Addendum Exhibit 2.5.4
Examples of Data Driven Program Improvements

Elementary Education

Historically, our elementary education students have performed very well on state licensure exams that measure content knowledge required for teacher certification (reading & language arts, mathematics, science, and social studies) – demonstrating 100% passage rate for students in the elementary education program for testing years 2010-2011 and 2012 (cohorts 2009-2010 and 2010-2011). For these exams, content area scores were combined – with the possibility that strengths in one content area might compensate for weaknesses in another content area.

In September 2012, a new series of content knowledge licensure exams were adopted by the State. Each content area was scored separately, requiring strong content knowledge in every content area. Although the elementary teacher candidates continued to perform well, this new series of exams uncovered content area weaknesses for a few students. Specifically, some candidates did not pass all content areas in their first attempts and were required to retake certain content area tests. The reading & language arts exam had a 100% passage rate, but mathematics exam showed a 92.5% passage rate (37 out of 40 candidates for that cohort). Although this was over a 90% passage rate, it demonstrated that we should work to further strengthen the elementary teacher candidate’s mathematics content knowledge.

The program has taken steps to improve mathematics content area knowledge. We took a close look at our program and the mathematics and mathematics education courses that our teacher candidates were taking. The required mathematics methods course (EDCI 4115) was only a 2-credit course. We worked with teacher education faculty and increased the number of credits of the required elementary mathematics methods course from 2 credits to 3 credits. All elementary teacher candidates are now required to take this 3-credit elementary mathematics methods course. Additionally, a faculty member in the Neag School of Education and a faculty member in the Mathematics Department studied interactions between coursework taken in the Math Department and elementary teacher candidates’ confidence with respect to teaching mathematics, as well as their performance on the mathematics content State licensure exam. A particular course in the Mathematics Department that had been designed specifically for elementary education majors (Math 2010Q) was identified as having an impact on both the mathematics content licensure exam and also confidence with respect to teaching mathematics. As a result, this course has been made a requirement for elementary teaching candidates and we have worked with the Mathematics Department to add an additional section of this course to accommodate our students.

Elementary Education

One example of a change came in response to alumni survey data. The data indicated that the alumni of our elementary education program did not feel well prepared in classroom management or in supporting English language learners. The program has taken steps to address these concerns. We have added a required 3-credit Classroom and Behavior Management course
to the program. To address the second concern, the faculty created a professional learning community and, with some grant support secured by 2 faculty members, engaged in a 2-year inquiry into their own practice regarding teaching to support English language learners. As a result, all methods instructors attend more extensively to supporting literacy across content areas and supporting ELLs specifically. Our program data indicates that these changes have indeed addressed the intended goals, and our candidates feel more prepared in these areas.

**Elementary Education**

Annual review of the curriculum included a discussion of the Two-Week Science Unit Plan, which is an assessment capturing science teacher candidates’ preparation to enter student teaching. It prompts them to think more deeply about the science teaching profession, while the rubric prompts them to develop detailed lesson plans and situate those activities into larger contexts. Anecdotally, the process of generating the science Unit Plan has been useful in calibrating science teacher candidates to the realities of daily science instruction. Despite the overall positive accomplishment, it is quite common for the community engagement dimension to be less than adequate.

To a certain extent, this may be too high of an expectation for novice science teachers. When struggling to make science content accessible to adolescents, being able to enhance the local significance of the material at hand is elusive to most of our science teaching candidates. In response, we have made strides toward enriching their field experiences. For example, for TCPCG students at Avery Point, they are now teaching a series of science lessons to middle schoolers at an urban STEM summer camp. At very basic level, science teacher candidates are exposed to students who do not look like them and may have backgrounds and experiences that color their interpretations of science activities and content. In a way, this exposure obliges science teacher candidates to shift perspectives to become more accommodating of students’ prior knowledge. This understanding resonates with the principles described in How Students Learn Science. This field experience as reinforces the utility of scientific practices as a framework for designing hands-on activities and supporting knowledge construction.

We also realize that doing poorly on the Science in the Community section of the science Unit Plan pays dividends because of the teacher preparation programs’ design. Both IBM and TCPCG require substantial field experiences and coursework that follows student teaching. We make maximum use of this time and this is when the community-based expectations can be reinforced. Put another way, the mistakes often made on this portion of the Unit Plan raises sensitivity and awareness in our science teacher candidates that can be addressed via remediation. To a certain extent, we almost expect them to fall short on the Science in the Community requirement -- at least on their first exposure. And we concede that this may be a developmental inevitability: there may not be a way to force better understandings and performance before student teaching. However, by having so many teacher candidates do poorly on this dimension, we leverage their frustration in follow-up courses to consider how Science in the Community considerations are central to realizing the goal of scientific literacy for all Americans.
Executive Leadership Program

The Executive Leadership Program (ELP) uses three primary resources for continuous program improvement. First, each of the five (5) program courses includes one or more core assignments specifically designed to assess whether each participant meets the identified ISLLC standards for assigned to that course. A specifically designed, standards-based ELP Assessment Rubric is associated with each assignment and used by faculty and program participants to determine whether or not each standard is met. Each spring the ELP faculty reviews the standards-based assessment data for each course including the number of Incomplete grades for each course and then uses that information for program adjustments and improvements.

Second, each spring all ELP Mentor Superintendents are invited to an ELP Program Review and Feedback session. The ELP Director, the Connecticut Association of Public School Superintendents ELP Mentor Coordinator and occasionally other members of the ELP faculty meet with the ELP Mentors to gather feedback on the ELP Internship specifically and the program in general. Agendas and meeting summaries from the 2012 and 2014 sessions are included here for your review. Every other year we also use an ELP Mentor Survey to gather actionable suggestions for improvement.

Finally, following the ELP Mentor Superintendent Feedback Session, the ELP Director convenes an ELP Program Review and Improvement Meeting for all members of the ELP faculty (Department of Educational Leadership members and Clinical Professors who teach in the Program). An agenda for this annual review meeting is included. In addition to reviewing participant assessment and course performance data, the faculty reviews the program improvement suggestions from ELP Mentor Superintendents. Faculty members review and course changes made during the year in terms of materials, learning activities and guest lecturers for each course. Based on this review various course improvements and course alignment and coordination issues are agreed upon and implemented in the following year. Recently, the faculty of the ELP program agreed to a number of changes in the curriculum. The Politics, Policy and Governance (EDLR 6301) course has an increased focus on State and District School Finance. It also emphasizes school district governance, a topic that is also addressed in the school district governance seminar (EDLR 6092). And, the faculty agreed to change the course sequence to EDLR 6031—summer 1; 6302—Fall; 6304—spring and 6303 summer 2. This shift will allow the Human Capital Leadership objectives to be developed over the 6 full semester sessions.

School Psychology

The School Psychology program conducts annual evaluations of the student internship experience. Analysis of the data uncovered two key findings. The first finding pertained to our students’ lack of knowledge of the services and supports offered by other professional within the school and the community. The second finding pertained to supervision opportunities during internship. While nearly half of our students did not appear to receive supervision, those who did receive supervision did not seem to gain competence during the internship experience.
The program has taken steps to address these concerns. To increase our students’ knowledge of supports available in the community, we have added a new required activity. During the first year of practicum, all of our student compile a list of resources - including public and private facilities, professional personnel and their functions and potential support individuals in the school in which they are working. This list must include state and local resources. It must be user-friendly. In addition, students in the second year of practicum also complete this activity, present their work to other students, and discuss any interactions with community partners.

To address areas of weakness in supervision, students now complete required readings related to supervision. In addition, practicum students now role-play supervisory roles across a variety of mock situations relevant to practice. Students in Year 2 supervise the students in Year 1 in these activities. Also, students write a self-reflection paper focused on their growth in the area of supervision, which is graded using a behaviorally anchored rubric.

**Secondary English Education**

Data from the combined assessments indicate that secondary English education program graduates possess a solid base of content knowledge, thus suggesting adequate content area preparation. In recent years, however, select candidates have failed the Praxis II exams on their first attempt.

To address the occasional non-passing grade earned by candidates in their first attempt at the Praxis II exam in the IB/M program, the English education advisor organized a preparation session held during the spring semester of the senior year beginning in 2010. The goal of the session was to familiarize English education students with the test format to better inform them to prepare for and pass the exams. Since implementing this session, all students with the exception of one passed Praxis II on the first attempt; the one student passed on the second.

**Secondary English Education**

Data from the Lesson Plans Created as Part of a Larger Instructional Unit, the Student Teaching Evaluations from University Supervisor/Cooperating Teacher, the Student Teaching Videotaped Lesson Reflection Project, the English Language Learner Infusion Project, and the Professional Teaching Portfolio assessment indicate that secondary English education program graduates possess the professional and pedagogical knowledge, skills, and dispositions necessary to be effective teachers. However, several faculty members in the larger teacher education program identified (through alumni survey data and informal interviews with candidates) a lack of knowledge on behalf of candidates surrounding their ability to support English Language Learners (ELL) in the classroom setting.

In response to these data surrounding the instruction of ELLs, a teacher research group was formed. Members meet on a monthly basis to share concerns and emerging understandings of the process of language acquisition, the role of language in learning and assessment, cultural awareness and sensitivity, and classroom implications in the areas of planning, instruction, and assessment. The data generated from Assessment 7 (English Language Learner Infusion Project)
reflects the results of one such revision to the English Language Arts methods course. Additional work in this area is ongoing.

Secondary English Education

Analysis of the data from the Lesson Plans Created as Part of a Larger Instructional Unit, the Student Teaching Evaluations from University Supervisor/Cooperating Teacher, the Student Teaching Videotaped Lesson Reflection Project, the Inquiry Project, the English Language Learner Infusion Project, and the Professional Teaching Portfolio indicate that secondary English education program graduates demonstrate a marked ability to affect student learning and create environments that support learning. However, although we recognize the value of membership in professional organizations, we have not successfully provided all candidates the opportunity to assume such a role in the professional conversation.

In response, we have attempted to foster a commitment to this missing professional development component by: creating opportunities for students to serve as presenters at both regional and national conferences, thus affording them the chance to receive funding support to attend; seeking opportunities for involvement in local affiliates that do not require extensive travel or funds in order to participate; and encouraging involvement with other professional organizations housed at the university (Connecticut Writing Project, for example) to build a local community of professionals engaged in continued learning.

University of Connecticut Administrator Preparation Program

In response to our students' performance on the school improvement modules of the Connecticut Administrator Test (CAT), the faculty of the University of Connecticut Administrator Preparation Program (UCAPP) engaged in series of conversations around the curriculum. More specifically, we examined the syllabus and course assessments the Program Evaluation for School Improvement course. We concluded that the syllabus should include earlier and more frequent opportunities to analyze diverse data sets throughout the course. We developed a new course assessment to monitor proficiency in this essential skill.

We also examined the Planning for the Program Evaluation course. This conversation resulted in refinement of the scoring rubrics for two core assessments - the program evaluation plan and the school improvement plan. We agreed that more detailed criteria could inform the students' development of these products, ideally increasing the students' leadership capacity in these processes.

And, we introduced a new element into the classroom experience. During the dinner break in each class session, we discuss "real world" issues of program evaluation or school improvement the students are observing or facing in their internships. This focused conversation is intended to strengthen the connection between the coursework to the practicum. It also presents an opportunity to brainstorming about possible and appropriate courses of action to improve our students' strategic approach to scenarios they will face on the CAT exam.