and pedagogy of the International Baccalaureate (IB) program coupled with an *inquiry* approach provides a great deal of structure and strategy to the work of the six schools in this project. Three of the six EXPECT schools are officially moving toward IB certification: one elementary school (Regional Multicultural Magnet School) and two middle schools (Cutler Arts & Humanities Magnet Middle School and West Side STEM Magnet Middle School) have committed to a full implementation of the IB Programme in its entirety. Having been named an IB Candidate School, RMMS is working towards authorization as an IB Primary Years Programme school, with the goal of full implementation during the 2017-2018 school year. Cutler and West Side are committed to becoming IB Middle Years Programme schools, incorporating a seamless transition to their district's IB program at the high school. The remaining three EXPECT schools are committed to the notion of interdisciplinary instructional practices and the use of inquiry as a teaching and learning tool. The two intra-district middle schools in Norwich (Teachers' Memorial Middle School and Kelly Middle School) plan to begin implementing their magnet themes during the 2017-2018 school year, with a STEAM focus at Kelly and a Global Studies/World Language focus at Teachers' Memorial. Finally, CT River Academy will significantly revise its school theme and curriculum, with the addition of an Advanced Manufacturing curriculum strand. All six of the EXPECT schools will focus on systemic-reform instructional elements, including inquiry, learning in context, and interdisciplinary units within language, social studies, science, math, arts, physical education, and design.

The overarching EXPECT project Logic Model and each of the six school Logic Models include a focus on student achievement, the activities that will be undertaken to increase student achievement, project objectives, and the short-term, medium term, and long-term outcomes of

this work. The overarching Project Logic Model is included in this section on page 148, while the six school Logic Models are included as attachments to this application.

***1 (b) Quality of Project Design***

*(1) The manner and extent to which the magnet school program will improve student academic achievement for all students attending the magnet school programs, including the manner and extent to which each magnet school program will increase student academic achievement in the instructional area or areas offered by the school, including any evidence, or if such evidence is not available, a rationale based on current research findings, to support such description.*

**Regional Multicultural Magnet School (RMMS):**

The Regional Multicultural Magnet School is the oldest interdistrict elementary magnet school in the country, having delivered quality multicultural education to more than 1,800 graduates in its 25+ year history. RMMS educates students from 22 districts throughout southeastern Connecticut. Despite a strong teaching staff and parent support, recent state budget cuts in combination with increased class size, changes in standards, and an increase in technology demands, have made it increasingly more difficult to run the school at optimal levels, while providing the highest quality education possible.

Over the past two years, the RMMS faculty, families and students have engaged in deep conversations regarding the school and its reach across southeastern Connecticut. These conversations included reflection and review of the school's applicant pools and student enrollment over the past several years, leading to the recognition that a new approach and theme was warranted. Focus groups were conducted and schools throughout New England were visited by faculty and parents. Following this research, the school decided to revise its magnet theme and curriculum by becoming an International Baccalaureate (IB) Primary Years Programme

(PYP) School. This revised theme aligns the school’s historic theme and raises the instructional rigor to meet with the needs of 21<sup>st</sup> century students. The IB combines the best research and practices from a range of national systems with a wealth of knowledge and experience from international schools around the world. In addition to impacting curriculum and instruction, becoming an IB school will also assist the school in attracting a more diverse population within an increasingly competitive magnet school marketplace. Since the PYP is new to the region, potential funds will inform current and potential RMMS families and the local community about the philosophy and strengths of the PYP.

The Primary Years Programme (PYP) is a comprehensive approach to teaching and learning that focuses on the development of the whole child. Combining local, national and international lenses, the PYP addresses the academic, social, physical, emotional, and cultural needs of students. The goal of the IB is to “develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.” These dispositions illustrate what it means to be “internationally-minded” which are demonstrated through the Learner Profile characteristics of being knowledgeable, open-minded, caring, risk-takers/courageous, principled, inquirers, balanced, thinkers, reflective and communicators. PYP students also learn about the Approaches to Learning, which provides instruction, and focus on skills in the following areas: thinking, research, communication, social and self-management. The Learner Profile and Approaches to Learning combine to create a school wide system utilizing a common vocabulary and expectations that reinforces the characteristics and skills needed for academic and social success. Teachers and students discuss this vocabulary, reflect, and set goals on individual academic, social, and emotional development and contributions to the learning community.

The IB Learner Profile and Approaches to Learning will provide consistent school-wide language that is reinforced through the Responsive Classroom practices. RMMS has been using Responsive Classroom structures to build community and implement restorative practices for many years. However, not all teachers have had training and all staff would benefit from refresher training and coaching.

At RMMS, the IB PYP theme will be one that embraces global citizenship as the school creates a community that is committed to respecting and seeking to understand cultural diversity, empowering all learners, and developing compassionate people who take responsibility for making positive change in society and the world. Technology will be the vehicle that connects students to the broader global community. Students will be both consumers and producers of online content through online research and student-generated content, such as podcasts, presentations, surveys, and videos that will be shared with families, and with the local and world communities.

STEM topics and design thinking are part of the new NGSS standards and will be an additional part of the IB PYP transdisciplinary units. The STEM/Math coach will provide teachers with job embedded professional development in best STEM practices as applied to the PYP program of inquiry. The STEM/Math coach will also guide the expansion of STEM offerings through the RMMS enrichment program.

Within the IB PYP framework, RMMS hopes to provide students with even more access to the greater world around them through world language and cultural exploration. Technology allows for communication with other parts of the world for genuine opportunities to practice world language skills. While RMMS has provided Spanish instruction for all students for many years, offering a second world language will broaden our students' horizons, especially for our

students who already are bilingual in English and Spanish. Introducing a second world language reinforces the belief in the importance of language and culture and to open doors to understanding the world.

With this significant revision of the school's theme and pedagogy, RMMS will use the PYP framework of curriculum, instruction, assessment, and character education, which includes inquiry-based instruction, STEM, world languages, and collaborative practices among other best practices.

*Connections Between Philosophy, Pedagogy and Instruction:*

The PYP model has been proven to improve student achievement, despite varying degrees of economic backgrounds within student populations. For example, in a recent study of 14 public and private PYP schools in New Zealand, the standardized test analysis indicates that achievement in the PYP schools generally exceeds achievement among schools nationally. Additionally, researchers noted that the emphasis on international-mindedness, inquiry, and action in the PYP schools had positive benefits for students. Students also displayed a great deal of agency in their own learning, and teachers tended to act as facilitators of the learning process. (Kushner, Cochise, Courtney, Sinnema and Brown, 2016).

The PYP is a concept driven curriculum in which students are asked to examine how concepts such as perspective, causation, change and function are reflected across content areas. Conceptual-based learning is rigorous because students see how ideas connect across and between content areas, not just learn content. This creates students who regularly engage in analytical and evaluative thinking that leads to higher achievement. Throughout the PYP, standards are addressed through six broad transdisciplinary themes that organize and structure the standards. Transdisciplinary themes reflect the real world inter-connectedness of issues, an

approach that will prepare students to be ready to address future world issues. The focus on concepts helps students to take a broader perspective and more deeply understand their learning. RMMS has not previously organized curriculum to address systematically key concepts, so the IB magnet theme will add a layer of cognitive complexity for students at this school.

Taking the concept-based curriculum to an additional level of challenge is the IB expectation that students will transfer their learning. Transdisciplinary units are organized around a broad central idea. Through the inquiry process, students learn about the central idea and concept; then generalize that knowledge to a new context and it is in this transfer where much learning depth of thinking and genuine learning occurs. IB students have choice in how to share this new information with others, and an opportunity to think deeply about the life-long skill of effective communication. Students are also encouraged to take action, which could change their own behavior or take action that contributes to helping the issue. These activities allow for structured choice, which builds student motivation and encourages in-depth exploration of the topic. Additionally, students explore creativity by sharing their learning, which turns the information from something that is learned for a test into something that is personally meaningful and memorable.

RMMS is preparing to begin the process of curriculum revision using the NGSS, new CT social studies, CCSS ELA, CCSS Math, and ISTE (technology) standards and the IB framework to create a learning environment that is relevant and significant for their students. While some students may continue on an IB pathway beyond their elementary school years, others will bring this deep and international perspective with them back to their district for middle and high school.

With this revised theme and curriculum, RMMS will also continue its successful dual language program, called Puentes. The benefits of being a Dual Language Learner are well-supported by research. Students in DLL programs out-perform their peers in monolingual programs academically (Lindholm-Leary, 2001; Thomas & Collier, 2002). Furthermore, their exposure tends to foster positive attitudes about students who speak other languages and come from different cultural backgrounds, as well as positive attitudes towards themselves as learners. (Cazabon, Lambert, & Heise-Baigorria, 2002).

RMMS utilizes a number of strategies to meet the needs of their struggling students. RMMS incorporates differentiated and culturally-responsive lesson planning across all of its grade levels. Teachers meet weekly to discuss curriculum, instruction and learning in order to continue to refine their practices. Teachers engage in collaborative learning models to support math development, e.g. accountable talk, Number Talks, inquiry and project-based learning, and cooperative learning strategies, however these practices are inconsistently applied. RMMS will continue its work with Teachers College's Reading and Writing Project (TCWRP) infusing it into the PYP transdisciplinary unit. With its mission to help young people become avid and skilled readers, writers, and inquirers, TCRWP supports the work at RMMS to respect cultural diversity, empower all learners, and develop compassionate people who take responsibility for making positive changes in our society and will also support RMMS as it moves to implementing the IB PYP approach and theme.

The Scientifically Researched Based Interventions (SRBI) process is used at RMMS to monitor student growth over time in literacy, math and behavior. According to the Connecticut State Department of Education, the "scientific evidence is substantial for a number of areas central to children's school success and well-being, such as reading, language development,

some areas of mathematics, and social-emotional learning.” Targeted interventions are implemented to address the specific needs of students. Some students participate in small group instruction with a trained interventionist to accelerate reading and math achievement, some students receive supported language instruction with the certified Teachers of English to Speakers of Other Languages (TESOL) teacher. Still other students participate in individual counseling through the school based health center.

### **GROTON PUBLIC SCHOOLS:**

Groton Public Schools is committed to transitioning to an intradistrict magnet school model, believing that it is the best path to equity for its diverse student population. In order to provide equitable learning opportunities for all of Groton’s students and encourage residents to stay in district, choosing Groton schools, the district piloted its first intradistrict elementary magnet school, the Catherine Kolnaski STEM School, in 2008. The district’s second intradistrict elementary magnet school, the Northeast Academy Arts School, opened in September 2016. The schools, located on opposite sides of town, have been very successful in recruiting more balanced student populations from across the district.

With these MSAP funds, Groton will expand this approach to its two middle schools by converting them into similarly themed intradistrict magnet schools, with the inclusion of the IB Middle Years Programme (MYP), serving as a seamless pathway to Groton’s successful IB program at Fitch High School, operating since 2001. Though the IB program has been effective in closing the achievement gap among students from diverse racial and socioeconomic backgrounds (Byrd, 2007), many Groton families, especially those who are English Learners, are still unfamiliar with the program. MSAP funds will be used to convert Groton’s two middle

schools into International Baccalaureate (IB) schools, with the ultimate goal of expanding student participation in the IB Diploma program at the high school level.

The IB MYP is offered in approximately 900 schools worldwide. Students who participate in MYP later take more AP and IB classes in high school, and also perform better in these classes than their peers who do not participate in IB (Australian Council for Educational Research (ACER). 2015. *The International Baccalaureate (IB) Middle Years Programme (MYP): Comparing IB Diploma Programme outcomes of students who complete the MYP and other middle years courses of study*. Bethesda, MD, USA. International Baccalaureate Organization).

For this reason, Groton believes it is important to introduce their students to the IB program as early as possible. The December 2015 Groton School Choice Survey revealed that many Groton families are also interested in the IB Primary Years Programme (PYP). Many Groton students attend the Regional Multicultural Magnet School (RMMS) in New London (another EXPECT partner school), and with these MSAP funds, RMMS will become an authorized International Baccalaureate Primary Years Programme, allowing Groton families the option of a continuous IB pathway from grade school through high school graduation. This option will expand school choice options to Groton students and their families, creating a stronger connection between the communities in the region.

As a military community (with the New London Submarine Base located in Groton, as well as the US Coast Guard Academy in neighboring New London), it is important to note that the IB program is recognized by the military community as “a rigorous college preparation course of study that leads to examinations for highly motivated high school students. A student can start in an IB program in elementary school, although most begin in 9th grade. Students can earn college

credit from many colleges and universities if their exam scores are high enough” (Military Child Education Coalition (MCEC), *2012 Military Parents Guide to School Policies and Transitions.*)

Cutler Arts & Humanities Magnet Middle School (CAHMMS):

The selected theme was based on 1) evidence that sustained exposure to the arts leads to student academic achievement, 2) evidence that working with primary sources in a history-rich social studies curriculum leads to deeper understanding, 3) community and stakeholder interest, 4) access to exceptional local resources, and 5) access to highly trained theme-related staff and programming currently within the school and district.

Research shows that sustained involvement with the arts, especially in math and theatre arts, contributes to academic success. Interestingly, this academic achievement holds true for all students, including those of low economic status. The gains became more pronounced over time. (Catterall, 1999 Involvement in the Arts and Human Development: General Involvement and Intensive Involvement in Music and Theatre Arts. *The Imagination Project at UCLA, Graduate School of Education and Information Studies.*) (Kelly, S., 2012. A Comparison of Cohort Data from 2007/08 to 2010/11 Regarding Fine Arts-Related Instruction's Influence on Academic Success. *Florida Music Director*, 65(5), 8-11.)

Groton has witnessed growth in academic achievement via sustained arts exposure. One of Cutler’s elementary feeder schools, Northeast Academy (NEA), recently received that designation of a 2015-16 Connecticut School of Distinction based on high academic growth for all students, especially those with high needs. Over the past five years, NEA administrators have invested heavily in fine and performing arts programs, expanding the current music and arts program to include more students and piloting specialized instruction for advanced music students. In 2016, NEA become an intra-district arts magnet school and Groton has reason to

believe that this sustained arts exposure is linked to improved student academic performance within the school.

Research also suggests that analyzing primary artifacts and documents in social studies and language arts can “deepen students’ understanding of history while allowing them to think critically.” The benefits of using primary sources can be grouped into two major themes: developing a critical and comprehensive understanding of history and creating a relevant and meaningful learning experience for students. In recent years, numerous studies have been published on the best approach to using primary source artifacts and documents in the classroom, including developing habits of mind (Tally, Bill; Goldenberg; Lauren B. Fostering; Historical Thinking with Digitized Primary Sources. *Journal of Research on Technology in Education*, v38 n1 p1-21 Fall 2005)

In 2015, the Connecticut Department of Education crafted the Elementary and Secondary Social Studies Framework “to assist curriculum writers at the district level as they write or revise the social studies curriculum for their districts,” based on the 2013 College, Career, and Civic Life (C3) National Framework. The writers of this framework encourage using local and state history when teaching United States history in elementary school, middle school, and high school. Studying local and state history helps students develop a sense of place and connection to their community. The Mystic Seaport Museum was a key contributor to the development of the state framework. As a strategic partner to CAHMMS, the Mystic Seaport will work closely with Cutler to interpret the standards of the state Social Studies Framework and apply them to the middle school classroom. When feasible, the Museum will include other local history organizations, such as the Mystic River Historical Society, the Submarine Force Museum, and the local libraries to connect students to the local history.

The arts and humanities components of Cutler’s magnet theme align with the IB Middle Years Programme. The arts disciplines offered in the MYP are visual art, media, drama, music, and dance. The humanities disciplines focus on

in the individuals and societies units of study, thus providing greater depth and understanding of the civic life in both local and global society. These units complement the goals of the state Social Studies Framework and the CCSS. (*Daly, K., 2012. Curriculum Integration in the International. Baccalaureate Middle Years Programme: Literature review.*)

In 2005, a national poll, commissioned by *Americans for Arts*, revealed that the majority of Americans believe that arts education improves children’s attitudes about school and that arts education is “the first step in adding back what’s missing in public education today” (Ruppert, 2006). The Groton community is excited about the prospect of expanding arts within the district. The results of the 2015 Groton School Choice Survey showed that a majority of Groton families have an interest in arts as a magnet school theme, mirroring the results of the national poll. (Ruppert, S., 2006. Critical Evidence: How the Arts Benefit Student Achievement. National Assembly of State Arts Agencies.)

Established in 1929 as one of the first living history museums in the United States, the Mystic Seaport Museum is now the largest maritime museum in the world. It supports academic research through its extensive library collection and runs several graduate-level academic programs. Each year, the Museum welcomes about 250,000 visitors each year, in addition to offering education services to schools throughout the region and an extensive outreach program for local families. Cutler’s language arts and social studies departments will work collaboratively with the Mystic Seaport Museum to design *customized* experiences for each grade level.

The Mystic Museum of Art began in 1913 as an artist colony, known as the Mystic Art Association. In 2015, with support from the Connecticut Humanities, the organization completed a three-year strategic plan that included an extensive survey of its constituents. The new Museum designation in 2015 reflects the organization's commitment to working with the community through public programs and education, in addition to requiring that MMoA operate to the standards of the American Alliance of Museums, the New England Museum Association, and the Association of Art Museum Directors. MMoA's programs engage students in active thinking and discovery so they may develop into self-initiated learners who seek out learning experiences beyond the classroom. Teaching methods used in these programs are designed to meet the needs of students with diverse learning styles, particularly those who do not succeed academically by traditional methods. MMoA programs provide interactive experiences with the arts, allowing individuals to explore ideas, create meaning, construct knowledge and communicate concepts, thoughts and feelings. As a result, these programs help students develop the capacity for abstract and creative reasoning, learn within groups to find multiple solutions to complex problems, and transfer these skills to other areas of learning.

Over the years, a small cohort of Cutler students have participated in the world renowned Eugene O'Neill Theater Center's programs, including the Young Playwright Festival, wherein students submit an original play to be performed at the playhouse by resident actors. This effort has been led by a language arts teacher and a dedicated parent volunteer. With the support of these MSAP funds, Cutler will expand the drama and theatre program within the school to include opportunities in playwriting, screenwriting, and video production for all students. Several professional screenwriters have graduated from Groton schools and continue to maintain

ties with the community. Cutler is requesting funds for a portable stage, lighting, and sound equipment to be used for the community and family theatre productions.

Cutler is also requesting funds for an audio and visual lab that will be used for teaching within the core disciplines and exploratory classes, afterschool activities, special events, and daily activities, such as morning announcements. These productions will be streamed to the classrooms and broadcasted on the smartboards. Students in all grade levels will have access to the lab for video editing and engineering through their exploratory classes. The equipment will also be used for drama productions, school dances and celebratory activities. An afterschool club of students will be trained in the proper usage of the equipment to assist with these events. As the lab will be built in the current computer lab, Cutler is also requesting funds for a cart of Chromebooks.

Cutler's three music teachers teach classes as well as lead the chorus, band, and orchestra programs. Each teacher also leads select groups, including the Cutler Singers, Jazz Band – always done during their volunteer time. Most recently, the Grammy Foundation & Recording Academy selected Cutler's instrumental music teacher Kevin Mazzarella as a quarterfinalist for their 2017 Music Educator Award. Over 3,300 teachers nationwide were nominated for this prestigious award, most of whom were high school teachers. Music instructor Ruth Ann Eichelberg was also recently named the 2016-17 Groton Teacher of the Year. Cutler's music department has brought numerous programs and visiting musicians to the school, often through ambitious local fundraising efforts that vary year to year. The department is involved in local community outreach efforts, including regular programs at the Groton Senior Center and the annual holiday festival and foodbank drive at the Mystic Aquarium. A portion of the MSAP funds will be dedicated to the music department to purchase new instruments and continue to

allow them to expand the ability to invite inspiring performances and musicians to the school. Receipt of the MSAP funds will allow Cutler to deepen these relationships and to work with additional music organizations throughout the region and state, including the Coast Guard Academy Band, the Eastern Connecticut Symphony Orchestra, the Mystic River Paper Beasts, the dance department at Connecticut College, and the Franklin Brothers Recording Studio in New London. In addition to these local resources, the magnet coordinator will also research the *Arts for Learning in CT* website to identify other potential instructors.

In March 2017, an analysis by Tourism Economics found that the tourism industry in Connecticut is growing. Since Mystic is the number one tourist destination in Connecticut, Groton Public Schools hopes that by working closely with organizations like the Mystic Seaport Museum and the Mystic Museum of Art that these experiences will not only enrich student learning but may also set them on a path for future careers in the local industry.

West Side STEM Magnet Middle School:

With the receipt of these MSAP funds, West Side Middle School will become an intradistrict STEM (Science Technology Engineering and Math) Magnet Middle School (WSSMMS). Each grade level is comprised of two teams, led by four core academic teachers. Students also rotate through numerous exploratory subjects, including music, art, STEM, foreign language and computer science. The West Side Magnet School Task Force developed a plan that integrates STEM into the curriculum, including the core academic disciplines and exploratory subjects, and afterschool enrichment activities. WSSMMS will adopt the International Baccalaureate Middle Years Programme model, which emphasizes an interdisciplinary approach to the core disciplines and encourages inquiry-based study, supporting the Next Generation Science Standards (NGSS). Through partnerships with local organizations, including New England Science and Sailing and

Project Oceanology, the West Side STEM Middle Magnet School will provide unique, rigorous educational opportunities that create STEM-literate students ready for the challenges of the curriculum at high school, advanced education, and the requirements for a 21<sup>st</sup> century workforce.

Inquiry and innovation is the key to STEM education, which seeks to transform teacher-centered classrooms by encouraging a cross-disciplinary curriculum that is driven by problem-solving, discovery, exploratory learning, and an experience that requires each student to actively engage in situations in order to find solution. The West Side STEM Middle Magnet School (WSSMMS) curriculum will use authentic real-world research and problem solving within local and world environments such as the Long Island Sound (LIS). West Side’s goal is to provide the highest quality education experience for students that ensures creativity, innovative thinking, and practical applications to their studies and real-world experiences through a focus on science, mathematics and technology.

Many parents of Groton students work at Pfizer, General Dynamics Electric Boat (EB), and the Navy Submarine Base. They are actively involved in their children’s schools as leaders and advisors in afterschool programs, such as Robotics and Math Counts, and through special events like Math and Science Days, Visiting Engineer Days, and district-wide STEM Expos. In the coming years, West Side STEM Magnet Middle School will expand on those connections to strengthen ties to these world-renowned corporations and entities. EB is rapidly expanding its workforce with as many as 14,000 new employees to be hired in the next thirteen years. Groton Public School’s goal is to have many of their West Side STEM magnet students one day join these growing workforces. Because Groton employs a significant percentage of the workforce across the region, the town often is called the “Hartford of Southeastern Connecticut.”

Working with Pfizer, General Dynamics, the Navy Submarine Base, UCONN Avery Point, and local agencies that utilize technology such as the fire, police public works and water filtration plant will be part of the school's proposed program.

West Side is also requesting funds for robotics equipment, makerspace materials, and *Engineering is Everywhere* (the middle school component to *Engineering is Elementary*) kits to be used for teaching within the core disciplines and exploratory classes, afterschool activities, special events, and daily activities, such as morning announcements. Groton's Fitch High School's Aluminum Falcons First Robotics team is consistently ranked among the top competitors in the country. WSSMMS will invite the Falcons Team to visit the school and provide in-school demonstrations to all students. Interested students can further explore this program through SRBI, with the goal of preparing them to compete successfully at the high school level. The West Side Magnet School Coordinator will work with members of the West Side STEM Magnet School Task Force to design and develop a MakerSpace. The establishment of a MakerSpace within the school will help to create and nurture a culture of exploration and innovation. The space would allow for student driven projects and learning that could expand as their interests determine. *Engineering is Everywhere* (EE) includes themed curriculum units developed by the Museum of Science in Boston, Massachusetts. EE empowers youth to tackle real-world engineering problems using the engineering design process, creativity, and collaboration. WSSMMS will purchase these units to incorporate into the existing STEM block science classes at each grade level.

WSSMMS will create additional STEM-focused learning opportunities, including a Technology Club, a Coding Club, and Environmental Club. The Technology Club will help foster a sense of leadership as students learn to become tech support for teachers and other

students. The Coding Club will introduce students to the growing field of programming, in addition to teaching digital literacy. The estuarine environment of Long Island Sound is within two miles of WSSMMS. As citizen scientists, students in the Environmental Club will participate in projects aimed at preserving Long Island Sound and other local natural environments.

With the support from MSAP funds, West Side will also implement *Project Lead the Way* (PLTW) as a key component to its STEM instruction. PLTW began in 1986 when a New York high school teacher started pre-engineering courses to help his students meet the growing demand. Over the past twenty years, it has grown exponentially and now includes five distinct technology career programs, in addition to middle and elementary school programs. Over 8,000 schools nationwide now participate in PLTW and the Department of Education has identified it as a “program of distinction.”

In 2015, the Connecticut Department of Education adopted the Next Generation Science Standards (NGSS), based on the National Research Council’s (NRC) 2012 framework for science education. Schools are expected to fully implement NGSS by 2018. The West Side STEM Magnet Middle School (WSSMMS) will work with local partners within the science and technology communities to incorporate these standards into the curriculum.

Critical thinking and communication skills are key components of NGSS because students need these skills for postsecondary success and citizenship in a world fueled by innovations in science and technology. The NGSS includes interdisciplinary units where Connecticut Core Standards (CSS) in language arts and mathematics are reinforced. Both content and practice are intertwined in the standards. An example of this is the *Engage in Arguments from Evidence*

standard, in which students must support and defend their research and the outcome of an experiment.

The International Baccalaureate (IB) Middle Years Programme (MYP) focuses on real-world experiences and phenomena as part of the units of science instruction, thus providing greater depth of understanding of the natural world. These units complement the goals of NGSS and the CCSS.

Though ultimately the NGSS will be incorporated into the curriculum at Cutler Middle School, the WSSMMS will serve as the lab school for NGSS curriculum modification and partner development in the district. As compared to CMS, the students at WSSMMS, will have increased opportunities for hands-on learning and field trips and priority access to state-of-the-art scientific equipment and techniques.

#### **NORWICH PUBLIC SCHOOLS:**

With the United States Department of Education's announcement of the 2017 Magnet School Assistance Program competition, Norwich Public Schools formed a committee of district administrators, school administrators, teachers, and other key stakeholders to explore the possibility of implementing intradistrict magnet themed programs at each of the district's two middle schools, one serving students in grade 6, and one in grade 7 and 8. When determining the focus of the magnet themes, the committee discussed topics such as the district's current vision of curriculum development, the structure of the existing middle schools, and the themes of the district's current elementary magnet schools. This committee discussed parent feedback over the past several years, urging the district to provide more opportunities at the middle school level, and a pathway, for students attending the district's two existing elementary magnet schools, to continue their education in a themed magnet school experience. The committee met several and determined

the themes of Science Technology Engineering Arts Math (STEAM) for Kelly Middle School and Global Studies/Service Learning for the 6th Grade Academy at Teachers' Memorial. STEAM education, with a strong focus on project-based learning, has the ability to present new learning in an integrated and holistic way, as discussed in the Defined STEM Research Study 2016. In a 2005 study of service learning, "The Impact of Participation in Service-Learning on High School Students' Civic Engagement", the authors state: "*Service-learning students had significantly higher scores on enjoyment of school overall than comparison group peers.*" Additionally the study mentioned students involved in service learning were more academically engaged and were more likely to value learning. By presenting choice through this magnet middle school model, Norwich Public Schools will engage students in self-guided learning, and ensure opportunities for differentiation at all learning levels. NPS expects that all 8th grade students at TMGMMS will complete a *Knowledge to Action Plan* where 75% of those students will exhibit mastery of their school's magnet theme. *Knowledge to Action* (K2A) is a term used by World Savvy, the Professional Development provider that will be working with Teachers' Memorial. "Knowledge to Action (K2A) is an integral component of the World Savvy learning model that provides all students with a unique opportunity to demonstrate their *creativity, innovative thinking* and *drive* to convert their learning into positive action that has impact at the personal, local or global level. K2A programs provide youth with opportunities to publicly their innovative thinking and problem solving skills. They are also the vehicle by which students begin to self-identify as *social entrepreneurs and change-makers* – students start to believe that the actions they take are both meaningful and possible, a realization that benefits themselves and their community. Through K2A projects, students can serve as catalysts for innovative thinking about the challenges and problems their communities face. ([www.worldsavvy.org/k2a](http://www.worldsavvy.org/k2a))

Norwich Public Schools is applying to transition two district schools into intradistrict magnet schools. Currently all of the 6<sup>th</sup> grade students in the district attend The Sixth Grade Academy at Teachers' Memorial and all of the district's 7<sup>th</sup> and 8<sup>th</sup> grade students attend Kelly Middle School. These two schools are applying for this funding to create two distinct 6-8 middle schools both with clear magnet themes, which will allow for a seamless transition for students in grade 5 (especially those in the districts two existing elementary magnet schools) to move into one of two magnet middle schools.

Kelly STEAM Magnet Middle School:

Kelly Middle School will become the Kelly STEAM Magnet Middle School (KSMMS). A focus on learning in the areas of Science, Technology, Engineering, Performing Arts, and Mathematics will allow educators to offer a challenging learning environment that maximizes individual potential to ensure that students are equipped to meet the challenges of the 21<sup>st</sup> century. The school's STEAM theme, "Arts in the 21<sup>st</sup> Century" will provide exciting educational opportunities for middle school families who all too often have chosen to withdraw their children from Norwich Public Schools once they exit elementary school, and opt for other regional magnet schools, private schools, and parochial schools.

Norwich Public Schools believes that a STEAM focus will provide a seamless transition and build on learning themes of the two existing elementary intradistrict magnet schools in the district (Moriarty Environmental Science Elementary Magnet School and Wequonnoc Arts & Technology Elementary Magnet School). The STEAM theme at KSMMS will increase student engagement and raise student achievement by allowing students to gain a deeper understanding of their learning through an integrated curriculum approach. STEAM education, with a strong focus on project-based learning, has the ability to present new learning in an integrated and

holistic way, as discussed in the *Defined STEM Research Study* 2016. STEAM programs will enrich students' learning opportunities in the areas of science, technology, engineering, performing arts and mathematics to promote critical thinking, problem solving, and effective communication skills. Norwich Public Schools recognizes a STEAM approach incorporates critical components for students to thrive both in the present and in the future.

Kelly Middle School, with its large, recently renovated auditorium, ample space for music and art, and science labs, makes the school a natural choice to move to a STEAM focus magnet school. In addition, the construction of a new art-technology space, (scheduled to be built over the summer of 2017), will allow students the appropriate environment in which to develop key technological skills that are essential in the world today.

To ensure increased student achievement and engagement at KSMMS, the school will provide professional development for teachers in the following areas:

- STEAM practices and principles,
- Ensuring alignment of curriculum, standards, and lesson planning to the STEAM magnet theme;
- Cultural Competency provided by Dr. Tamika La Salle from the University of Connecticut.

#### Teachers' Memorial Global Studies Middle Magnet School:

The Sixth Grade Academy at Teachers' Memorial will become Teachers' Memorial Global Studies Magnet Middle School (TMGSMMS). Three major tenants of the Global Studies theme include: a focus on local, civic engagement through service learning, a world language studyprogram, and a Knowledge to Action Plan focused on personal impact on a problem in the local or larger global community. A focus on learning in the areas of Global Studies, World

Languages, and Service Learning will allow students to engage in a challenging curriculum focused on developing critical thinking, problem solving, and effective communication skills while viewing issues through the lens of diverse populations.

Norwich Public Schools believes that the school's theme, encouraging an awareness of global issues, and taking local action, will build on the strength of the diverse city population including those from the Uncas Tribe and those who have immigrated to the region over the generations, and continue to immigrate to the area seeking employment in casinos at nearby Native American reservations. The inclusion of World Languages allows students to develop skills to become college ready, by building on some of the existing bilingual and world language programming in district and the current relationship with the Uncas tribe at Uncas Network School. In a 2005 study of service learning, "The Impact of Participation in Service-Learning on High School Students' Civic Engagement", authors state: "*Service-learning students had significantly higher scores on enjoyment of school overall than comparison group peers.*" Additionally the study mentioned students involved in service learning were more academically engaged and were more likely to value learning.

In addition, Teachers' Memorial Middle School is undergoing a renovation of its planetarium with plans to integrate learning modules on various topics including geography and oceanography.

To ensure increased student achievement and engagement, TMGSMMS will provide professional development for teachers in the following areas:

- Global Competencies provided by *World Savvy*;
- Project Based Learning; and
- Trauma Sensitive Learning with in-house staff.

### Connecticut River Academy:

The Connecticut River Academy at Goodwin College (CTRA) is a LEARN magnet high school (grades 9-12) with a state-of-the-art campus located along the historic Connecticut River in East Hartford. CTRA's Sustainability Theme provides hands-on learning in Environmental Studies and Advanced Manufacturing. CTRA defines *Sustainability* as the long-lasting well-being of all aspects of life including social, economic, environmental, and health. CTRA demonstrate this theme of sustainability through its core values of **awareness, diversity, and action**. CTRA's Early College Theme offers unique college and career experiences, including the opportunity to earn tuition free-college credits. A high interest in the coursework and experiences connected to an advanced manufacturing program in conjunction with the school's early college opportunities will support CTRA in recruiting students from towns with diverse socio-economic profiles, thus supporting its mission to provide a high quality, racially and socio-economically integrated program.

CTRA will significantly revise its theme and curriculum with the addition of Advanced Manufacturing to the school's existing environmental studies theme. This integrated and updated approach will better prepare students for life beyond high school by bringing the school focus into connection with modern technologies and manufacturing.

The process for developing the new theme at CTRA is the product of a highly collaborative process involving leadership of the high school, Goodwin College and a wide range of community partners in both the public and private sectors. Goodwin College has worked closely with the Governor's office in Connecticut to seek solutions to a shortage of skilled workers in Connecticut's manufacturing industry. It quickly became clear that it was crucial to provide significant exposure to this growing sector at the secondary level. On this basis, Goodwin

College offered to create both college-level and high school level programming designed to prepare students with 21<sup>st</sup> century skills. This new programming will help students develop skills in areas of significant demand in the economy of the future (e.g. advanced manufacturing, laser technologies, robotics, quality control, logistics, etc.).

This development has great value to students at CTRA, by providing coursework and experiences through its advanced manufacturing program that aligns well with the school's existing early college focus. It also opens opportunities for students interested in technology careers, who might not have been interested previously in CTRA. This supports the school's mission to provide a high quality, racially and socio-economically integrated program to students throughout the Greater Hartford region. The added advanced manufacturing focus has the potential of attracting students with a wide range of post-secondary interests, from competitive four-year engineering programs to cutting-edge technical careers.

Engagement of the stakeholders at the school was important to the ensured success of the theme change. Parents were integrated into the process on an ongoing basis through the school's Governance Council, which guides educational programming and implementation. The CTRA Sustainability Advisory Council, with over 20 business and industry partners, helps support program development and growth and supports students with internships and other real life experiences. Finally, every effort was made to coordinate this process with area school districts, which are the source of the students who come to the Connecticut River Academy, especially from Hartford, East Hartford, New Britain, Manchester and Bloomfield.

The College's administrative leadership also helped to support this change by securing funds from the Connecticut State Department of Education and Department of Administrative Services

to build a manufacturing annex, providing state-of-the-art equipment to enable students to learn at the highest level.

The school's theme of Environmental Studies (addressing environmental issues – climate change, green energy, environmental justice, water quality, air pollution, etc.) combined with Advanced Manufacturing, offers students the opportunity to develop skills in significant-demand areas for the economy of the future (e.g. advanced manufacturing, laser technologies, robotics, quality control, logistics, etc.). Students will learn how to design and produce the products needed to ensure a sustainable environment, economy, and society.

A focus on green, efficient manufacturing concepts, including responsibility for manufacturing-waste management, the re-use of materials in the manufacturing process, and the creation of products through man-made materials with a reduced impact on precious natural resources will preserve and restore environmental quality while also promoting technological advancement.

CTRA, through Goodwin College, has secured Connecticut State Department of Education funding for the construction of an additional school building and the equipment needed to support a hands-on education in advanced manufacturing. That project is now underway and will be completed in approximately two years. In the meantime, Goodwin College is allowing CTRA students to take advantage of their existing resources, which will be adapted for high school students. As the host site for CTRA, Goodwin College is uniquely positioned to support this theme for the following reasons:

- With the recent development of an Advanced Manufacturing center at the college, specialized resources are being developed for high school students interested in exploring high-tech “careers of the future.”

- Given the proximity of CTRA to the Connecticut River watershed, Keeney Cove, and the floodplain that comprises the Goodwin College campus, opportunities abound to study available water resources – integrating the physics, chemistry, biology, geology, and hydrology of the watershed – and the related dynamics of land use.
- Students at CTRA have access to both the College’s Advanced Manufacturing Project Center, as well as hands-on river experiences in the wetlands and on the school’s recently acquired research vessel, opening new career areas for students in advanced manufacturing, green engineering, manufacturing logistics and quality control, manufacturing management, etc.

High-tech laboratory facilities in the Project Center will give students hands-on experiences with cutting-edge machinery, technology and tools. Students will be prepared to enter the manufacturing workforce upon graduation or continue their education at the college level in Manufacturing Technology, Manufacturing Engineering, Supply Chain & Logistics, Quality Management Systems or CNC Machining. Students who complete the Goodwin College Advanced Manufacturing program will be able to earn the National Institute for Metalworking Skills (NIMS) and the Manufacturing Skills Standards Council (MSSC) credentials (toward the Level and Certified Production Technician, respectively), receive a National Career Readiness Certificate, and participate in a structured internship programs in either environmental or manufacturing fields.. This combination of opportunities will give them access to career areas not presently available.

The new curriculum will prepare students for careers in Advanced Manufacturing-related fields, and is being developed in consultation with regional business and industry. High-tech laboratory experiences in Goodwin’s unique Project Center will give students hands-on

opportunities to experience cutting-edge machinery and tools. Additional opportunities with Connecticut's high-tech industries are being explored through partnerships such as Pratt & Whitney, the Connecticut Center for Advanced Technology and other industry partners.

As a prerequisite to more advanced coursework, CTRA's 9<sup>th</sup> and 10<sup>th</sup> grade curriculum will offer a range of transitional courses and experiences to help develop prerequisite skills as well as apply developed knowledge and skills in science, technology, engineering, and mathematics, including:

- Course content aligned with industry standards, leading to student certification in advanced manufacturing fields such as Safety, Quality Practices & Measurement, Manufacturing Processes & Production and Green Production. If successful students can qualify for a full Certified Production Technician (CPT) Certificate by graduation;
- A complete high school program meeting all state standards with extensive early-college opportunities at Goodwin College;
- Curriculum based experiences that support the development of skills in the area of technical reading and writing;
- Special programming days (Magnet Theme Days) specific to sustainability and manufacturing, which will include participation from area industry representatives;
- Grade 9 and 10 exploratory experiences leading to selection of an area of concentration in one of the recognized environmental studies or advanced manufacturing areas; and
- Partnerships with industry incorporating internships, work-study and other student work experiences into each student's core learning.

The new manufacturing theme specifically targets all STEM areas. Advanced Manufacturing principles will be integrated into coursework in science and math courses, engineering curricula

will be revised to include manufacturing components, and the addition of a technology teacher will allow for a variety of tech-related courses.

Dually enrolled students will have access to Goodwin College's full selection of courses offered through their Advanced Manufacturing program, including the potential to earn nationally recognized credentials through the Manufacturing Skill Standards Council (MSSC). As the owner and operator of the Connecticut River Academy in collaboration with LEARN, Goodwin College is also a partner in the development of the curriculum and program, as well as training and support in key STEM areas leading to early college learning. CTRA's sustainability focus is tied directly to the offerings and expertise at the college in both Advanced Manufacturing and Environmental Studies. The college offers both of these programs from certificate level through baccalaureate degrees and beyond. As an essential partner in the development of the school and its new Sustainability theme, Goodwin will work continuously to help CTRA to implement high quality programming in these areas and provide professional development needed to support them. In addition, Goodwin is committing resources from its Health Sciences department as well as in Mathematics and Science through its general education department to the overall CTRA program.

In addition to the numerous instructional strategies and programs outlined in this proposal, CTRA will offer a robust array of interventions to students who exhibit that they are struggling academically or social-emotionally. CTRA's Scholar Intervention Team meets at least weekly and is composed of school counselors, the school's SRBI/Special Education Coordinator, social workers, administrators, and the school nurse. The team reviews data to determine which scholars are in need of additional interventions, and then collaborates to set a plan in place that addresses each area of need. Possible interventions include but are not limited to: team meetings

with families and teachers; addition of academic support time to a student's schedule; group or individual counseling, mentoring arrangements; and connections to community resources. CTRA also works to focus on the positive aspects or assets that the student brings to the school community, to capitalize on what works best for each individual. All of this work is done in the context of CTRA's other work around Restorative Practices, Habits of Mind, Attachment Theory, and other foundational principles for the school's work around building positive and productive relationships, as recommended by the CSDE's 2011 brief. Students not showing a response to interventions at increasing levels of intensity may be referred to a 504 or Planning and Placement Team to determine possible eligibility.

**Parent Engagement at all EXPECT Schools:**

Achieving meaningful change within a public school requires the deep and active engagement and participation of parents and families. In addition to establishing a relationship with parents and making them feel welcomed, schools should offer a variety of opportunities to engage parents in the life of the school. Research have identified six types of involvement that schools can use to engage parents: providing parenting support; communicating with parents; providing a variety of volunteer opportunities; supporting learning at home; encouraging parents to be part of decision making in schools; collaborating with the community. (Epstein JL. *School, Family, and Community Partnerships: Your Handbook for Action*. 3rd edition. Thousand Oaks, CA: Corwin Press; 2009.)

Every EXPECT school will develop strategies and plans around parent engagement to support their work in this project:

**Regional Multicultural Magnet School:**

RMMS was founded with a commitment to building strong relationships with parents. A testament to that long-standing work is the fact that the school is now beginning to have parents who attended RMMS as children send their own children to the school. RMMS currently offers a variety of ways for parents to be engaged with the school. Parents can participate in leadership and decision-making roles on the Steering Committee, which serves as a policy making body. However, there are fewer parents of new students attending. Another parent group, the recently renamed and reorganized *Parent Caregiver Connections*, is undergoing a revision in order to attract more parents and refocus their work on solving school issues. Many parents volunteer in the school, but in a recurring pattern, the number is decreasing in comparison to the past.

RMMS also maintains a staff member specifically dedicated to recruitment and enrichment. This individual helps to provide tours of the school, supervise advertisement, and welcome parents through open houses and orientations.

Communication with families has been another long-standing RMMS practice, but ensuring that current practices are being used effectively to reach parents is an opportunity to get more parents engaged. RMMS teachers send home newsletters-once a week for K-1, bi-monthly in grades 2-3, and monthly in grades 4-5. Many teachers use parent notification apps, but this technology has not been maximized across the school to celebrate student learning and connect parents even more deeply to the school.

An additional area for exploration will be to use the weekly newsletters to assist parents understand upcoming units and how to support their child's learning. The IB PYP inquiry units offer an opportunity to have families visit school and showcase student learning to genuine audiences. As the first elementary IB PYP school in the region, it is important for parents to

understand the major tenets of the IB PYP program which leads to home support as well. This work is beginning, but website revisions, well-designed informational materials and videos would support parents increased knowledge and engagement in their child's education.

Groton Public Schools: CAHMMS & WSSMMS:

In 2016, the Groton BOE Ad-Hoc Communications Committee worked with a coordinator to develop a plan for two-way district communications with internal and external audiences. The plan outlines communications goals, objectives, strategies, and messaging, which reflect the district goals and priorities. It is designed to serve as a framework to create a proactive, tactical action plan that is flexible and inclusive to stimulate an open community conversation.

The plan includes support for both traditional and digital public relations and marketing efforts, which may include: Public Relations; Media Relations; Community events; Grass roots Outreach; Digital (Web site, Mobile Apps, New email messaging platform; Social media); Collateral (Banners/Signage, Brochures, Newsletters); Advertising (Traditional print, such as Daily and weekly newspapers, specialty publications, and insertions); Digital

Recent Efforts to increase parent engagement in Groton include: hired a part-time district communications coordinator; and promotion of GPS magnet school programs, as well as the curricular choice options at both the middle and high school levels, were identified in the plan as key district initiative. Support specific to these initiatives has been a focus and outlined in more detail in a magnet school communications plan.

Recent efforts have also included conducting competitive analysis, grass roots outreach, media relations, promotion and community events. The district is seeking to elevate and evolve its digital communications and online presence. The IT team is currently in the process of selecting a vendor to update the district web site and may also consider development of a mobile

app. Discussions have included creation of a more user-friendly URL for the GPS web site and a vanity URL specific to Groton's magnet schools.

As part of the transition to more digital communications, creating a social media platform for GPS and the development and launch of a district FB page is underway. GPS is considering local advertising and has recently met with The Day advertising team to discuss advertising options.

Norwich Public Schools: KSMMS & TMGSMMS:

Both middle schools will accommodate barriers that may limit parent/family opportunities to participate fully in the education of their child, such as flexible meeting and workshop times, hosting events within the community, and communicating with families in a variety of ways including: good news post cards, phone calls home, and utilization of technology for open and two-way communication. The schools will provide families with informational sessions on magnet activities including magnet-themed curriculum implementation, community-based projects related to the schools' magnet themes, and supporting learning at home. The district will ensure family engagement activities and wraparound services are clearly communicated to school staff, families and community members and agencies. Each school will outfit a Family Resource Center to provide a quiet space for parent workshops, access to technology, and a resource library to support families of middle school children. Parents will be engaged through attendance at student performances. The schools will engage with the community through partnerships for student showcases, and service-learning projects. The district will utilize the district website, social media, and two local newspapers to communicate positive news about Norwich Public Schools to improve public perception of the district and its ability to offer robust, well-rounded programs of studies in the middle grades.

Each school will fund a position, which will work, in whole, or in part, to support family engagement at the school. The Parent Liaison (at KSMMS), and the Family and Community Connection Coordinator (at TMGSMMS) will support student success by engaging parents in their child's academic success. These positions will ensure parents are supported in meeting basic needs of their children, students are

attending school regularly, and families are provided with the resources and information needed to support their child's learning at home. These positions will also work to develop larger scale school-wide, family events, linked to the school's magnet theme and focused on building a sense of school community and positive school climate. At TMGSMMS, the Family & Community Connection Coordinator will also arrange opportunities for parents to learn a second language through online language learning tools.

CTRA:

CTRA will engage parents in the process of its theme revision through a multi-tiered approach. Specific to their work in Advanced Manufacturing, families will be invited to evening events with a "maker space" theme. Students would be able to show their parents and siblings the types of technology they have learned how to use, and actually work with them to produce items they can customize and keep. CTRA will also develop a magnet theme day (MTD) event with an Advanced Manufacturing focus. The school has hosted MTDs in the past that focused on their environmental work and commitment to social justice, and they have been widely attended and praised by family and community members. Other authentic opportunities for parent engagement will come through efforts in regards to Restorative Practices. In processing any issue involving harm to the school community or an individual, parent involvement is important to reaching a holistic understanding of why certain actions may have been taken and what will be most effective in restoring the harm.

***1 (b) Quality of Project Design***

*(2) The extent to which the applicant demonstrates that it has the resources to operate the project beyond the length of the grant, including a multi-year financial and operating model and accompanying plan; the demonstrated commitment of any partners; evidence of broad support from stakeholders (e.g., State educational agencies, teachers' unions) critical to the project's long-term success; or more than one of these types of evidence.*

EXPECT views the commitment and capacity imperative through five spotlights that interact and support one another:

- High Quality Systemic Programs;
- Enrollment and Retention of students and families;
- Community and Capacity Building;
- Sustainability Planning; and
- Resource Effectiveness.

In its July 9, 1996 Sheff v. O’Neill decision, the Connecticut Supreme Court ordered that *measures be implemented to remedy the unlawful segregation*. Subsequent agreements among the plaintiffs continue to refine and measure progress toward desegregation and resource allocation. Magnet schools are one of the remedies implemented since 1996. Currently more than 80 magnet schools are supported by state funding, local education dollars, and other resources.

Each partner has experience conceiving, planning, implementing, and sustaining magnet schools. EXPECT partners collectively have a total of 48 years of experience administering magnet schools successfully. This experience ranges from 3 years to 25 years; and it should be noted that all 11 existing schools among the partners were developed through similar partnerships. Clearly, eastern Connecticut has a strong history of sustaining and continuing magnet schools and activities.

The Connecticut State Department of Education only supports the operation of magnet schools; they no longer support the planning or revisions of schools. EXPECT will use MSAP funds to plan new schools and support the curriculum and program revisions for the schools

identified as in need of significant revision. Following the MSAP funding, the schools will rely on the combination of state and local dollars to support the schools.

CSDE and state legislative funding is determined through per pupil formulas for interdistrict magnet schools and education cost sharing for local districts' schools including their intradistrict magnet schools. Interdistrict magnet schools, for which legislation allows full parent choice, are able to charge a tuition to the student's home district. This creates a funding stream for the viable operation of a school. Intradistrict magnet schools use their local community's education budget for the operation of the school. These methods have been successful for 25 years. It is important to emphasize that these dollars only support the operation of an established school- not planning for a new school or revision of an established school due to changing contextual issues.

There are additional sources of funding to leverage following the MSAP stream including but not limited to:

- Groton Public Schools receives federal impact aid as the result of being home to the Naval Submarine Base; and
- Norwich Public Schools receives funding as an identified state Alliance District and home to two Commissioner Network Schools.

Historically, deep community partnerships assist with sustainability. For instance, local foundations and businesses have provided significant support for educational needs across eastern Connecticut. They have funded projects for the existing magnet schools, however none fund regular daily operations or staffing. These local funding sources include but are not limited to:

- Dominion Educational Partnership: Nature's Classroom scholarships
- Pfizer, Inc.: STEM related activities

- Dime Savings Bank, Chelsea Groton Bank: Student activities or one-time replacement of technology
- Local foundations: Field trips, Robotics Clubs, Environmental Science Clubs

Therefore, each of the six schools has operational budgets to support the sustainability of the magnet school. Across the schools, these budgets are made up of federal funding, state funding, local funding and private funding. These sources of funding are subject to legislative changes and funding formulas, making it hard to leverage them for revising and creating new magnet schools. Each partner is committed to leveraging the funds from MSAP for start-up and for revisions and then continuing to support the schools with an operating budget from the district or the college.

In addition, as evidenced by the letter from the Connecticut State Department of Education (CSDE), the development, ongoing operations, and strengthening of these six EXPECT schools is supported by CSDE. [This letter is included as an Attachment to this proposal.] While support for the schools and for this proposal are evident, it is important to remember that the state of Connecticut has also supported schools financially. These finances are not for planning or revising schools and there are multiple funding formulas across the state as a result of varying legislative mandates.

**LEARN**, as the applicant on behalf of the EXPECT consortium, is not a magnet school newcomer. It currently operates seven magnet schools (two with partner Goodwin College) in the region serving just under 2,200 students. One of the schools included in this application as a significant revision, the Regional Multicultural Magnet School (RMMS), recently celebrated its 25<sup>th</sup> year of educating students in a diverse setting where uniqueness is treasured. Other LEARN administered schools range in age from 3 years to 11 years. In order to sustain the high quality

education within these schools and to manage the growth of the schools, LEARN re-organized and created an office focused on the five spotlights mentioned above. Ms. Katherine Ericson (named as Project Director for this proposal) was recently named Associate Executive Director for Magnet Schools. In this role, Ms. Ericson assures high expectations, efficient operations, innovative education, and the sharing of best practices across the region.

**Norwich Public Schools**, identified magnet and theme-based learning in its strategic design five years ago. Since then, Superintendent Abby Dolliver led the district to the creation of two successful elementary magnet schools – both of which were a part of the most recent 2013 MSAP cycle’s regional project, PEACE. These schools reached their goals of integrated theme learning, decreasing minority group isolation, increased attendance, increased parental participation, and increased professional learning for staff. There is every expectation that these two elementary magnet schools will continue beyond the three years of the MSAP grant funding, through the use of their sustainability planning and the intensive work that was accomplished through the project period.

**Groton Public Schools** knows from the success of its two intradistrict elementary magnet schools – Catherine Kolnaski STEM school and Northeast Academy of Arts – that school choice is important to Groton residents. They also know that two schools are not enough to shift the racial imbalance across the district. As a community, Groton is committed to growing its school choice and creating pathways of learning for students. This commitment is unwavering and has been in the district plans submitted to the state along with some school construction.

Groton Public Schools are committed to transitioning to the magnet school model at its middle school level and strongly believes that it is the best path to equity for its diverse student population. The overall minority population of Groton has increased from 35% to 44% over the

past decade and has resulted in several schools being deemed “racially imbalanced”. At the same time, Groton is experiencing growing socioeconomic disparity across the district. Forced redistricting to curb racial imbalance has repeatedly failed in Groton. Additionally, an increasing number of families each year are opting to send their children to magnet schools outside of the district.

In order to provide equal learning opportunities for all of Groton’s students and encourage residents to remain in-district, GPS opened two intradistrict elementary magnet schools. With this grant, Groton aims to convert its two middle schools (Cutler and West Side Middle Schools) into intradistrict magnet schools.

Groton's Board of Education has committed to supporting the ongoing costs associated with maintaining the MYP and themed magnet programs at these two middle schools in order to address our current and future racial imbalances among the schools.

*Goodwin College*, as an institution of higher education dedicated to innovation and serving students through career pathways, has been a significant part of the Sheff v. O’Neill settlement components. Not only do they partner with LEARN to operate two magnet schools, they are home to a Hartford Public Schools magnet school and they offer a co-curricular college opportunity for Hartford students. Goodwin also offers scholarships to parents of CTRA students who enroll at Goodwin. Goodwin College is dedicated to its students and their career pathways; Goodwin plans its career paths based on the ten-year labor data, which led them to the significant revision of the CTRA theme to include manufacturing. This type of critical thinking and decision-making is a critical component to the continued success of the Goodwin schools and the picture of school choice in the Sheff region. The development of the Industry Advisory Council for CTRA (as described above) will serve to address sustainability of the school, as well,

by learning and understanding the ongoing needs of this industry and developing deep and strengthened partnerships with these identified industry leaders.

Given the long and extensive history of **all of the EXPECT partners and their host communities**, USDOE can be certain that commitment and sustainability is a paramount component of the spotlights of this proposal.

It is known that the strength of a school is in the teaching and learning and a deserved reputation of excellence. This excellence is cornerstone to garnering funding supports for a school- to assuring community and business supports. This proposal is designed to assure that the schools are recognized, thereby increasing enrollment and starting the domino effect of additional sources of funding. This proposal is designed to build and strengthen the capacity of the seven EXPECT schools to continue the magnet pathways after the assistance under MSAP is no longer available. With four new schools and two significantly revised schools, sustainability and resource effectiveness are key. Furthermore, the extensive PD program includes coaches, co-teaching, and STEM and partnership specialists. The fact that EXPECT chose professional development as a promising practice, performance measure, and inclusion in the logic model is strategic. The EXPECT partners know this will assure success in the schools and have an impact on the reputation of the schools for student recruitment and business interest.

As previously mentioned, the state of Connecticut supports efforts to reduce racial, ethnic, and economic isolation through per pupil allocations to interdistrict magnet schools. Local districts pay per pupil tuitions to magnet schools. Federal dollars, such as entitlements and impact aid, are forthcoming to districts in the partnership. Local foundations support the schools. District education foundations support classroom and student activities. Formal business partnerships support governance of the schools, financing of activities, mentorships,

internships, and student scholarships. District operational budgets for individual schools are based on schools needs and equity across schools. LEARN and Goodwin College support the schools with PD, in-kind resources, operational budgets, and foundation supports.

In order to assure that the above mentioned financial supports continue to exist, schools must prove their value to the students, families, communities, funders, and business community. To that end, the plan to build capacity of the schools through an average of 100 hours per teacher annually of professional learning is the foundation of success. Additionally, the creation of a sustainability plan beginning one month after the notification of funding and continuing improvements to the plan quarterly throughout the funding will assure strategic uses and identification of additional sources of funding.

Sustainability and continued interest in the school must be grounded in high quality practice and retention of families in the magnet pathway. If EXPECT brings a framework of coherence that connects design, instruction, stakeholder input, and culture, then an earned reputation of excellence will assure high enrollment, retention of students, and increased financial resources.

In looking ahead to the implementation of this project and intensive efforts to ensure the continuation of these schools beyond the five years of MSAP funding, all of the EXPECT partners will use the “Sustainability Model Canvas” developed by LEARN. Following the development and use of this tool for the 2013 MSAP PEACE Project, LEARN was asked to present at the MSAP Project Directors meeting on its use, and also to submit an article highlighting the Sustainability Canvas for an upcoming Grantee Corner on the MSAP Center website. Elements of the Sustainability Model Canvas include: Key Partners; Key Activities; Key Resources; Key Work; Customer Relations; Characteristics of these Relationships; Channels; Financials; and Long-term Capital Planning.

Each section of this tool includes a series of deep questions, requiring intensive and ongoing conversations among the members of each school's Magnet Leadership team. [The Sustainability Model Canvas is included as an attachment to this this application for more information.]

Additionally, the EXPECT project recognizes the critical importance of strategic partners. As detailed in this proposal, the following partners will be working with at least one of each of the six schools:

- Mystic Seaport & Museum
- Mystic Museum of Arts
- Arts for Learning in CT
- New England Science & Sailing
- Project Oceanology (Project O)
- The Connecticut Center for Science & Exploration
- New England Science and Sailing
- Connecticut College
- Connecticut Center for Advanced Technologies
- UConn Extension – 4H
- World Savvy
- Habits of Mind
- Mystic Aquarium

LEARN and its partners have found that forging strong partnerships through an influx of grant funds proves to be a sustainable practice. As these partners grow and develop deep relationships with each school and their students, they often assist the school in seeking and

supporting the acquisition of a variety of other funding to support and sustain continued growth and collaboration.

***1 (b) Quality of Project Design***

*(3) The extent to which the training or professional development services to be provided by the proposed project are of sufficient quality, intensity, and duration to lead to improvements in practice among the recipients of these services;*

The six EXPECT schools are fully committed to the inclusion of extensive, focused, and relevant professional development throughout the three years of the EXPECT project. The target for each year of the EXPECT project is that every teacher at each school will receive an average of *50 hours of professional development in systemic reform topics and 50 hours of professional development in the integration of their school’s specific magnet theme*. This PD plan is driven by solid research into the tipping point at which a teacher has received sufficient professional development to have a positive impact on student learning. (Source: “*Is There a Magnet-School Effect? A Multisite Study of MSAP-Funded Magnet Schools*” Jia Wang, Jonathan D. Schweig, and Joan L. Herman, “*Journal of Education for Students Placed at Risk*” [JESPAR])

The EXPECT project is committed to ensuring that teachers have what they need and students have what they need to be successful throughout the five-year project – and beyond.

With respect to *educator professional learning to ensure high student achievement and engagement* at all six EXPECT schools, the project leadership and faculty are committed to the professional learning outlined in the “Desegregation” section of this application.

In addition, specific examples of the types and focus of proposed professional development activities are outlined below and also are included within each school’s Logic Model.

Regional Multicultural Magnet School:

RMMS teachers are eager to learn additional strategies that will make them even more effective in addressing the needs of all learners in order to ensure that all students are achieving at high levels. RMMS will engage in two categories of work that, in combination, will raise the level of student achievement. One key area will be *Curriculum and Instruction*, which will span both magnet and core reforms. *Positive School Climate* is the second area of effort that will deepen the understanding and use of the core reform Responsive Classroom framework and the IB Learner Profile and Attitudes to Learning.

Curriculum and Instruction Magnet Reforms:

- *Making the PYP Happen*: essential elements of the IB PYP framework. Provided by International Baccalaureate Organization; some teachers
- *Concept Based Learning*: deeply addresses how to teach with a conceptual lens. Provided by International Baccalaureate Organization; all teachers
- *Transdisciplinary Teaching*: philosophical and practical aspects of teaching in a holistic, curriculum connected approach. Provided by International Baccalaureate Organization; some staff members
- *PYP Instruction for Single Subjects*: specialized training for specials area teachers in the PYP. Provided by International Baccalaureate Organization; some teachers
- *PYP Curriculum Development*: using the PYP framework to develop concept-based, transdisciplinary units of instruction utilizing the most up to date standards-NGSS, new CT Social Studies standards, Connecticut Core Standards, National Core Arts standards, and ISTE standards. Provided by RMMS PYP Coordinator Lynne Ramage; all teachers

- *Inquiry Instruction*: rationale and techniques of inquiry-based instruction to increase cognitive depth of curriculum and student engagement. Provided by RMMS PYP Coordinator Lynne Ramage, International Baccalaureate Organization; all teachers

#### Curriculum and Instruction Core Reforms

- *SRBI and Data Driven Decision Making*: strengthen teacher knowledge and school wide systems of using assessment data and equity lenses to impact content area instruction. Provided by Connecticut Literacy Leadership, Center for School Change; all teachers
- *Transition to Connecticut Core standards Vertically Aligned Math Instruction*: components and most effective use of new math program, classroom embedded planning and coaching. Provided by RMMS Math program consultant and RMMS Math and Technology Coach; all teachers
- *Aligning Literacy Systems*: creating a schedule and system for literacy learning within the new IB Framework, clarifying best practices in developing foundational reading skills as well as Reader’s and Writer’s Workshop within IB. Provided by Consultants TBD; all teachers
- *NGSS Standards and Practices*, including engineering and design. Provided by LEARN Science Consultant, Dr. Terry Contant; some teachers
- *Effective use of technology in the classroom*: Systems for the use of classroom technology such as GoogleClassroom, inquiry tools, and presentation tools. Provided by LEARN Educational Technology Specialist, Jeff Giliberto, and RMMS Math and Technology Coach; some teachers

#### Positive School Climate/Responsive Classroom Approaches Core Reform

- *Responsive Classroom*: training for new teachers about components of creating a classroom community based on restorative practices. Provided by Northeast Foundation for Children; all teachers
- *Positive School Climate* using Responsive Classroom Approaches coaching: individualized and small group coaching for teachers to examine, analyze and improve classroom systems and structure for the delivery of instruction, the building of community and the humane management of classrooms, build capacity for in-house coaching, examine, analyze and improve school-wide systems and structures, Provided by Positive School Climate Consultant, Andrew Dousis; all teachers

#### Positive School Climate Magnet Reform

- *IB Learner Profile and Approaches to Learning*: coordination and integration of Responsive Classroom practices with the Learner Profile and Approaches to Learning to create a positive school and classroom climate based on community building, restorative practices and self-reflection. Provided by RMMS PYP Coordinator, Lynne Ramage; all teachers

#### **Groton Public Schools:**

In its efforts to ensure that all of its teachers at the two new magnet middle schools will have sufficient training and support to ensure increased student achievement and engagement in their learning, Groton Public Schools is committed to offering the following systemic reform professional development opportunities:

- IB MYP: in order for a school to become an authorized MYP school, they must undergo a multi-year application and review process that includes extensive professional development for teachers and administrators. The first step in this

process is conducting a district-wide feasibility study. In 2016, the Groton Board of Education formed a Middle School Curriculum Committee to initiate the MYP feasibility study for the 2016-2017 school year. Professional development for teachers and administrators began in the fall of 2016 as several faculty members attended an IB MYP conference. Both Cutler and West Side magnet schools will continue this rigorous and long-term process of implementing the full IB MYP curriculum within their schools, in combination with their specific focus of Arts & Humanities (Cutler) and STEM (West Side).

- Restorative Practices: In 2016, middle school faculty took part in a Restorative Practices training program. The Assistant Principals and school counseling staff at both Cutler and West Side regularly employ restorative practice strategies when working with struggling students. This helps to build an emotional safety and trust for the students. The middle school staff and teachers will continue to participate in PD related to restorative practices.

To ensure that the educators at both Cutler and West Side are sufficiently trained and ready to implement the new magnet themes, Groton Public School is committed to providing the following professional development opportunities in magnet theme integration:

Cutler Arts & Humanities Magnet Middle School:

In addition to the rigorous and extensive professional development associated with becoming an authorized IB MYP school, other magnet-themed professional development activities at Cutler are planned during the five years of the EXPECT proposal, to be provided by:

- Mystic Seaport & Museum
- Mystic Museum of Arts

- Arts for Learning in CT

*Mystic Seaport Museum's* (MSM's) professional development leads to improvement in instructional practices that in turn lead to improved academic achievement. MSM's training is designed to "go deeper" with teachers on how to effectively use primary sources in the classroom to enhance students' critical thinking skills (also known as "historical" thinking skills). Because of their large collection of artifacts and number of exhibits on the grounds, Mystic Seaport is in a unique position to provide in-depth and sustained professional development that will enable teachers to enhance their instructional practice as it relates to use of primary sources in the classroom. The Connecticut Core Standards and CT Social Studies Frameworks both emphasize the importance of analyzing primary sources and other informational text to help students develop their inquiry skills, which in turn helps them have a deeper understanding of history.

*Mystic Museum of Art's* professional development sessions equip teachers with tools to integrate art across their curricula and connect MMoA collections and art-making to classroom themes. Research cited by the National Art Education Association supports the idea that professional development for teachers should allow opportunities to share ideas and collaborate. MMoA professional development includes group discussion and reflection time for this purpose.

In the first year of the grant, Cutler administrators will identify additional PD related to arts and music instruction. Utilizing the *Arts for Learning in CT* website, Cutler will have access to over ninety local artist and musicians. At the same time, Cutler will also hire several technology consultants to assist with customizing the video and audio equipment and to provide teacher instruction on best practices for instruction and maintenance that they can then share with the students.

West Side STEM Magnet Middle School:

West Side has developed a strong plan for professional development of its faculty and staff to ensure fidelity of implementation to its proposed plan as well as to provide an engaging, welcoming, and safe environment for all students to learn and succeed. In addition to the rigorous and extensive professional development associated with becoming an authorized IB MYP school, other magnet-themed professional development activities at West Side planned during the five years of the EXPECT proposal, include:

- NGSX: the district’s science coordinator is receiving professional development in NGSX, a blended professional learning system designed to help teams of K-12 Science educators apply the pedagogical shifts described in the Framework for K-12 Science Education and Next Generation Science Standards to their own teaching. WSSMMS teachers will accompany the Coordinator in this training.
- WSSMMS teachers will also participate in the following NGSS professional development programs at the CT Science Center Mandell Academy for Teachers:
  - ◆ Integrating Science & Engineering Workshops: These workshops will follow the engineering practices model of the NGSS and integrate Connecticut Core Standards for math and language arts while supporting the current Connecticut Science Framework;
  - ◆ Inquiry for Teaching and Learning Series: Teachers will learn methods of inquiry-based teaching and learning at a series of week-long immersion workshops, as well as an annual two-day follow-up conference. Teachers will learn to transform classroom learning, engaging and exciting their students.

- ◆ Physical Science Content Workshop: These workshops focus on the underlying scientific principles behind the content standards in the Connecticut Science Framework. Using the inquiry method, teachers will deepen their understanding of scientific principles.
- Project Lead The Way: will provide onsite professional development to guide teachers and students in transforming classrooms into hands-on collaboration spaces.
- New England Science and Sailing: this non-profit ocean adventure education program will engage students and teachers in experiential learning that builds confidence, teamwork, and leadership skills, that supports student learning with engaging “hands wet” programming that supports STEM curricula.
- Project Oceanology: Aligned with CT Science standards, Project O provides students with opportunities to explore the disciplinary core ideas & crosscutting concepts as well as employ the scientific & engineering practices of the *Next Generation of Science Standards* (NGSS).

### **Norwich Public Schools:**

Norwich Public Schools believes that educators must be provided with ongoing professional learning in the areas of diversity and inclusion. Norwich Public Schools is committed to providing culturally sensitive training in the area of social-emotional learning, trauma-based learning, and restorative practices. Throughout each year of the magnet funding, district funds will support each school’s commitment to supporting the needs of our diverse learners. Additionally, Kelly Middle School is engaged in a multi-year project with the University of Connecticut, evaluating the rate of suspensions and office discipline referrals across subgroups.

This research project will help the district to inform culturally sensitive practices that provide all students with equitable behavioral supports in school.

Both schools (Kelly STEAM Magnet Middle School and Teachers' Memorial Global Studies Magnet Middle School) will provide professional development for their teachers in the following areas:

- Restorative Practices
- Trauma Sensitive Learning provided by district staff
- Responsive Classroom will ensure educators are delivering academics in an engaging way, promoting a positive school climate, effectively managing classroom environments and ensuring a commonly held knowledge of child development

Both schools will implement practices in alignment with the professional development outlined above. However, schools will ensure practices consistent with previous training in:

- Weekly or Daily "team meetings
- Advisory Programs
- Cultural Competency
- Hands-on, project-based learning: where students demonstrate proficiency in both group and individual expectations

Additionally, both schools will continue with in-house support for teachers in the implementation of the Connecticut English Language Proficiency (CELP) Standards, Sheltered Instruction Observation Protocol (SIOP) strategies to support English Learners. The State Education Resource Center (SERC) has been providing technical assistance to the middle schools in writing goals and objectives for Individualized Education Plans. This work will continue in concert with in-house support for teachers working with special education students in

a math workshop model. Finally, the district will invest in *Verbalize and Visualize* training for special education teachers to support cognitive development, comprehension and thinking.

KSMMS will provide Positive Behavioral Interventions and Supports with a focus on universal expectations, to its entire staff and faculty. And TMGSMMS, with its focus on global awareness issues such as homelessness, poverty, illness and disease, will infuse socio-emotional learning into all content areas.

In terms of magnet theme integration professional development, KSMMS will provide professional development for teachers in the following areas:

- STEAM practices and principles, to be provided by the KSMMS Magnet Theme Coach. In addition to specific STEAM-related content, topics will include community partnerships, how to transfer control of learning to students, student-centered learning, hands-on experiential learning, curiosity and collaboration, and setting up classrooms where students are not afraid to fail;
- Ensuring alignment of curriculum, standards, and lesson planning to the STEAM magnet theme.

TMGSMMS will provide magnet theme integration professional development for their teachers in Global Competencies and Project Based Learning through World Savvy, a national education nonprofit that works with educators, schools, and districts to integrate the highest quality of *global competence teaching and learning* into K-12 classrooms, so all young people can be prepared to engage, succeed, and meet the challenges of 21st century citizenship..

**Connecticut River Academy:**

Professional Development to be provided to support positive culture and climate at CTRA, as well as to ensure inclusion for all students will include:

- *Restorative Practices*: trainers from the International Institute for Restorative Practices will certify each CTRA educator in a model of building and maintaining a positive community and for restoring relationships when harm has been done. This includes the use of affective questioning techniques and restorative circles at the classroom and administrative levels. This work includes the participation of parents and community members.
- *Cultural Competence*: Work with Calvin Terrell, a nationally acclaimed presenter and facilitator of cultural competence in schools, including a focus on diversity, equity, and justice-building. CTRA proposes a model of 1-2 full days of training with faculty and students, in addition to follow-up work.  
  
Student-created initiatives to address issues of cultural competence, such as CTRA' Unity Day, which features a peace rally, will be planned and organized by the Student Activists group. These events will be planned in conjunction with community members and parents.
- *Training for Advisors* in a variety of social-emotional models, including Attachment Theory, developmental stages, and asset-based approaches.

The *Kagan Cooperative Learning Model* is a highly research-based approach to increasing achievement through raising student engagement. This model supports teachers in planning for a wide range of needs in heterogeneous classes, holds students accountable for being agents of their own learning, and builds relationships and understanding in the classroom while also increasing academic achievement. The ability to both work cooperatively and remain individually accountable will later support our students in college and career. The four cornerstones of the work – positive interdependence, individual accountability, equal

participation, and simultaneous interaction (PIES) – are explicitly built into a variety of teaching and learning structures that can be adapted for a variety of skills and content. CTRA will have all educators trained in this mode and will provide ongoing classroom coaching in its implementation. CTRA is specifically looking to work with one of its former faculty members, who helped to open the school in its first years and is now a national trainer for Kagan. As a result of this work, classroom engagement will visibly improve as evidenced through observation data using CT’s Connecticut Core of Teaching rubric that is part of LEARN’s Educator Development and Evaluation Plan.

*Habits of Mind* (Costa and Kallic) are the dispositions that can support all people when they are confronted with new learning. These are 16 teachable habits that can be implemented in classrooms as a part of the set curriculum units as well as through a highly reflective personal growth and goal-setting model. In the past, CTRA has identified connections between its curriculum units and these habits and have started to report out on student progress in these areas. CTRA is looking to heavily increase its training and practice in giving explicit feedback to support students in their development of *Habits of Mind* and to encourage a Growth Mindset. More specifically, CTRA educators have identified school-wide expectations for learning around Critical Thinking and Written & Oral Communications. The faculty is interested in using *Habits of Mind* as a means for teaching and supporting reflection and growth in these areas. As a result of this work, CTRA expects to see improvements in academic achievement overall as evidenced by higher GPA, as well as a growing proportion and racially integrated distribution of scholars who will be identified for early college programming. This work will be led by CTRA’s Early College Theme Coach, who has done extensive learning around this topic and understands it in the context of our early college theme.

As an extension of work done during the 2016-2017 school year on Differentiated Instruction, all CTRA educators will engage in professional learning on student-centered instructional practices and personalized learning experiences. It is clear that instructional practices that both meet the wide variety of needs in CTRA classrooms and engage students based on their particular interests and authentic, interdisciplinary learning experiences and assessments will result in higher levels of academic achievement and career and college readiness for all of our students. As a part of this work, educators will participate in a series of learning walks in which they will collect observational evidence and work together and with LEARN leadership and professional trainers to set goals for their own practice based on collaborative research, reading and professional development experiences. CTRA will also hold a series of curriculum tuning protocols, in which educators, students, and parents will review and give feedback on our curriculum, lessons, and assessments. Having feedback from this cross-section of stakeholders will ensure both a commitment to high impact practices as well as relevance and cultural competence within and across the school's curricula.

As CTRA works to build and integrate the new Advanced Manufacturing theme throughout its curricula and programs, the school will dedicate professional opportunities to build understanding of manufacturing fields, as well as the major concepts and skills that will support student success in this area. CTRA's Advanced Manufacturing theme coach will work in coordination with a Curriculum/Instruction/Assessment Coach and subject area teachers to find the natural points of connection for interdisciplinary and theme-based learning. They would then follow through the planning, instruction, and assessment process to coach the teachers and students to success. Through opportunities like guest speakers and worksite visits, CTRA will also engage its community partners from inside the advanced manufacturing industry to bring

authentic experiences to both staff and students. The specific nature of this work will be built out of the interdependent collaboration that the school plans to develop. Included in this list of community/business partners for CTRA are members of its Manufacturing & Environmental Advisory Board: Zuvic/Carr Associates (consulting engineers), Riverfront Recapture, Rapid Global Business Solutions, CT Invention Convention, and CT Science Center.

***1 (b) Quality of Project Design***

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

When designing the EXPECT consortium, the partners relied on both the legislative mandates for reducing racial, ethnic, and economic isolation and having racially balanced schools within a district. There is little research regarding intradistrict magnet schools that have passed the What Works Clearinghouse (WWC). *However, the studies from University of Connecticut and Syracuse University demonstrate promise and are without reservations in the WWC.*

“Connecticut’s Interdistrict magnet schools offer a model of choice-based desegregation that appears to satisfy current legal constraints. This study presents evidence that interdistrict magnet schools have provided students from Connecticut’s central cities access to less racially and economically isolated educational environments and estimates the impact of attending a magnet school on student achievement.”

It is known that estimating the effects of school desegregation efforts on student achievement can be difficult. While students may be randomly selected within the school lottery system; they have made the choice to enter the lottery and have expressed interest in a school. In this study the researchers used information from the admission lotteries as well as longitudinal data on

individual students to help isolate the effect of attending a magnet school on student achievement.

In summary, “reliance on voluntary choice to promote integration makes CT’s interdistrict magnet school program an interesting model for reducing racial and economic isolation and improving educational outcomes for poor and minority students in city schools. Furthermore, interdistrict magnet schools have a positive effect on the mathematics and reading achievement of central city schools and that interdistrict middle magnet schools have positive effects on reading achievement.”

EXPECT logic models, evaluation plan and processes, and performance measures support and are aligned to this research. **Program Purpose 1:** *The elimination, reduction, or prevention of minority group isolation in ... schools with substantial portions of minority students: .Logic Model Activity:* *Desegregation – Student recruitment, application and selection activities; Benchmark:* *for applicant pool - proportion of isolated students are 10 percentage points less than actual enrollment for each school.* All proposed magnet schools will reduce minority group isolation and increase socioeconomic integration by decreasing the percentage of black or Hispanic students and increasing the percentage of white and middle class students. (The district-wide K to grade 12 enrollment and projections are on Table 1: Enrollment Data-LEA Level.) **Objective 1:** Minority group and socioeconomic isolation will be reduced at the proposed magnet schools. (This objective addresses MSAP Performance Measure a.)

All six schools (RMMS, Cutler Arts and Humanities Magnet Middle School, West Side STEM Magnet Middle School, Kelly STEAM Magnet Middle School, Teachers’ Memorial Global Studies Magnet Middle School, and CT River Academy) will be using instructional and/or theme coaches to improve teaching quality with a focus on improving teacher-student

interaction. [Based on the work of R.C. Pianta, J.P. Allen, of the Toward Positive Youth Development: Transforming Schools and Community Programs.] Schools will systemically work to build the capacity of their educators to improve classroom management and engagement by changing their own behavior in ways to promote youth development. Furthermore, the work of Allen, Pianta, Geogory, Mikami and Yin leads the schools to want to implement a coaching program –MyTeachingPartner—to help teachers offer youths more instructional and emotional support. Allen, J. P., Pianta, R.C., Gregory, Mikami, A.Y., & Lun, J.(2011) An Interaction-Based Approach to Enhancing Secondary School Instruction and Student Achievement. SCIENCE, vol 333, 1034-1036.

One of the single most important factors affecting student achievement today is the teacher. Teachers with little experience and/or poor classroom management skills will have difficulty motivating and engaging students regardless of the content. Lack of motivation and engagement of students lead to minimal academic progress. The research over the past 30 years indicates that classroom management a key lever in ensuring student success. In order to ensure teachers are equipped to handle the developmental, intellectual, and social need of students, on-going, job embedded coaching is essential. When coaching empowers teachers to change their own behaviors, the research shows that the result is higher levels of student learning. The value of the instructional coach cannot be overstated. According to Michael Fullan and Jim Knight, “Next to the principal, coaches are the most crucial change agents in a school.” It is widely believed that school improvement comes from an investment in social capital built through the strategic use of instructional coaching.

The article titled, *An Interaction-Based Approach to Enhancing Secondary School Instruction and Student Achievement*, (Allen, et. al., 2011), presents the finding of a randomized

controlled trial of a coaching program –the MyTeachingPartner—Secondary program (MTP-S)—focused on improving teacher-student interaction in secondary classrooms with students aged 11 to 18 so as to enhance student motivation and achievement.

Data was collected from 78 secondary school teachers from 12 schools who participated for 13 months in MTP-S and for a total of 2 year in the evaluation of the program. The majority of teachers who participated in the study were white and had, on average, 8.7 years of teaching experience. During the intervention year, a total of 1267 student in 76 classrooms participated. An additional 970 students in 61 classrooms joined the second year of the study. The intervention group and the control group mirrored one another in terms of gender, racial, ethnic, socio-economic, and academic status. The researchers utilized a state standardized end of year test to measure student outcomes for the study. Teachers in the treatment group participated in a workshop-based training, used online video resources, and had job-embedded coaching for an entire year. On average, teachers had 20 hours of professional learning throughout the year, targeted on building their skills in utilizing various types of instructional strategies, increasing the rigor in the questioning techniques, as well as the creation of real-world application to demonstrate skills and knowledge. The control group was not provided any type of support, or professional development, or coaching around motivation and engagement.

Hierarchical linear modeling was used to estimate the effects of the intervention with moderation and to account for interdependencies of student outcomes within teachers. The effect of the MTP-S intervention on student achievement as compared to the control group resulted in a non-statistically significant impact. However, results from teachers during year two after the training did show a statistically significant positive effect. Students in the MTP-S intervention had a net gain of .22 as compared to the control. Another result that was measured through the

study was the observable qualities of instruction as aligned with the modeling framework. Researchers were able to find an indirect effect of the intervention on the student-teacher interaction qualities in the second year of the experiment.

In this study, the increased outcomes of the treatment group in comparison with the control group in the second year aligns with overall research around the implementation gap. Reaffirming other studies that consistently observe no change or a decrease in student achievement during an implementation year. The teachers who participated in the MTP-S study had a great deal of new learning to apply to their own practice. The study affirms that after the year of learning they were able to affect student achievement due to increase in their effective practice classroom management. This study seems support to the notion that by increasing the extent to which interactions amongst teachers and students align to the needs of adolescents there will be an increase the motivational and achievement levels of students.

The evaluation plan, logic models, and performance measures all align to support this research,. **Purpose 3:** *The development, design and expansion of innovative educational methods and practices that promote diversity and increase choices in public elementary and secondary schools ....* **Logic Model Activity:** *Magnet Theme Integration;* **Benchmark:** *(a) Dosage for implemented and planned units attains the target number of hours for project year. (Checked during each site visit.) (b) See Benchmark for Project Purpose 2. (c) Student surveys indicate that engagement, motivation, academic commitment and interest in magnet theme increase each year (year 1 is baseline). 90% of students are interested in magnet theme and find it challenging.* Magnet Theme Integration, Improvement of Curriculum and Instruction and intensive Professional Development will produce Quality Magnet Curriculum and Instruction which will increase student diversity and choice because the curricula are not offered at other schools.

**Objective 3:** All students, at each magnet school, will receive magnet theme instruction.

**Performance Measure 3.1:** By the end of each project year, all students, at each magnet school, will receive magnet theme instruction coordinated with or including systemic reforms for at least 3 (year 1), 6 (year 2) and 10 (year 3) hours per week.

***Selection Criteria (c) Quality of Management Plan:***

*The Secretary considers the quality of the management plan for the proposed project. In determining the quality of the management plan for the proposed project, the Secretary considers the following factors: (1) The adequacy of the management plan to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks;*

Throughout the 25+ year history of the system of magnet schools across eastern Connecticut, there has been support for the operation of these schools from local districts and from the state. State support for significant changes and the resources necessary for new schools are much more limited and, in some cases, no longer available. The six schools and three districts/LEAs plus Goodwin College are all committed to providing the necessary resources to **ensure the achievement of the objectives included in this proposal on time and within the projected budget.** It is important to note that the Memorandum of Understanding for EXPECT was signed by all Superintendents and the College President. (The signed MOU is included as an attachment with this application.) All logic models were developed and signed by the school Principals. The creation of this consortium has been more than one year in the making; with all parties working with their respective schools and partners to gain commitment. The region has supported and worked to open and support high quality magnet schools for 25 years.

Through the opening of four new magnet schools and the significant revision of two existing magnet schools, EXPECT will not only decrease minority group isolation, it will build the capacity of the schools to lead their students to successful futures. Capacity building will include, but not be limited to:

- implementation of systems-based instructional supports and effective teaching strategies,
- implementation of systems-based marketing and recruitment,
- implementation of systems-based computing and communication platforms,
- implementation of systems-based data collection and analysis,
- implementation of systems- and context-based parent and community engagement strategies,
- implementation of systems- and context-based PD activities,
- implementation of systems-based coaches in each magnet school setting,
- hiring of systems- and context-based curriculum specialists, and
- implementation of systems-based shared services and purchasing.

EXPECT will use a systems approach to reducing minority group isolation, improving student achievement, engaging parents, offering choice options, achieving systems reforms, and supporting instruction that strengthens students' knowledge of magnet-themed offerings and other core subjects, and the attainment of tangible skills that take them beyond their educational experience into successful careers.

The collaborative nature of the EXPECT proposal allows for “adaptive change” in schools to build their capacity and assure sustainability. “The locus of responsibility for problem solving when a company faces an adaptive challenge must shift to its people. Solutions to adaptive challenges reside not in the executive suite but in the collective intelligence of employees at all

levels, who need to use one another as resources, often across boundaries, and learn their way to those.” [Donald Hefetz & Donald Laurie, “The Work of Leadership”, February 1997] School governance councils, teachers, professors, families, and community members have been and will continue to be involved in the various aspects of planning and developing magnet schools to support this “adaptive change” process.

The systems approach is designed a highly innovative 21st century organizational design - based largely on the work of social systems scientist Jamshid Gharajedaghi (2010). EXPECT will use the five critical dimensions of a system to create one that supports educational achievement as well as the people within the system. In order to successfully manage, implement, and assure the future success of a highly-effective organization of magnet schools with a regional presence – a system of people working together towards a common goal (developing and implementing successful inter- and intra-district magnet schools) – the work will be organized around these five critical dimensions, which together define the EXPECT project as a whole:

- *Wealth*: the development and implementation of a sustainable financial model;
- *Knowledge*: the generation and dissemination of content-rich and thematic-focused information;
- *Beauty*: the affective side of the EXPECT project, creating interest and excitement about learning environments that are engaging, supportive, and relevant;
- *Values*: the formation and institutionalization of processes and systems relative to interrelationships, culture, cooperation, collaboration, competition, and conflict; and
- *Power*: the development and duplication of ability and responsibility – designing a sustainable and continually innovative model that contributes to the good of the whole.

As illustrated in the “EXPECT Organizational Chart” in this proposal’s communication and working partnerships are clearly defined. (The Organizational Chart is included as an attachment to this proposal.) As members of the EXPECT Partner Team, each partner plays an important role in the governance and oversight of the project. Each school has a Parent Advisory Committee/Council; each school commits to working closely with the evaluators to ensure program efficacy; and each school has developed (and will continue to develop and strengthen) a wide range of community/business partners to support the strength and real-life application of its curriculum.

By using a systems-based approach that incorporates multiple levels of participation, accountability and decision-making, the capacity of these schools to continue their inclusive school climates will be secured beyond the use of these MSAP funds. Inherent in a systems-based approach to capacity building is a need for continuous improvement and design. An illustration of the EXPECT project’s systems model is included as an attachment to this application.

The goals of the EXPECT proposal support the purposes of MSAP and are targeted to respond to the specific needs of the low-achieving students in eastern Connecticut, specifically those in the four EXPECT host communities – New London, Groton, Norwich, and East Hartford. EXPECT’s outcomes (i.e., objectives and performance measures) are aligned with the six purposes of the Magnet Schools Assistance Program (MSAP). A set of objectives and performance measures are included in the “Evaluation” section of this proposal.

**Timeline and Critical Milestones:**

In developing the EXPECT proposal, the leadership of the three partner districts (Norwich Groton, and LEARN) and Goodwin College agreed to the following critical milestones and timeline for the project:

- Quarterly Partner Meetings, beginning in November 2017 and continuing throughout the life of the project. These meetings will provide critical support and oversight to the project to ensure fidelity of implementation and progress towards meeting Performance Measures and targets.
- Hiring of Key Staff: for those schools that have not already identified a Magnet Theme Coach, the recruitment and hiring processes will begin immediately upon receiving word of funding for the EXPECT project, with the goal of having all staff hired and on-board by January 1, 2018.
- Site Visits at each EXPECT school: Beginning in the winter of 2018, regular site visits will be conducted by project evaluation team to each EXPECT school, with the goal of three (3) visits per year. Typically, these visits will occur in Fall, Winter, and Spring of each year of the project and will result in a written report, expressing the degree to which the project is being implemented according to the approved proposal, any commendations or recommendations from the Site Visitor. Each school will have a School Evaluation Team, comprised of the Principal, Magnet Theme Coach, and Teacher representatives who will review all formative and summative reports, discuss report findings and recommendations with school staff and faculty, and develop plans for implementation of recommendations – creating a complete feedback cycle.
- Magnet Theme Dosage: As outlined in the EXPECT project evaluation, each school will begin implementing its magnet theme and by the end of Year 1 of the project (9/30/18),

each school will be providing a minimum of three (3) hours per week on average of magnet themed instruction. By Year 5 of the project, all schools will be implementing a minimum of 12 hours per week of magnet themed instruction.

- Professional Development: Beginning in Year 1 and continuing through Year 5 of the project, teachers at each EXPECT school will receive an average of 50 hours annually of professional development related to systemic reform and 50 hours annually of professional development related to the implementation of their school's magnet theme.
- Parent Engagement: Active and meaningful parent engagement activities will occur at each school, with the goal of achieving a 5% increase of parental/family involvement each year of the EXPECT project at each partner school.

### *1 (c) Quality of Management Plan*

*(2) How the applicant will ensure that a diversity of perspectives are brought to bear in the operation of the proposed project, including those of parents, teachers, the business community, ... or others, as appropriate.*

EXPECT schools will reflect a **spectrum of diverse perspectives**, with a heterogeneous mix of students. The faculty of each EXPECT school will include highly qualified teachers across all curricular strands. Within each classroom, active learning environments will be maintained where interaction between and among students is encouraged and supported. In conjunction with learning about group process skills and cooperation, students will also learn important communication skills that are critical for success in the workplace of the future.

As each school's Logic Model was developed, input was sought from EXPECT schools. The principal for each school signed off on their school's Logic Model, demonstrating their understanding of and commitment to the critical elements of this proposal. Additionally, each

superintendent has signed a “Memorandum of Understanding”, indicating their understanding of and commitment to the varied responsibilities and expectations for the project. Representatives from each school and district/LEA participated in a series of planning meetings in the development of this proposal, and individual meetings with each school’s leadership were held throughout the planning process to develop the various elements of their implementation plan and to identify resources available and resources needed.

The current concentration of minority students in New London, Norwich, Groton, and East Hartford allows for only very limited interaction between and among students of different backgrounds. The EXPECT project, if approved, will support the development or significant revision of six magnet schools. One of the schools is located in New London; two in Groton; two in Norwich; and one in East Hartford. The EXPECT schools will reduce minority group isolation by attracting students from pre-dominantly non-minority communities and/or neighborhoods for each of the project years, consistent with the goals established in each school’s Operations Plan. The identified magnet themes were strategically selected to provide innovative and engaging learning opportunities that are unavailable in the non-magnet schools across eastern Connecticut.

Key to the success of the EXPECT project is an inclusive learning environment for ELs and students with disabilities, allowing them to develop their potential. The inclusion of these students will provide them opportunities to interact with students without disabilities and students for whom English is their primary language in both formal and informal settings.

Professional development for the EXPECT schools will include exposure to instructional strategies to facilitate learning for diverse learners in flexible groupings. Newly created thematic units and lessons will be developed to address differentiated instruction and cooperative learning to reach all students.

The six EXPECT schools will utilize cooperative learning strategies to maximize student success and to support a variety of interactions within their diverse student populations. As envisioned for the EXPECT project, cooperative learning offers a wide range of approaches regarding how students are grouped in heterogeneous teams for the purposes of effective instruction. Through the incorporation of cooperative learning strategies into the six EXPECT schools, educators will be able to foster a new sense of partnership and interaction between and among learners in which the focus is on “cooperation.”

Teachers will receive intensive coaching and training to support their ability to be part of creating a safe, engaging, and inclusive learning environment. Each school is committed to building communities that support student achievement. To that end, every effort will be made to ensure that students feel that there is a place for them in their school; that they have access to every learning opportunity within their school; and that staff, resources, and attention is available to them and focused on their needs. The six EXPECT schools recognize the importance of meeting students and families “where they are” by bringing what they need to the process. These schools have built in a number of “safety nets” to catch students before they falter and to prevent them from doing poorly academically.

Finally, each school’s Parent Engagement Plan (as described in the Project Design section of this proposal) supports the active and meaningful involvement of parents and families at their school. These family members will be encouraged and welcomed to participate in numerous ways, including but not limited to:

- Ensuring their child’s health & safety;
- Learning and implementing effective parenting skills;

- Two-way communication systems from home-to-school and school-to-home about student progress and all school programs and activities
- Opportunities for volunteering in the classroom or other areas of the school;
- Opportunities for families/parents to learn and engage in home-based support of their children’s learning; and
- Leadership opportunities for parents, including the PTO/PTA, School Governance Councils, Advisory Councils, or other committees/teams/task forces in place at each school.

***Selection Criteria (d) Quality of Personnel:***

*(1) The Secretary reviews each application to determine the qualifications of the personnel the applicant plans to use on the project, The Secretary determines the extent to which:*

*(a) the Project Director (if one is used) is qualified to manage the project;*

As the lead applicant for the EXPECT project and in keeping with its policies and practices for non-discriminatory employment, LEARN will ensure that all EXPECT personnel are selected for employment without regard to race, religion, color, national origin, sex, age, or disability. The same standard applies to all contracted consultants. All personnel, secured with the use of MSAP funds will meet or exceed requirements for certification. Current staff as outlined below have more than 10 years experience each in the operation and success of magnet schools. Collectively that experience is “priceless” and calculated at exceeding 100 years of relevant experience. Job titles, descriptions of responsibilities, and biographies of identified current staff are included below. All job descriptions, hiring processes, and employment ads reflect LEARN’s Equal Opportunity Employment practices (EOE).

**The EXPECT Project Director** will be responsible for ensuring the commitment and active support of the EXPECT schools to the goals of MSAP and the EXPECT proposal. The Project Director will have overall responsibility for the planning, implementation and evaluation of project activities to meet the goals. Specifically, the Project Director will: manage all aspects of the project; ensure that proposed activities for desegregation are implemented effectively and with fidelity; support project school Principals with implementation of their school plans; oversee and manage the EXPECT budget; work directly with the LEARN Director of Business & Finance and accounting office; oversee the completion and filing of all required local, state, and federal reports.

Katherine Ericson, Associate Executive Director of Magnet Schools for LEARN, is named as the Project Director. Ms. Ericson received her Bachelor's degree in Secondary Education from Boston College and her Master's of Science in Special Education at Southern Connecticut University. Additionally, she received her Intermediate (Principal) Leadership certification from Sacred Heart University and is completing her Executive Leadership Program (Superintendent) certification from the University of Connecticut, with an expected completion date of July 2017. Prior to joining LEARN in 2015, Ms. Ericson served as the Chief Academic Officer for the New London Public Schools, where she orchestrated New London's transition into an **all-magnet district** and oversaw the opening of the district's K-5 STEM magnet and K-5 Arts magnet schools, including the successful design of their specific theme-based curricula and implementation of the district's desegregation strategies.

Ms. Ericson will be housed at LEARN and will report to the Executive Director of LEARN, Dr. Eileen Howley. Dr. Howley came to LEARN in December 2012, after having served as the Assistant Superintendent for Curriculum, Instruction and Assessment in the West Hartford

Public Schools. Dr. Howley helped shape a systemic approach to district and school development aligned with mission framework, revitalized the process of curriculum review, and created structures to address special education needs during a transitional implementation time to a cross-categorical model for children with special needs. She also developed the plan for the Connecticut Core Standards, and worked with teachers and leaders to begin the process of redesigning West Hartford's system for educator evaluation and development. Prior to her time in West Hartford, Dr. Howley served as the Assistant Superintendent and Interim Superintendent of Farmington Public Schools.

## ***2 (d) Quality of Personnel***

### ***1 (b) Other key personnel are qualified to manage the project;***

The EXPECT project, a collaboration among LEARN, Norwich Public Schools, Groton Public Schools, and Goodwin College will create or significantly revise six magnet schools and has identified a core of **key personnel** to support the successful implementation of this project.

As the lead agency for the EXPECT project, LEARN has the status of a Local Education Agency (LEA) with its Executive Director being equivalent to a district's Superintendent of Schools. LEARN and the other project partners employ certified and non-certified staff. *The EXPECT project will be managed and implemented by a team of experienced and knowledgeable experts with extensive experience in planning, creating, and managing successful magnet schools, including working with diverse populations, the development and implementation of effective desegregation strategies, and the implementation of high-interest, high quality theme-based curriculum.*

Working closely with the Project Director, will be Elizabeth (Liz) Binger as Assistant Project Director. Most recently, Ms. Binger served as the Coordinator of LEARN's regional MSAP-

funded project, PEACE, where she was responsible for managing fidelity of implementation with respect to all aspects of the approved proposal, overseeing expenditures and monitoring compliance for the seven project schools. In this capacity, Ms. Binger supported the project schools in developing and implementing desegregation strategies, effective recruitment and retention plans, and planning for each school's long-term sustainability. Over the course of her career, Ms. Binger has had extensive experience working with diverse populations, both in educational settings and as Executive Director of two organizations serving low-income, low-skilled, primarily minority populations. Previously, Ms. Binger served as the Project Director for LEARN's 2004 MSAP cycle's project, "We're in this Together," working with four interdistrict magnet schools across southeastern Connecticut, all of which continue to successfully operate their magnet themes.

In the role of Assistant Project Director, Ms. Binger will be responsible for assuring the effective implementation of each activity as it relates to the MSAP and EXPECT goals; working with other EXPECT project staff, including each school's Magnet Theme Coach; managing regular meetings of Project Partners; supporting the recruitment/application process at each EXPECT school, their lotteries, and student selection processes; coordinating the work of the six project schools and the independent evaluators to ensure in the collection and analysis of all data related to student achievement and federal, state and local requirements; work to ensure timely and appropriate filing of all reports to the US Department of Education.

Other key personnel will include:

Lynn Nenni, Chief Financial Officer at LEARN will lend her expertise and knowledge to the EXPECT project to ensure effective and appropriate management of grant funds. Ms. Nenni joined LEARN in 2015 and is responsible for the financial, budgetary, cash management,

purchasing and building maintenance functions of the organization. In this role, she aids the Executive Director and the leadership team in the development and delivery of departmental and organization-wide goals. Since coming the LEARN, Ms. Nenni has improved the use of technology and financial accounting; initiated an investment program for idle funds to increase revenue, and instituted predictable budget review, improved review processes, and user understanding of school and departmental budgets.

John (Jack) Cross, Director of Development at LEARN will provide oversight and guidance to the MyTeachingPartner (MTP) process. In this role, he will coordinate the professional development, trouble-shoot implementation activities, and support each school's Magnet Theme Coach. Mr. Cross will serve as a liaison to the partner districts in ensuring that the MTP implementation is meaningful and is conducted with fidelity to the approved EXPECT proposal. Mr. Cross was formerly the Superintendent of Clinton (CT) Public Schools, where he revitalized the administrative council, summer retreat and instituted administrative rounds.

Lisa Cooney, Program Coordinator at LEARN will provide support and assistance in the implementation of the EXPECT project, to ensure fidelity of implementation. Ms. Cooney is a program coordinator in LEARN's Development Department. With her regional, statewide, and national experience, she was a member of the successful team that coordinated LEARN's 2013 MSAP project: PEACE. Ms. Cooney's background is in design strategy, including systems approaches to organizational development, project management, facilitation, communications, marketing, and public relations. She is trained in strategic planning, service design, process improvement, Facilitative Leadership, principled negotiation, and Results Based Accountability. In addition, she has been extensively involved in Community Conversations on Education, a series of community meetings developed to encourage community participation in educational

planning. Of particular note is Ms. Cooney’s ability to lead a team through the successful implementation of projects. She is known for her design, delivery, promotion, and support of programs and services that meet all guidelines and requirements and exceed customer expectations.

***1 (d) Quality of Personnel***

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

The EXPECT project will ensure that all teachers hired at each of the six partner schools (including one Magnet Theme Coach [MTC] at each school), will be highly qualified in instructional practices, coaching methods and approaches, and in working with diverse populations. In the three schools that will incorporate STEM into their themes (Connecticut River Academy, West Side STEM Magnet Middle School, and Kelly STEAM Magnet Middle School), the MTCs will be expert in their respective STEM/STEAM areas. Preferred requirements for the Magnet Theme Coaches will be:

- Highly qualified teachers with at least five years teaching experience;
- Experience in the development and delivery of theme-based instruction;
- Experience in developing and implementing desegregation strategies and activities, and working with diverse populations;
- Experience in staff training and coaching; and
- Master’s level coursework and experience in curriculum development.

The six Magnet Theme Coaches will provide support for all of the school-based activities described in this proposal at their respective schools. They will assist with professional development of classroom teachers at their schools, including systemic reform PD and magnet-

themed PD. Working with the faculty at each school, the MTCs will support curriculum development and the writing of and implementation of integrated units and discrete classes that reflect their school’s theme. MTCs will support the work of the school to align their magnet curriculum; they will model best practices in effective classroom instruction; and will facilitate collaborative planning time for their school’s faculty. The Magnet Theme Coaches will also be instrumental in the planning and implementation of their school’s recruitment and retention strategies and activities.

All six of the EXPECT partner schools and the three districts use clearly defined processes for ensuring teacher quality, aligned with student outcomes and best instructional practices. Each district will use its state-approved Teacher Evaluation systems to ensure that all teachers at the six EXPECT schools receive the necessary supports and assistance making certain that they receive a score of no lower than “Proficient” in their district’s teacher rating scale.

Each EXPECT school will strive to hire teachers with at least three (3) years of experience, a rating of “Exemplary” or “Proficient” or its equivalent, proven instructional ability in their school’s magnet theme, and experience instructing diverse populations and implementing desegregation strategies, with the understanding that all educators will *“live in the area of Proficiency, while regularly visiting Exemplary.”*

***1 (d) Quality of Personnel***

*(2) To determine personnel qualifications, the Secretary considers experience and training in fields related to the objectives of the project, including the key personnel’s knowledge of and experience in curriculum development and desegregation strategies.*

All of the key personnel currently in place to support the EXPECT project have extensive experience in curriculum development and implementation, and have proven successful in their

previous desegregation efforts. Their extensive background knowledge of the region, its systems, strengths, and areas of challenge allows them to expertly facilitate the innovative school change proposed in the EXPECT proposal.

All future hires will be carefully selected to ensure their experiences and levels of expertise complement current personnel and grow the team in a myriad of ways.

Knowing that strong Tier 1 curriculum is the foundation of any successful school, this will continue to be a priority in the hiring and recruitment practices of all six EXPECT schools, helping to ensure that the goal of desegregation is met and exceeded.

An EXPECT Partner Team, comprised of representatives from the project partners, will work to ensure the full implementation of the project, as outlined in this proposal. The EXPECT Project Director and/or Assistant Project Director will lead the team in regular meetings to assess progress towards the objectives, discuss problems or challenges to allow for adjustments as needed to continue forward momentum of the project, and to make certain that accurate and timely data is collected and reported, so that the impact and effectiveness of the project can be evaluated effectively.

Bios and resumes for additional key project personnel (including EXPECT school principals and EXPECT Partner Team members) are included as attachments to this proposal. Additionally, the job description for the Magnet Theme Coaches at each school is attached.

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*1 (e) **Quality of Project Evaluation** The Secretary considers the quality of the evaluation...*

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This evaluation, spanning the five years of this project, is designed to produce evidence of promise (rigorous evaluation with two sets of quasi-experimental studies) as well as provide feedback to help school and district staffs improve project performance and attain high levels of fidelity of implementation. The evaluation will also produce information needed by the United

States Department of Education (USDOE) to properly evaluate project effectiveness, determine if all project activities are implemented as designed and on time, and to insure that adequate progress is made toward the attainment of all project outcomes (two annual summative reports).

**Data Collection:** This evaluation will draw on a wide variety of data to provide substance and context for formative and summative reports and the quasi-experimental study. The evaluation contractor will develop a complete set of data collection instruments (including surveys, data and document requests, and observation and interview protocols) designed to collect sufficient information to address performance measures, perform the quasi-experimental analysis and supplement extant data. However, extant data will be used whenever possible to lessen the burden on school and project staff. The data to be collected will include:

**Student academic achievement, demographic, enrollment and other data:** The contractor will collect standardized test score data (e.g., school and grade level and individual student data linked to their teachers) needed to address performance measures related to student academic achievement and perform the quasi-experimental study. School enrollment, applicant pool and student selection data disaggregated by race/ethnicity and socioeconomic status data will indicate the extent to which the schools succeed in meeting desegregation related performance measures.

**Document requests:** The contractor will request documentation from magnet school teachers and MSAP staff to help determine the quality and extent of MSAP implementation. Examples include: ► **descriptions of and dosage** (amount of program delivered) **for** units and courses that present the magnet theme to students; and student recruitment, teacher professional development, parent involvement; ► **schedules** of school based magnet staff; ► School improvement plans.

**Observation and interview data** will be collected during site visits to each school (see schedule at end of section), by trained evaluators with extensive experience in magnet schools. During

site visits, the evaluator will conduct walkthroughs, observe lessons, and interview teachers, administrators, students and parents to help assess progress towards performance measures.

**Surveys** will be administered annually to all teachers and a sample of students (one complete grade) at each magnet and comparison school. Comparison schools will be selected based on school size, grade span, and school-level student achievement and demographics. Drawing on its 20-year history of MSAP and regular and rigorous evaluations, American Education Solutions developed survey items and scales with its survey consultants, Dr. David Silver, a senior researcher at UCLA's CRESST Center, and currently, Dr. Jia Wang, a senior research scientist at CRESST. *These survey items are directly related to the purposes of the MSAP and the logic model, objectives and performance measures of this proposal.* Validated survey items and scales measure constructs including school climate, instructional leadership, professional development hours (formal, collaborative and coaching) and effectiveness, student academic commitment and expectations, student engagement and motivation, student and teacher perceptions of intergroup relations and magnet theme implementation, standards based instruction, systemic reform implementation, parent involvement, and magnet-specific professional development dosage.

### ***1 € Quality of Project Evaluation***

*(1) The extent to which the methods of evaluation will... produce evidence of promise.*

The rigorous evaluation design proposed below will be carried out by researchers at University of California Los Angeles (UCLA), Center for Research on Evaluation, Standards, and Student Testing (CRESST). Dr. Joan Herman will be the principal investigator (PI), and Dr. Jia Wang will be the co-principal investigator (co-PI) and project director. The UCLA team has many years of experience conducting similar studies, including evaluations of magnet schools (e.g., Los Angeles, New Haven), charter schools (e.g., Green Dot), and I3 validation grants (e.g.,

Literacy Design Collaborative). Both the PI and co-PI have peer-reviewed publications based on our prior magnet work (Wang & Herman, 2017; Wang, Schweig, 2014 & 2017).

UCLA CRESST's rigorous evaluation of the impact of the LEARN Consortium's Magnet School Assistance Program (MSAP) grant on student learning will be comprised of two sets of quasi-experimental studies and will also examine fidelity of implementation to the MyTeachingPartner training and coaching program as well as magnet implementation more broadly in all six project schools. These quasi-experimental studies are designed to meet the "What Works Clearinghouse Evidence Standards with reservations" by comparing MSAP outcomes with an identified comparison group that is similar to the treatment group at the baseline. If the interventions are well implemented, we expect the quasi-experimental studies to produce evidence of promise on the relationship between program implementation and objective performance outcomes.

The first set of quasi-experimental studies will examine the impact of the MyTeachingPartner program on the achievement of students at the six project magnet schools as compared to the achievement of academically and demographically similar comparison students at magnet schools operated by LEARN and partner districts, which are not implementing the MyTeachingPartner program. The second set of quasi-experimental studies will explore how students in each of the six project magnet schools perform relative to academically and demographically similar peers in similar non-magnet schools in LEARN's partner districts. The following sections will describe these studies in detail.

Our studies will be conducted with the statistical rigor of a high-quality quasi-experimental design, but with keen attention to limitations of available data and sample sizes, and on a scale that is reasonable within the current funding structure. This evaluation strives to bolster the

current body of research with instrumentation and analytic methodology aligned directly with the priorities and selection criteria of the Magnet Schools Assistance Program (MSAP), and it is intended to contribute to the evidence-based database on magnet schools the Department of Education is building.

While we will administer annual surveys to students and teachers to get their perspectives on their magnet schools and provide context for our student outcome analysis, the evaluation focuses on measuring MSAP impact on student achievement in English Language Arts (ELA), math, and science. Using a statistically rigorous, high-quality quasi-experimental design, we examine the following broad evaluation questions:

**Evaluation Question 1.** How did students in the six project schools taught by teachers who received coaching through the MyTeachingPartner program perform on assessments in English Language Arts, math, and science relative to matched students at LEARN and partner district magnet schools not implementing MyTeachingPartner?

**Evaluation Question 2.** How did students attending each of the six project schools perform on assessments in English Language Arts, math, and science relative to matched students at comparison non-magnet schools operated by LEARN and partner districts?

**Evaluation Question 3.** How is the fidelity of implementation to the MyTeachingPartner model at the teacher level related to student achievement outcomes?

**Evaluation Question 4.** How did the level of magnet implementation vary across the six project schools?

The following sections describe how these evaluation questions will be addressed.

### **Evaluation Question 1: Quasi-Experimental Studies of MyTeachingPartner**

As noted earlier, the six project schools will be working with Teachstone Training to implement the MyTeachingPartner program. MyTeachingPartner involves training coaches who then provide support to teachers in their schools.

In Year 1, at least 1 coach from each of the 6 project schools will be trained in the MyTeachingPartner coaching model. This model involves five steps: 1) a teacher recording a video which captures classroom instruction; 2) the coach reviewing the video and writing prompts highlighting instructional practice issues; 3) the teacher reviewing the video and responding to coach-written prompts; 4) the teacher and coach discussing the prompts and instructional practice; and 5) the teacher and coach creating an action plan to address identified pedagogical issues. A single cycle takes 2-3 weeks for a teacher and coach to complete.

In Year 2, each coach will work with up to 10 teachers in her school, with each teacher completing 10-13 5-step cycles in partnership with the coach. Coaches will also receive ongoing support over the first year of their practice. In Year 3, the original cohort will participate in a smaller number of cycles (approximately 5), while at the same time a new cohort of 5 teachers will begin the intensive coaching process with the school coach. Additional cohorts of around 5 teachers will be added in Years 4 and 5. Student outcome measures for the analysis will include Smarter Balanced assessments in English Language Arts (ELA) and math for grades 4-8, the SAT in reading and math for grade 11, the Connecticut Mastery Test in science in grades 5, 8, and 10, and 4-year graduation rate for high school.

### **Identification and Matching of Comparison Group**

We will select comparison magnet schools operated by LEARN and partner districts based on how closely they match the characteristics of MSAP project schools in the year prior to magnet implementation using hierarchical cluster analysis. The comparison school selection will take into consideration the grade span of the school, school size based on enrollment, school racial composition (i.e., percentage of Black and Hispanic students), the percentage of ELs and the percentage of National School Lunch Program (NSLP) participants.

We will utilize a radius matching approach to select students in the comparison schools who are similar to treatment students across a broad range of variables (Huber, Lechner, & Wunsch, 2010). The radius matching approach will compute a distance measure comprised of both a propensity score and a Mahalanobis distance score for all eligible comparison students. Any comparison student whose distance measure falls within a defined distance (radius) of a treatment student in the same grade will be matched to that student.

If the propensity scores of multiple comparison students are sufficiently close to a single treatment student, each comparison student will receive a weight inversely proportional to her difference measure. For example, two comparison students who have identical difference measures within the defined radius distance would each receive a weight of 0.5. Treatment students will be removed from the analyses when they cannot be matched to any comparison student within the defined radius. The approach will also apply a trimming technique to ensure that no single control case is weighted too heavily in the analysis (Huber et al., 2010). We intend to use the following variables in the matching process: grade, gender, race/ethnicity, English Learner (EL) status, National School Lunch Program (NSLP) status, special education status, and prior achievement score.

Additionally, along with our evaluation partner American Education Solutions (AES) and the school district, we also plan to work with our existing contact at the Connecticut Department of Education to explore the possibility of requesting student testing data for the whole state which would expand our pool of possible control magnet schools. We worked with the Department staff previously on a grant proposal and they are familiar with our ongoing work on magnet schools.

### **Analysis Approach**

Our research will compare the outcomes of students at the six project schools taught by teachers who participated in the MyTeachingPartner training to demographically and academically similar students at LEARN and partner district magnet schools not implementing MyTeachingPartner. Depending on the final sample size for analysis based on the number of teachers trained in testable grades, we may combine data from cohorts of teachers who receive training in different years to increase statistical power and produce more precise impact estimates. To examine the effect of MyTeachingPartner on student achievement outcomes we will use a regression-based approach with bias adjustment, which performed well in a recent simulation study as detailed in Huber, Lechner, & Steinmayr (2012). Specifically, we will first use a Weighted Ordinary Least Square (WOLS) regression equation on the comparison student population to produce the coefficient estimates.

A counterfactual estimate will then be obtained by adding a bias adjustment from the regression results to the average observed score of the comparison population in an outcome year. This counterfactual represents an estimate of how these students may have fared if they had not been taught by teachers who received MyTeachingPartner training and had instead attended a comparison school. The average treatment effect on the treated (ATT) (Ho, Imai, King, & Stuart,

2007) is determined by subtracting the counterfactual estimate from the actual average observed score of the students taught by teachers participating in MyTeachingPartner. This approach is known as a double-robust regression as the estimator is said to be consistent if either one of the two models (propensity score or regression) is correctly specified (Huber et al., 2010). In other words, controlling for prior indicators relevant to treatment status and achievement in both the matching model and the analysis model increases the robustness of the estimates.

### **Evaluation Question 2: Quasi-Experimental Studies of Magnet School Attendance**

To answer Evaluation Question 2, we will conduct individual school analyses for each of the 6 magnet schools in this grant application. We will employ the same two step matching process of school selection via hierarchical cluster analysis and student selection via radius matching as described above, this time to identify the comparison students at similar non-magnet schools in LEARN's partner districts (or in the statewide if we are successful accessing statewide data). We will also use the same Weighed Ordinary Least Square (WOLS) regression equation to analyze the student data.

However, there are two key differences. The first difference is that instead of investigating the effect of MyTeachingPartner on student outcomes, we will investigate the effect of magnet school attendance on student outcomes. Our research will examine the effect of MSAP implementation by comparing outcomes of students in MSAP schools to the counterfactual condition of how they would have fared if they had not been a part of the MSAP program. As described earlier, this effect is known in the literature as the average treatment effect on the treated (ATT).

The second difference is that we will conduct individual school analyses (one for each of the four schools). These analyses will examine the impact of attending a magnet school on student

performance on Smarter Balanced assessments in ELA and math in grades 4-8, SAT reading and math in grade 11, CMT Science in grades 5, 8, and 10, and the 4-year graduation rate for high school students.

### **Evaluation Question 3: Relationship between Fidelity to MyTeachingPartner and Student**

#### **Outcomes**

In our fidelity of implementation analysis, we will also explore how differences across teachers in their participation in MyTeachingPartner are associated with differences in student learning outcomes. This within treatment study will take advantage of three main data sources: coach records capturing the number of learning cycles individual teachers participate in; observation records capturing teachers' skill growth over time; and surveys and/or logs capturing teachers' attitudes toward MyTeachingPartner and use of instructional strategies learned through the coaching process.

The UCLA team will construct a number of measures based on these data sources, including variables capturing the dosage of training that each teacher received and change in the quality of instructional practice over time. Exploratory HLM analyses will then be conducted with teachers at Level 2 and students at Level 1. Given the small sample size we anticipate only being able to include one to two teacher level variables in each model. Statistical power at Level 2 is likely to be a constraint on identifying relationships between fidelity of implementation and student outcomes, so we stress that these analyses will be exploratory in nature.

### **Evaluation Question 4: Variation in Magnet Implementation across Target MSAP Schools**

As described earlier, our evaluation will collect and analyze data on magnet implementation via surveys, site visits, and analysis of artifacts. These instruments will be used to construct variables such as magnet theme implementation, professional development usage, etc. and

thresholds for adequate fidelity of implementation will be set for each measure. CRESST will work closely with AES and the district in developing the rubrics used to rate the classroom artifacts teachers submit for peer review. The classroom artifacts will include end-of-unit assessments developed by teachers and the accompanying student work.

Assignment/assessment tasks can serve as windows into such variables as teacher clarity of instruction, cognitive rigor of instruction, and, in this case, degree and quality of magnet theme implementation. The CRESST team will also independently score a random set of these artifacts to ensure that school site peer review teams are reliably scoring the artifacts in alignment to the expectations set forth in the rubrics.

Based on collaboration with AES and the school district, the CRESST research team will create a fidelity index incorporating the various variables which we will use to measure quality of implementation at the school level. We will determine different levels of fidelity for each construct, including a threshold for adequate implementation. The fidelity index will indicate whether a particular school performed adequately across the different constructs, such magnet theme implementation, quality of professional development, etc.

UCLA CRESST has been developing a database of individual school MSAP effects based on our prior evaluations, and has published multi-site analysis work based on this database. Individual school effect estimates and fidelity measures from the current study could potentially be used in future analyses that would take advantage of this growing database of magnet studies.

### **Evidence of Promise**

The MyTeachingPartner study will establish a link between the MyTeachingPartner component of the six project schools' logic models and student outcomes in ELA, math, and science, as well as graduation at the high school level.

The magnet school study will be conducted for each of the six project schools, and the study will establish a link between the Quality Magnet Curriculum and Instruction component of their logic models and student academic outcomes for ELA, math and science on state tests, as well as graduation at the high school level.

### **Rigorous Evaluation Timeline**

- ▶ Study design revision (Year 1); ▶ UCLA and district IRB application & renewal (Years 1-5);
- ▶ Request and analyze school level data to identify comparison schools for surveys (Year 1);
- ▶ Survey development (Year 1); ▶ Survey administration, analysis and reporting (Years 1-4);
- ▶ Development of artifact scoring rubrics (Years 1-2); ▶ Scoring and analysis of artifact data (Years 3-4); ▶ Analysis of implementation variables (Years 3-4); ▶ Student level data request (Years 1-4); ▶ Student outcome data analysis & reporting for MyTeachingPartner study (Years 3-5); and ▶ Student outcome data analysis & reporting for magnet attendance study (Years 4-5).

### **Rigorous Evaluation Reporting**

Students are tested in late spring, and the testing data usually become available in September at the end of the grant year. To study the impact of MyTeachingPartner on student outcomes, we will analyze student outcome scores in years 2-4 at the beginning of Years 3-5. The analysis of the impact of student attendance in the magnet schools in years 3-4 will be done at the beginning of Years 4 and 5. A draft report will be submitted to the district within 8 weeks of the receipt of the complete data set.

The report will contain an executive summary, introduction, description of the school district and the participating magnet schools, analysis procedure that describes data, data collection, and analysis approaches, and the analysis results for both quasi-experimental studies. For the MyTeachingPartner study, results will be reported for the comparison between pooled students

from the six project schools and comparison students in LEARN and partner district magnet schools not implementing MyTeachingPartner; and for the magnet school study, student results will be presented for each school relative to non-magnet schools in the partner districts. When the sample size allows, the results will be disaggregated by race/ethnicity, grade, free and reduced price lunch status, English Language Learner status, and disability status.

***1 (e) Quality of Project Evaluation***

*(2) include...objective performance measures that are clearly related to the intended outcomes...and will produce quantitative and qualitative data to the extent possible;*

***Project performance measures follow the description of the formative evaluation.***

**Formative Evaluation:** The evaluation contractor will aid in the continual improvement of the project through formative evaluation, an examination of implementation that returns information to project, school and district staff to help them improve program performance. Formative evaluation includes the study of program fidelity (the degree to which a program is implemented as designed) and reach (the proportion of the target group that participates). Components of fidelity include: ► adherence – the degree to which the program adheres to its goals, plans, activities, timeline; ► dosage – the amount of program delivered; ► quality – the quality of program activities and services; ► responsiveness of participants to program activities; ► program differentiation – unique features when compared to non-magnets.

**Formative Evaluation Reporting:** Data will be collected, as available, and analyzed, and findings will be discussed with the project director, the school evaluation team and school staff throughout the year. Five formative evaluation reports will be written by evaluators each year:

**Reduction of Minority Group Isolation (MGI) Report:** Enrollment data will be compared with applicant pool and student placement data (all disaggregated by race/ethnicity), benchmarks

and data from previous school years to determine why performance measures were or were not attained and if previous recommendations were implemented. The October site visits, will focus on desegregation activities including recruitment, student selection and placement procedures and on the final results of the process. During this visit, the MGI report and all related data will be discussed with the project director, each school's recruitment and evaluation teams, and MSAP project staff. If minority group isolation performance measures were not attained, the data supporting the findings will be discussed and will inform modifications to recruitment or selection procedures and the collection of additional information (e.g., parent focus group results) if needed. Recommendations for improvement will be jointly formulated by the evaluator, the project director and the school evaluation teams.

**Site Visit Reports** provide feedback based on data related to project implementation. After each site visit (2 for year 1; 3 for years 2-4; 1 for year 5), a report will be written by the site visitor and submitted within ten days. It will summarize the findings of the visit, help school staff understand if they are on track to attaining performance measures and benchmarks, discuss reasons they may not be attained and highlight project successes. Recommendations for improvement, jointly arrived at by the staff (school evaluation team), the project director and the evaluator, will be included. **Documentation Reviews**, included in site visit reports, will summarize descriptive and quantitative data related to magnet curricula and instruction, systemic reforms, parent activities and professional development, and report on: adherence (e.g., activities implemented on time), dosage (e.g., the amount of time students, teachers and parents are exposed to grant activities), quality (e.g., peer reviews of units). Note: Because of the time involved in project start-up (e.g., hiring staff) there will be 2 visits for year 1. Because of the schools' increased capacity to implement program activities, there will be 1 visit during year 5.

**Survey Reports** will include item by item results for each school and summaries of survey construct results for each school. Relationships between variables (e.g, magnet implementation and student engagement, professional development dosage and impact) are explored as is change over time. Other formative evaluation strategies include: Short Term Outcomes. Benchmarks are short term outcomes that indicate whether adequate progress is being made towards the attainment of annual performance measures. Most are derived from site visit and documentation review reports, survey items or the MGI report. Examples of critical benchmarks are included in the performance measure section which follows. The project director, evaluator and the school evaluation teams can decide on additional benchmarks that could help guide one or more schools. The degree to which benchmarks are attained will be reported in the site visit, documentation review, survey and MGI reports or during Skype or Google Hangout sessions when needed (e.g., at critical points during the recruitment period).

**Continuous Cycle of Improvement.** This evaluation uses a four-part iterative cycle that will lead to better understanding of the components of this project’s logic model and theory of action as well as improved outcomes for students: **1) Planning or Modifying Activities.** The logic model and the activities described in this proposal will form the basis of the implementation plans that will be developed at the beginning of each project year. **2) Implementation.** Activities described in the MSAP proposal will be implemented by school and project staffs with fidelity. **3) Formative Evaluation Feedback** includes the five reports listed above, three site visits (most years, please see schedule at the end of this evaluation), two annual summative reports, and ongoing telephone, Skype and e-mail discussions with the evaluators about the reports and data. **4) Reflection/Discussion.** This part of the cycle insures that formative and summative data are discussed and used for project improvement. A school evaluation team,

composed of the Magnet Theme Coaches, teacher representatives (determined by the school planning and management team) and the principal, review all formative and summative reports and data, discuss report findings and recommendations with teachers during faculty and grade conferences, get teachers' feedback and monitor the implementation of recommendations. The team will meet at least five times per year within a few days of the receipt of each report. PLC's for Magnet Theme Coaches. Magnet Theme Coaches and the project director will meet regularly throughout the project period to discuss implementation, examine benchmark and short term outcome data and discuss barriers to implementation and how to solve them. Successes (best practices) will be identified, shared and duplicated in other schools. The results of **Reflection and Discussion** will be used for **Planning or Modifying Activities** as the cycle repeats throughout each project year.

**Summative Evaluation and Reporting:** The evaluator will determine the extent to which performance measures (medium term outcomes on the logic model) are attained. The evaluator will collect and analyze the data, prepare two semi-annual summative performance reports (mid-May and end of September), summarizing findings, and discuss the results with district and magnet school staffs. The data and findings in the semi-annual summative reports can be used in the Annual Performance and Ad Hoc Reports submitted to the U.S. Department of Education. The following section describes the annual performance measures, their relationship to each MSAP program purpose and to the EXPECT Logic Models and how the evaluators will assess their attainment (e.g., indicators, measures of change, data collection methods, data sources and frequency of data collection). Some of the most important benchmarks associated with each performance measure are also described. Long term outcomes on the logic model are the year 5 performance measures and represent the outcomes for the entire project period. They will be

reported on in the final report. **Program Purpose 1: The elimination, reduction, or prevention of minority group isolation in ... schools with substantial portions of minority students....**

**Logic Model Activity: Desegregation – Student recruitment, application and selection activities;**

**Benchmarks: for applicant pool - proportion of isolated students (race/ethnicity and socioeconomic status [SES]) is 10 percentage points less than actual enrollments for each**

**school.** All proposed magnet schools will reduce minority group isolation and increase socioeconomic integration by decreasing the percentage of black or Hispanic students and increasing the percentage of white and middle class students. The schools and their 2016-17 enrollments (isolated groups in bold) are: **1.1: Regional Multicultural Magnet School (K-5)** (12.9% Black, **35% Hispanic**, 34.8% White, 3% Asian, **13% 2 or More Races**, Low Income: 49.5%). **1.2: Cutler Arts & Humanities Magnet Middle School (6-8) (7% Black, 18.8% Hispanic, 59% White**, 7% Asian, 7% 2 or More Races, Low Income: 30%). **1.3: West Side STEM Magnet Middle School (6-8) 11.4% Black, 26.1% Hispanic, 48% White**, 5.7% Asian, 7.5% 2 or More Races, Low Income 56%). **1.4: Teachers' Memorial Global Studies Magnet Middle School (6-8) (20.1% Black, 29.7% Hispanic**, 31.2% White, 9% Asian, 6% 2 or More Races, Low Income: 73%). **1.5 Kelly STEAM Magnet Middle School (6-8) (21.25% Black, 28.6% Hispanic**, 32.9% White, 6.8% Asian, **9.5% 2 or More Races**, Low Income 78.5%). **1.6: Connecticut River Academy (9-12) (21.6% Black, 47% Hispanic**, 25% White, 3% Asian, .7% 2 or More Races, Low Income: 77.8%). [Please Note: With Norwich Public Schools making the decision to move back to a traditional 6-8<sup>th</sup> grade system for the middle schools and the plan for creating magnet programs at these two middle schools, the school demographics will change significantly. The last time these two schools existed with that 6-8<sup>th</sup> grade structure (2014-2015), the demographics, were significantly different: *Teachers' Memorial Global Studies Magnet*

*Middle School (6-8) (21% Black, 14.9% Hispanic, 20.4% White, 9% Asian, 8.8% 2 or More Races, Low Income: 7%). Kelly STEAM Magnet Middle School (6-8) (18.2% Black, 27.6% Hispanic, 43.1% White, 3.7% Asian, 7.2% 2 or More Races, Low Income 86%).* Offering high quality theme-based magnet programs at both schools and returning to the 6-8<sup>th</sup> grade model will provide students and parents clear choice options and will support the district's commitment to desegregation and the reduction of minority group isolation.] The proportion of low-income students at each school is greater than their district averages.

**Objective 1.** Minority group and socioeconomic isolation will be reduced at the proposed magnet schools. (This objective addresses MSAP Performance Measure a.)

**Performance Measure 1.1-1.6:** By October 1 of each project year, for the following magnet schools, enrollment targets (see Table 3: Enrollment Data-Magnet Schools) will be attained by reducing the isolation of black or Hispanic students (using 2016-17 as the baseline) by at least 2 percentage points per year (10 percentage points or more over 5 years). The schools and their 2016-17 enrollments (isolated groups in bold) are: **1.1:** *Regional Multicultural Magnet School (K-5) (12.9% Black, **35% Hispanic**, 34.8% White, 3% Asian, **13% 2 or More Races**, Low Income: 49.5%).* **1.2:** *Cutler Arts & Humanities Magnet Middle School (6-8) (**7% Black, 18.8% Hispanic, 59% White**, 7% Asian, 7% 2 or More Races, Low Income: 30%).* **1.3:** *West Side STEM Magnet Middle School (6-8) **11.4% Black, 26.1% Hispanic, 48% White**, 5.7% Asian, 7.5% 2 or More Races, Low Income 56%)..* **1.4:** *Teachers' Memorial Global Studies Magnet Middle School (6-8) (20.1% Black, **29.7% Hispanic**, 31.2% White, 9% Asian, 6% 2 or More Races, Low Income: 73%).* **1.5** *Kelly STEAM Magnet Middle School (6-8) (**21.25% Black, 28.6% Hispanic**, 32.9% White, 6.8% Asian, **9.5% 2 or More Races**, Low Income 78.5%).* **1.6:** *Connecticut River*

Academy (9-12) (21.6% Black, 47% Hispanic, 25% White, 3% Asian, .7% 2 or More Races, Low Income: 77.8%).

**1.7** By October 1 of each project year, the proportion of low-income students will be reduced by at least 3 percentage points at each magnet school therefore reducing socioeconomic isolation.

**1.8** For each project year, each magnet school will receive at least 100 applications.

**Assessment:** School enrollment data, disaggregated by race/ethnicity and socioeconomic status, as defined in Competitive Preference Priority (CPP4), collected by the district, will help determine the degree of attainment of 1.1-1.6. Each year (October 1), the percentage of students in the isolated racial/ethnic group and low income students enrolled in each school will decrease. Baselines are 2016-17 school enrollments. School census data is collected at each school and aggregated and confirmed by the district. Applicant pool (applications for magnet school seats) and student selection data (students who applied and were selected), collected by project staff each spring will determine if 1.8 was attained and explore how outcomes can be improved for all measures.

**Purpose 2:** *To develop, implement and expand magnet school programs that will assist LEAs achieve systemic reforms, and provide all students the opportunity to meet challenging State academic standards. **Logic Model Activity:** Improve Curriculum, Instruction & Student Academic Supports; **Benchmark:** 90% of each school's teachers agree that a great deal of emphasis was placed on (a) alignment of curriculum content and assessments with CCSS, NGSS and state standards; (b) data based decision making; (c) RtI; (d) Inquiry; (e) Unit quality reviews. (Survey results.)* **Objective 2:** All students will receive high quality instruction that includes their school's systemic reforms and magnet themes in units and courses aligned with CSS, NGSS and State standards. **Performance Measure 2.1** By the end of each project year (September 30), at each

magnet school, at least 15% (year 1), 40% (year 2), 65% (year 3) and 90% (year 4) and 100% (year 5) of all core academic subject units will meet district and project quality criteria determined by peer reviews using a unit quality rubric. **Assessment:** Unit quality rubrics will be designed, and passing scores established, by each school under the guidance of the Curriculum and Instruction department, the Project Director, the school's Magnet Theme Coach, and the evaluator. Reviews will occur 2-4 times per year as determined by each school's Magnet Team. Teachers will review each other's units facilitated by Magnet Theme Coaches who will monitor the process and maintain a database of review results. Teachers will be trained in rubric use to insure inter-reader reliability. Evaluators will review a sample of units to check for inter-reader reliability. Baseline is zero for 2016-17. The percent of units meeting quality criteria increases each year.

***Purpose 3: The development, design and expansion of innovative educational methods and practices....*** ***Logic Model Activity: Magnet Theme Integration; Benchmark: (a) Unit dosage attains the target number of hours. (Checked 3 times/year.) (b) See Benchmark for Project Purpose 2. (c) Student surveys indicate that engagement and motivation increase each year (year 1 is baseline). (d) 90% of students are interested in magnet theme and find it challenging.***

**Objective 3.** All students, at each magnet school, will receive magnet theme instruction.

**Performance Measures:** **3.1** By the end of each project year, all students, at all magnet schools, will receive magnet theme instruction coordinated with or including systemic reforms for at least 3 (year 1), 6 (year 2) and 8 (year 3), 10 (year 4) and 12 (year 5) hours per week.

**Assessment:** Success will be determined, by the evaluators, through unit analysis and confirmed with surveys, interviews and walkthroughs. Unit summaries for each teacher (including teacher dosage logs) are submitted to evaluators by each school 3 times per year. Entire units are made available by schools (Magnet Theme Coaches) to evaluators (on-line

access) on a continuous basis. The dosage is the average number of hours per week each teacher presents magnet theme related instruction (integrated units and separate magnet theme classes) to students. The baseline is zero for 2016-17. The number of hours will increase each year to meet the target.

**Program Purpose 4:** *Courses of instruction in magnet schools that will substantially strengthen the knowledge of academic subjects...* **Logic Model Activities:** *All activities.*

**Benchmarks:** *See Benchmark for Project Purposes 2, 3, 5 and 6.* Connecticut's Accountability System includes academic performance indices for all students and for High Needs Students (economically disadvantaged, English learners, students with disabilities). Performance Indices in English Language Arts/Literacy (ELA) and Mathematics are based on the Smarter Balanced Assessment Consortium (SBAC) tests for grades 3-8 and the Standardized Achievement Test (SAT), administered to 11<sup>th</sup> grade students. Performance index scores in Science are based on the Connecticut Mastery Test (CMT) for students in grades 5 and 8 and the Connecticut Academic Performance Test (CAPT) for grade 10. The maximum index is 100. The target is 75 for all schools. Because the new ESSA discontinued the requirement for annual measurable outcomes, Connecticut is considering long-term goals. However, targets, and the allowable time period to reach them, have not yet been established.

**Objective 4** (a) Student academic achievement will increase each year in ELA/literacy and math and science (for STEM schools) for all students. (b) The percentage of students from major ethnic and racial subgroups attaining level 3 or 4 on the state assessments will increase.

**Performance Measures: 4.1-4.2:** By the end of each project year, the percentage of "All Students" from each major racial and ethnic subgroup, and low income students at Regional Multicultural Magnet School, Cutler Middle School for the Arts, West Side STEM Magnet Middle

School, Teachers Memorial Middle School, and Kelly Middle School who score at level 3 or above on the SBAC will increase when compared with the previous year in: **4.1:** ELA/Literacy. **4.2:** Mathematics. **4.3-4.4:** By the end of each project year, the percentage of "All Students" from each major racial and ethnic subgroup, and low-income students at Connecticut River Academy who score at level 3 or above on the SAT will increase when compared with the previous year in **4.3:** ELA. **4.4:** Mathematics.

These performance measures address MSAP Performance Measures b and c: *The percentage of students from major racial and ethnic groups ... who score proficient or above on State assessments in reading/language arts and math.*

**4.5-4.7:** By the end of each project year, each magnet school will increase its Subject Performance Index (SPI) for All Students in: **4.5:** ELA. **4.6:** Mathematics. **4.7:** Science.

**4.8-4.10:** By the end of each project year, each magnet school will increase its SPI for High Needs Students in: **4.8:** ELA. **4.9:** Mathematics. **4.10:** Science.

**4.11:** By the end of the project period, 75% of students at each school will develop mastery of the magnet curriculum, as determined by project based assessments scored by rubrics.

**4.12:** By the end of the fourth year of the grant (September 30, 2021), for each project school, students in two or more of the tested groups/subgroups (e.g., total tested population, each racial/ethnic group, low income students, English Learners) will have higher test scores than carefully matched students attending non-magnet schools in at least one subject area tested by the State (ELA/literacy, mathematics, science). These results will be statistically significant.

**Assessment:** All students are tested in April of each school year. Data is analyzed by the State Education Department and made available to school districts. This data (4.1-4.10) will be presented in the Annual Summative Performance Reports in tabular form, highlighting the

performance targets and how each magnet school – both in aggregate and by subgroups – performed in relation to these targets. Baselines are 2016 scores and indexes.

Project based assessments (4.11) will be developed in year 1 for each grade by the Magnet Theme Coaches and classroom teachers with the support of each district’s Curriculum and Instruction department. Rubrics will be used in years 2 through 5 by teachers at least twice per year (frequency to be determined by each school’s planning and management team) and be approved by the magnet project director and each district’s Director of Curriculum and Instruction. The baseline is zero for 2016-17 and will increase each year. PM 4.12 will be determined through the quasi-experimental analysis of SBAC, SAT (ELA/Literacy and math) and CMT (science) scores in project years 3 and 4. (Please see the quasi-experimental design section of this evaluation.)

**Purpose 5: Improvement of the capacity of LEAs, including through professional development, to continue operating magnet schools at a high performance level after Federal funding...is terminated. Logic Model Activities: Professional Development (PD); Benchmarks: (a) PD is implemented as designed. (Checked during site visits.) (b)At least 85% of teachers will agree with survey items related to PD: (i) helped me integrate the magnet theme into lessons; (ii) deepened my content knowledge; (iii) helped me better maintain student engagement; (iv) I use what I learned from PD in my classroom;** **Objective 5.** Provide professional development related to Improvement of Curriculum, Instruction and magnet theme development and implementation.

**Performance Measures 5:** By the end of each project year, at each magnet school, teachers will receive at least 50 hours of professional development (e.g., workshops, courses, coaching) in each of the following areas: **5.1** directly related to the improvement of curriculum and instruction

including the development and implementation of the systemic reforms listed in each school's improvement plan; **5.2** directly related to the development and integration of the magnet theme.

Other performance measures related to capacity building include: (2.1, 3.1) development and implementation of systemic reforms and magnet theme units and courses.

**Assessment:** Magnet Theme Coaches (MTCs) will collect professional development (PD) data including the type of training, the number of hours provided and which teachers are involved and summarize it. This information will be entered into a database at each school under the supervision of the MTCs. Attendance sheets and data, agendas, workshop materials and magnet resource teacher logs and schedules will be available at each school and checked by the evaluator and project director. The 2016-17 baseline is zero. As explained by the logic model, the effects of professional development on student achievement are mediated by classroom teaching activities related to the PD. Therefore, the evaluation of PD effectiveness will include measures of classroom teaching practices and student achievement. These include teacher surveys, teacher logs (self-reports) of teaching strategies developed by the evaluators and district staff, units created by teachers, and student testing data. Individual student test scores will be linked to their teachers' implementation data. This data will be analyzed by the evaluators and used for the quasi-experimental study. Please see the quasi-experimental study design.

*Purpose 6: Ensuring that all students ... have equitable access to high quality education that will enable the students to succeed academically ....* **Logic Model Activities:** *Parent Involvement and all other logic model activities;* **Benchmarks:** *The degree to which: (a) parent activities described in the proposal are being implemented; (b) all classes reflect the racial/ethnic composition of the school. (Items a and b be determined during each site visit.)* **Objective 6a:** All students will have equitable access to high quality education. **Performance Measure 6.1** By the

end each project year, for each magnet school, at least 70% (yr. 1), 75% (yr. 2), 80% (yr. 3), 85% (yrs. 4 and 5) of classes (elementary grades) and STEM classes (middle or HS grades), will reflect their grade's enrollment for each racial/ethnic group (and gender for STEM classes) by  $\pm 15$  percentage points. **Assessment:** Success will be determined by analysis of class enrollments disaggregated by race/ethnicity and gender. Please see the assessment for measures 1.1-1.6. Baselines are 2016-17 enrollments. The percentage of classes meeting the criteria increases each year.

Parent involvement promotes equitable access to high quality education for all students.

**Objective 6b:** There will be an increase in parent participation at each magnet school.

**Performance Measure 6.2** By the end project years 2 through 5, for each school, there will be a 5% increase (compared with the previous year) in the numbers of parents who participate in school activities. **Assessment:** Workshop materials, attendance records and parent interviews will determine parent participation and satisfaction. Magnet Theme Coaches will collect this data as sessions occur, and will summarize and submit this data to evaluators and the project director 3 times per year. The baseline year will be 2016-17. There will be an increase in the number of parents involved in school activities for years 2 through 5.

**Annual Evaluation Schedule:** ► Initial meeting with project and district staff (Week 1); ► Refine data collection instruments and plan; refine analysis plan; (Weeks 1-3); ► Collect data (Throughout year): Enrollment data (Week 1); Documents collected (e.g. units integrated with magnet theme - Weeks 17, 29, 2 in next school year); Site visits including interviews, observations, implementation data collection for quasi-experimental study, etc. (Weeks 18, 30, 3 in next school year); Site Visit-Documents Review Reports (Weeks 19, 33, 3 in next school year); applicant pool data (Week 31); Dosage data (ongoing); Surveys administered (Week 33-35);

State test data (Week 49); Survey results reported (Week 40); ► Formative evaluation including discussion of recommendations (Weeks 1-52); MGI Report (Week 3); ► Analyze and process summative data (Weeks 30-32 and 50-52); ► Prepare Summative Evaluation Reports (Weeks 29-30 and 50-52); ► Summative Evaluation Reports (Weeks 31 and 52); Quasiexperimental Evaluation Report (Week 3). Week 1 is the week the project begins each year. For the 2016-19 MSAP cycle, October 1 was week 1. The site visits and related activity dates denote two visits for year 1 and the third visit at the beginning of year 2, three visits in years 2 through 4, and one for year 5.

***1 (e) Quality of Project Evaluation***

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

This evaluation will be cost effective and, at the same time, provide appropriate levels of service. It contains the most important activities that will provide the support and feedback that schools need to modify and improve project activities and produce evidence of promise, while keeping an eye on level of service in relation to cost. The frequency of key evaluation activities is summarized in the table below.

<b>Activity</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Quasi-experimental Analysis 1	No	Yes	Yes	Yes	No
Quasi-experimental Analysis 2	No	No	Yes	Yes	No
Site Visits and Site Visit Reports	2	3	3	3	1
Surveys	Yes	Yes	Yes	Yes	No
MGI Reports	No	Yes	Yes	Yes	Yes
Summative Reports	2	2	2	2	2

Project year 1 will most likely start on October 1, 2017. Project staff need to be selected/assigned following district guidelines and procedures, and project activities are just beginning. Therefore, it makes more sense to have two, rather than three, site visits during project year 1 to allow time for startup. Also, MGI reports will start in year 2 after the first recruitment/application/selection cycle during the first year. For years 2 through 4, there will be three site visits. By year 5, project activities will be completed or nearly completed, Therefore, there will probably be a need for only one visit. Site visit reports and documentation reviews will be written after each site visit. Two summative evaluation reports will be written each year (May and October). Surveys will be given for years 1-4. The quasi-experimental design (QED) analysis 1 (MyTeachingPartner) will be performed for project years 2, 3 and 4 (see rigorous evaluation section). QED analysis 2 (magnet schools) will be performed for project years 3 and 4. An analysis for year 1 for QED 1 and for years 1 and 2 for QED 2, may not show significant results because students and teachers may not be exposed to the treatments for a long enough period of time. Also, there may not be enough time during year 5 for an analysis of test scores before the end of the project period.

Part 1 of the QED analysis is significant, because it will examine the impact of the MyTeachingPartner program on the achievement of students at the six project magnet schools as compared to the achievement of academically and demographically similar comparison students at magnet schools operated by LEARN and partner districts, which are not implementing the MyTeachingPartner program.

Part 2 of the quasi-experimental analysis is significant, because it compares the test scores of magnet school students in this project's schools with those of similar students in non-magnet comparison schools. There are very few high quality studies of magnet schools that show

significant and positive results. Ballou (2009) examined 14 studies and found four that met high design quality criteria. Of those four, two, Crain, Heebner and Si (1992 and 1999); Ballou, (2007) had statistically significant positive results. The What Works Clearinghouse has only one study (Bifulco et al., 2009) that meets its design standards and has positive, statistically significant results. A multi-site study (Wang, et. al. 2014 and 2017) of 24 MSAP magnet schools in five districts found no effect on test scores, on average across all schools, but wide outcome variability. Using local implementation data to differentiate among schools, Dr. Wang found that the variability in student achievement was due to the degree of fidelity of implementation, which included magnet theme implementation (e.g., curriculum and professional development dosage, quality and reach) and support of classroom teachers (e.g., time with coaches). The two study-level covariates, explained about 60% of the variance between school sites for the magnet effect on math and about 40% of the variance on reading. The effect of both factors was statistically significant. Wang, et. al., indicates the importance of fidelity of implementation of key grant components and of coaching, part of the professional development activities of this grant.

If the magnet schools in this project are well implemented, as determined by the evaluation described in this section, we believe that test scores of students attending project schools will be higher than those of similar students attending non-magnet schools, and that the differences will be statistically significant, an important result. This result would support the findings of Wang, et. al., that the degree of fidelity of implementation of a magnet program is related to student achievement and that attending a magnet school contributed to improved student achievement, supporting the findings of Bifulco (2009).

The total 5-year cost of this evaluation is \$744,000 or 4.9% of the total 5 year budget of \$14,991,098 This is much less than evaluation budgets for grants such as I3, which can cost as

much as 10% to 15% of a budget's total. The 4.9% is also reasonable considering the research focus of part of the evaluation as well, as the formative and summative evaluation components for six project schools.

It is difficult to separate this exactly into the categories of rigorous evaluation, summative evaluation and formative evaluation as described in the evaluation section because of the close working relationship between UCLA CRESST and American Education Solutions. That said, however, the cost of the "rigorous evaluation," including the QED design, analysis, reporting, collection of test score data, survey design and analysis and reporting, is \$300,000 for the five years of the grant. The cost of the formative and summative parts of the evaluation (\$444,000 for the five years of the grant) includes the site visits and site visit reports and documentation reviews, the MGI Report, the summative reports, the collection of all data except for test scores including all data related to desegregation (e.g., enrollments, applicant pool, placements) and teacher level implementation data related to the QEDs. There is some overlap in data collection. For example, teacher level implementation data collection and monitoring including logs, interviews and unit quality rubrics will occur in schools, and their collection cost is included in the formative/summative component.

The average cost of the evaluation per year is therefore, \$148,800 for all evaluation activities. That is \$60,000 per year, on average, for the "rigorous component" and \$88,800 per year, on average for the formative and summative evaluations as described in this section. The average cost per school per year for the formative and summative evaluations is \$14,800.

LEARN believes these costs are reasonable because: (1) two sets of quasi-experimental studies are being performed to answer questions that the district feels are important; (2) the formative evaluations include site visits to all six schools, and, most years five formative

evaluation reports; (3) during site visits to all six magnet schools evaluators will collect teacher level data related to the implementation of professional development, units related to the magnet theme, and other implementation data needed for either the quasi-experimental study or the formative and summative evaluation; (4) The evaluation will look at the quality of the magnet curriculum including rigor. Using validated survey scales and items, the evaluation will look at school climate, instructional leadership, student engagement and motivation, magnet theme implementation, etc. (please see survey descriptions); (5) the evaluators are very experienced. The CRESST at UCLA has done hundreds of high quality education studies. The researchers, Drs. Wang and Herman, have done well-received, high quality research for many years (please see the description of CRESST and the researchers in the appendix). American Education Solutions (AES) has been doing magnet evaluation work for over 20 years. AES has performed 61 MSAP evaluations since 1995 working in partnership not only with CRESST but also with the Education Alliance at Brown University; (7) the formative and summative evaluations include only those activities that are necessary as described above. Because of these factors, the cost of this evaluation is, we believe, reasonable.