# Can We Engage Students for Academic Success?

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## Abstract
Levels of educational attainment by students at urban public schools have been discouraging. This paper makes the case that a curriculum that is relevant to students' experiences can stimulate their interest in learning at the college level and create a pathway to success for graduates of these programs. In the author's experience of developing and implementing a context-based curriculum at a newly established college, this approach has had encouraging outcomes in fostering broad learning as well as specific skills among an at-risk student population.

## Introduction
In this article the author describes a curriculum of context and relevance that attempts to address students' subpar skills and to deliver college-level curricular content. By piquing students' interest and establishing their connection to course materials, outcomes at the author's institution have proven to be significantly better than at comparable institutions. While the focus of this study is New York City, where the author's institution is located, the challenges facing students and the pedagogies discussed here are relevant to institutions of higher learning in many diverse US metropolitan areas.

The next section discusses the performance of students at the author's institution, who struggle academically, and examines reasons why that may be the case. This is followed by a short description of the institution, its curriculum and a profile of its students. This rationale for this institution's pedagogy of engagement and examples of its application are the focus of the subsequent section, followed by a description of the results. The final section examines these results and concludes.

## Background
Basic measures, such as student graduation rates and test results from high schools in major metropolitan areas in North America, often tell a story of disappointment and missed opportunities. For example, data from New York City's Department of Education, for cohorts entering high school from 2001–08, on 6-year graduation rates (high school is grades 9 through

12) and the percentage of students completing their Regents examinations in 6 years are reported in Table 1.

While the data indicate an improvement in high school students' graduation rates and test results, the better outcomes are still not very good. There are wide variations in results across various demographic categories. Black and Hispanic students and those not proficient in English tend to perform more poorly. This is an important issue because, in addition to being socially unjust, it would be a waste of resources and existing and potential talent to write off broad groups of at-risk students as being incapable of pursuing higher education.

**Table 1**

*City's Public Schools: Graduation and Regents Exam Completion Rates*

| Cohort starting in year | | | Graduate in 6 years as % of cohort | Completed all Regents in 6 years as % of cohort |
|---|---|---|---|---|
| 2001 | | | 58.50 | 32.8 |
| 2002 | | | 61.8 | 37.5 |
| 2003 | | | 65.6 | 41.2 |
| 2004 | | | 69.2 | 45.2 |
| 2005 | | | 70.9 | 49.1 |
| 2006 | | | 73.2 | 54.7 |
| 2007 | | | 73.0 | 59.5 |
| 2008 | | | 72.7 | 68.0 |
| 2009 | | | 74.7 | 69.6 |
| Average 2001-09 | By language proficiency | English-language learners (11% of total) | 49.37 | 27.55 |
| | | English language proficient (89% of total) | 71.49 | 54.18 |
| | By ethnicity | Asian (14.8% of total) | 84.4 | 74.78 |
| | | Black (33.9% of total) | 64.73 | 43.14 |
| | | Hispanic (37.5% of total) | 62.88 | 43.15 |
| | | White (13.8% of total) | 79.55 | 67.31 |
| | Overall | | 68.97 | 51.14 |

Data from New York City Department of Education

There are several possible reasons for these unsatisfactory results (which are even more pronounced if we look at four-year graduation rates), indicating the need for different approaches to remedy them. These are often colored by one's perspectives. Some researchers have pointed to the high percentage of immigrants in New York (as of 2011, 37% of the city's population was foreign born (Lobo and Salvo, 2013, p. 2)) who often lack English language skills and are not able to provide support and contribute significantly to their children's education (Ruiz, 2015). This is not intended to be a criticism, so much as a statement of fact: parents struggling with

language, jobs and other challenges may not have the resources to provide students the support at home that can often make a difference between successful outcomes and average or subpar performance. Others believe that given the ethnic, cultural, linguistic and economic heterogeneity of the city's student population, the city needs to devote resources to explicitly address their needs (New York Immigrant Coalition, 2015).

Stripped of emotional rhetoric, these arguments have some validity. For low-income parents, the need to work long hours can curtail their full involvement in their children's education; this may be even more the case for new immigrant families, who tend to have lower incomes than native-born residents of the city (Lobo and Salvo, 2013, p. 104). The lack of English-language skills in many immigrant households can hinder support for school-age children.  Additionally, many immigrants work in occupations such as hospitality, personal services, health care, transportation and construction (DiNapoli and Bleiwas, 2013), where work schedules can make it difficult for them to help their children succeed academically.

**Method**
The author describes the role of public community colleges, including his own, in advancing the prospects of students in New York City, where this college is located. He examines recent literature on using context from students' own experiences to further learning and then describes how these ideas are being operationalized in his institution's curriculum and pedagogies. Finally, he provides data on student performance to evaluate the effectiveness of his institution's practices.

**Community Colleges**
Close to half of US undergraduate students attend community colleges (American Association of Community Colleges, 2016). An even greater proportion—almost 60%—of New York's public high school graduates who go to college attend the author's university (Tibbels-Jordan, 2014). About three quarters of first-time freshmen at the university are graduates of the city's public schools (Tibbels-Jordan, 2014). Many of them start at community colleges and subsequently transfer to a senior college. However, the record of community colleges in retaining and graduating students is not strong (see Table 2).

Table 2

*Community College Retention and Graduation Rates*

|  | This college[1] | | University-wide[1] | National |
|---|---|---|---|---|
|  | Class entering in Fall 2012 | Class entering in Fall 2013 | Averaged over classes entering Fall 2004 – Fall 2013 |  |
| Still enrolled after 1 year | 74% | 69% | 66.9% | 54.3%[2] |
| Graduated in 2 years | 28% | 30% | 4.08% | 21%[3] |
| Graduated in 3 years | 49% | n.a. | 14.68% | 29.2%[2] |

[1]Data from City University of New York
[2]Data from National Information Center for Higher Education Policymaking and Analysis
[3] Data from National Center for Education Statistics, US Department of Education

To address these issues, the university decided to establish a new community college to raise retention and graduation rates; to prepare students for the workplace; and to continue into

bachelor's programs. The author's college opened in 2012 after extensive planning and preparation.

This college incorporates a number of best practices. Detailed in its foundation documents (City University of New York, 2008), these include a mandatory bridge program to prepare students for the transition to college, strong support services, opportunities for extra-curricular engagement, a culture of self-assessment, a commitment to "creating and sustaining a thriving New York City", and a curriculum rooted in that city. The curriculum is highly interdisciplinary and uses context to drive engagement and learning—which, as described in subsequent sections, is the main point of the paper: use what is familiar to address the twin goals of building students' acquisition of and understanding in subject-specific content, while strengthening their basic skills.

The college's students skew young. Most of them have completed high school just prior to entering the college. More than three quarters are 19 years old or younger. Almost all (95%) are from the 5 boroughs of New York City. 26% are African American and 60% are Latino. 78% of them receive some sort of financial assistance (Stella and Charles Guttman Community College, 2016). Between 8 and 12% of students in entering classes are proficient in Math, Reading and Writing; about 90% need remediation in at least one of these areas (Center for College Effectiveness, 2015).

**Contextual Learning**
Many community college students have the desire to succeed and make strong efforts to this end. However, a poor track record of success, inadequate support and cultural and intellectual distance from curricular content can foster disengagement. The question arises as to whether we can replace this alienation with a more positive attitude toward learning.
Du Kirkebæk, Du and Jensen (2013) highlight the use of context in learning about culture. Komalasari (2009) discusses this in the form of connections, personal experiences and applications to build civic knowledge and values. Apiola and Tedre (2011) note the importance of such pedagogies in working with information technology students, while Gillam, Gillam and Reece (2012) study their effectiveness in developing children's language skills. Other examples are available—teaching geometry in the context of its application in construction (Burke and Moore, 2009) and using technology to supplement learning (Boyle and Ravenscroft, 2012).

Incorporating context in content can be applied across a wide range of disciplines. A variation of this is developing curricula that are culturally responsive. Harding-DeKam (2014) examines how students' cultural background can be included in a math curriculum. This connection can serve to increase the relevance of subject matter for students.

**Incorporating students' experiences into curriculum**
Keeping work of this nature in mind, we include context familiar to students into the first-year curriculum (and beyond) so that it reflects who our students are and where they are from (Saint-Louis, Fuller and Seth (2016) provide a detailed description of the development of the college's first-year curriculum). It was decided early on to base the common first-year curriculum on topics that matter to and resonate with our students. The curriculum uses our complex, fascinating, messy city as a source of content for formal topics. The remainder of this section briefly describes the nature and structure of some of the first-year courses and provides examples of how content of those courses is derived from the city—an environment that is familiar to students.

The first-year City Seminars are three-part (Critical Issue (CI), Quantitative Reasoning (QR) and Reading and Writing (RW)) courses, built around a critical urban issue, while also targeting students' numeracy and literacy skills. While students are examining a current topic of importance to New York in CI, QR builds numeracy using data—which students collect or access—that are relevant to that topic. RW classes develop literacy in the context of the CI topic.

Close to 60% of US college freshman are required to take developmental courses in Math and/or English (National Center for Public Policy and Higher Education, 2010). The track record of stand-alone developmental courses is poor and students often spend several semesters taking and retaking them, which costs time and financial resources. At the same time they do not accumulate a sufficient number of credits to motivate them to persist to completion of their degrees.

In a significant departure from this practice, standard in US community colleges, this college does not offer remedial courses in Math and English. Skills development is embedded into familiar contexts in credit-bearing courses, to make those skills meaningful and relevant to students.

While students are developing these skills, the content used to build them is based on the examination of issues that are current in New York and familiar to students: consumption, waste and recycling; proposals for a sustainable city; immigration; health care; housing and gentrification; and the market for and politics of food. Students study and write about these issues from perspectives that are familiar to them, e.g., examining the availability of health care to New Yorkers and comparing it to that in countries of origin of some of the students undertaking these studies. One group, examining sustainability in New York, developed a proposal for bottle-filling water fountains in the College to reduce the use of plastic bottles; this proposal was later operationalized by the College administration. Another group created a sustainability plan for Times Square that was presented to local business leaders. For a City Seminar related to sustainability and food availability in different communities in New York, a QR project involved students working with an urban farm, the Brooklyn Rescue Mission, which was interested in refining its practices related to acquisition and distribution of food. College students helped the Mission create an inventory control system, which helped build students' quantitative skills and expertise in using software such as Excel.

Recently, the City Seminar focused on gentrification in different neighborhoods of New York and assignments addressed affordable housing. Students met a developer and an architect who work in this field and examined urban housing from economic, political, social justice, environmental and other perspectives. For the QR section of this assignment, teams created and administered surveys to collect data on housing issues and preferences. They analyzed the data they generated to identify trends which they represented in charts or graphs and wrote about, using additional resources they had been examining in CI. In the signature assignment for this course, students wrote about their collection and analysis of data related to a local issue that concerned many of them at first hand. It culminated in a policy proposal, based on students' research and expectations for sustainably designed affordable housing, which they presented to their peers, faculty and invited professionals.

Another first-year course, Ethnographies of Work, focuses on observation and interviews as tools of data collection and for building skills in social science research methods. At the same time, with a strong focus on reading, writing and reflection, this course also builds literacy. Structured

as a series of sociological studies of the dynamics of workplaces, it requires students to observe and write about work locations that are matched to their interests and professional plans; these sites have included fast-food restaurants, department stores, coffee shops, public schools, food trucks, police stations and corporate offices. The project-based course examines workplace situations. In addition to observation, students conduct interviews, analyze qualitative data that they have collected and write proposals to develop solutions for the issues that they have observed. The impact of race, class, gender and sexuality on workplace relations is an important aspect of discussions; the ability to situate the course in a city as diverse as New York provides a broader and deeper pool of experiences to offer our students. It also allows them to see patterns that may be repeated across a variety of settings and situations.

In Statistics courses, students examine topics of interest to them, including teen pregnancy and how it relates to income and educational levels; the impact of legalization of same-sex marriage on a region's economy; homelessness in our city and its variation with population, unemployment and incomes; and how mortality rates from HIV-AIDS change with expenditures on awareness campaigns. While the structure and learning outcomes of assignments in these courses are common for all students, they have the discretion to target their investigation toward topics of their choice and they often pick ones that they feel are most relevant to their own experiences.

During two "Community Days", held every semester, students participate in service learning projects to examine issues that are related to the College's learning outcome of civic engagement and tied to content of the City Seminars. As an example, a recent Community Days activity involved students working with a local urban planning consultant on a traffic study of pedestrian access on 42nd Street, a major east-west artery of the city. Students conducted surveys on the street and handed out informational flyers about a proposal to open up the street for pedestrian traffic and streetcars. Related to this, in Statistics classes, they examined data on pedestrian deaths and injuries, honing skills in research and the use of geographic information systems.

Another Community Days activity involved collaborating with neighborhood settlement houses in Queens and the Bronx. Students examined the city's census data on the demographics of different neighborhoods in an effort to promote voter registration in immigrant communities. This project was part of a City Seminar structured around immigration and premised on students' connections to the city. It increased awareness of psephological issues, particularly in neighborhoods of immigrant communities, where voter participation can be low. It built QR, statistical and technical skills (as students grew more comfortable working with large datasets), and encouraged students' creativity in designing flyers in different languages to raise voter participation levels.

These are just a few examples of assignments created in contexts familiar to students to build basic skills and to provide them with analytical tools and a reservoir of content to carry into the second year where they specialize in their majors. In addition, experiential learning—internships, visits to city administrative offices, museums and parks and meetings with professionals from areas connected to the curriculum—also provides context and relevance.

**Results**
Developing and implementing this curriculum have given us an opportunity to test out our ideas of using the city as text and classroom. Our students are excited about starting college; our goal is to maintain, build and harness that excitement and curiosity and make it instrumental in their

continued learning. Contextualization has played a key role in this process. Students often tell us, both anecdotally and in college-wide surveys, how they feel that they learned more broadly and deeply because of the connection they made with course contents.

Instructors have observed students' academic and intellectual growth and the development of their writing, numeracy and research skills and of their abilities to analyze data and build thoughtful arguments. In terms of retention and graduation rates, this appears to be working (see Table 2).

One-year retention rates at the college are slightly higher than across the university and significantly higher than retention rates nationwide. Likewise, graduation rates exceed national levels and are far higher than those at other community colleges in this university.

Additionally, the Community College Survey of Student Engagement (CCSSE) report (Center for Community College Student Engagement, 2014), based on survey data for this college's first class, shows that its students are highly engaged in their learning. The Center for Community College Student Engagement computes five benchmarks of what it considers effective educational practices, viz., Active and Collaborative Learning, Student Effort, Academic Challenge, Student-Faculty Interaction and Support for Learners. For each of these benchmarks, the college's students scored higher than the CCSSE cohort (Table 3). What was particularly encouraging was that they also scored at the same level as (for one benchmark: Student Effort) or higher than (for the other four benchmarks) the top-performing colleges, which were the ones that scored in the top 10 percent of the cohort for a particular benchmark.

*Table 3*

*Community College Survey of Student Engagement*

| Benchmark | CCSSE Cohort[1] | 2014 Top-Performing Colleges[2] | Guttman |
|---|---|---|---|
| Active and Collaborative Learning | 50 | 60.3 | 78.1 |
| Student Effort | 50 | 58.6 | 58.6 |
| Academic Challenge | 50 | 57.4 | 62.6 |
| Student-Faculty Interaction | 50 | 59.1 | 72.7 |
| Support for Learners | 50 | 60.2 | 68.1 |

[1]Benchmark scores for the cohort (all respondents) are scaled to have a mean of 50
[2]Top-Performing colleges are those that scored in the top 10 percent of the cohort by benchmark    Data from Center for Community College Student Engagement

**Discussion and Conclusion**

Graduates of high schools in major US cities are often unprepared to continue their education into undergraduate programs and beyond. The author's institution was recently established to focus intensely on equipping students with the tools to be successful learners and professionals. A major part of its curriculum and pedagogy is content that is relevant to students' lives and experiences and that focuses on literacy, numeracy and critical thinking skills. This curriculum has been successful in building those skills, as well as improving students' persistence and graduation rates. The institution's practices effectively address some of the shortcomings in urban K-12 systems and could be adopted and adapted in other institutions that are grappling

with ways to improve students' academic performance.  To address the alienation from academic efforts resulting from lack of preparedness upon completion of high school, it is important to connect students' existing knowledge and experiences with topics being addressed in the classroom. This can serve as a way to build the engagement, connection and buy-in that will strengthen basic skills and motivate students to persist.

To answer the question in the title of the paper as to whether we can engage students for academic success, in the author's experience at the new institution he writes about, the answer is yes. When we look at the results from Table 3 (related to student engagement) and those from Table 2 (which compare students' retention and graduation rates at this college to those at comparable institutions) in tandem, we can see a clear pattern: students at this institution are highly engaged and they are succeeding at rates far beyond those of their peers. While it could be argued that coincidence is not proof of causality, the fact remains that increasing engagement through a highly contextualized curriculum is a core feature of the college's pedagogy and it appears to be bearing fruit.

For many instructors, who struggle with students who seem disinterested or unmotivated, to work with students who are highly engaged would count as a degree of success. To have those students persist and graduate is an added measure of success, one that is more tangible, with positive implications for further achievement.

Many students at this college have commented on how they are drawn into new ideas and information via the familiar avenues that the curriculum provides. It should also be mentioned that a few speak of being turned off by the excessive focus on New York in the curriculum, which indicates the need to establish ways to reach those students who may be more receptive to approaches other than those that work for many others.

A contextualized curriculum is by no means the panacea for an at-risk student population. Yes, the college is graduating almost half of its students in three or fewer years and performing well above its fellow institutions both within the university and nationally; what about the other 51%? From that perspective, the results suggest that, in addition to practices that are proving to be effective, there is a need to continue to innovate and develop others that will ensure the success of a higher proportion of community college students.

Additional proof of the efficacy of this curriculum would lie in success of the college's graduates in the four-year schools to which they transfer. It is important for us to know whether our students' succeed only in this context-rich high-touch environment or whether the college is preparing them to function in diverse environments; are they being accustomed to constant stimulation, or are we preparing them to learn under more traditional circumstances as well? The college's institutional research division is compiling these data. This information is harder to trace in a comprehensive fashion, since not all graduates inform us regarding transfer to senior colleges.

These results are encouraging, but should be tempered with caution, since they cover only a few years and a relatively small population. If we can continue this performance over a longer period and for a higher percentage of a larger student body as the college grows, our practices could prove even more instructive to other institutions as ways for them to promote students' academic and professional success.

**References**

American Association of Community Colleges. (2016). *2016 Fact Sheet*. Retrieved from http://www.aacc.nche.edu/AboutCC/Documents/AACCFactSheetsR2.pdf.

Apiola, M. and Tedre, M. (2011, September 13-15). *Towards a contextualized pedagogy for programming education in Tanzania*. Paper presented at the meeting of the IEEE Africon 2011 Conference, Livingstone, Zambia.

Boyle, T & Ravenscroft, A. (2012). Context and Deep Learning Design. *Computers & Education*, 59(4), 1224-1233.

Burke, S. & Moore, T. (2009). Learning in Context. *Principal Leadership*, 9(8), 32-35.

Center for College Effectiveness (2015). Progress to Proficiency: Student Proficiency Status during the First-Year, Retrieved from https://guttman-cuny.digication.com/idea/ proficiency.

Center for Community College Student Engagement (2014, June). Community College Survey of Student Engagement Stella and Charles Guttman Community College 2014 Key Findings. Retrieved from https://guttman-cuny.digication.com/idea/survey.

City University of New York, Office of Academic Affairs (2008, August 15). A New Community College Concept Paper. Retrieved from http://www1.cuny.edu/portal_ur/cmo/i/8/24/nccconceptpaper.pdf.

City University of New York. CUNY Office of Institutional Research and Assessment (2015, April 22). System Retention and Graduation Rates of Full-time First-time Freshmen in Associate Programs by Year of Entry: Community Colleges. Retrieved from http://www.cuny.edu/about/administration/offices/ira/ir/data-book/current/retention-graduation/system.html.

DiNapoli, T. & Bleiwas, K. (2013). *The Role of Immigrants in the New York City Economy*. Retrieved from State of New York, Comptroller's Office website: https://www.osc.state.ny.us/osdc/rpt17-2010.pdf.

Du Kirkebæk, M. J., Du. X.-Y. & Jensen, A. J. (2013). *Teaching and Learning Culture: Negotiating the Context*. Rotterdam : SensePublishers.

Gillam, S. L., Gillam, R. B. & Reece, K. (2012). Language outcomes of contextualized and decontextualized language intervention: results of an early efficacy study. *Language, Speech, & Hearing Services in Schools*, 43(3), 276-291.

Harding-DeKam, J. L. (2014). Defining culturally responsive teaching: The case of mathematics. *Cogent Education*, 1:972676.

Komalasari, K. (2009). The Effect of Contextual Learning in Civic Education on Students' Civic Competence, *Journal of Social Science*, 4(4). 261-270.

Lobo, A. P. & Salvo, J. J. (2013). *The Newest New Yorkers: Characteristics of the City's Foreign-born Population*. Retrieved from New York City Department of City Planning website: http://www.nyc.gov/html/dcp/pdf/census/nny2013/nny_2013.pdf.

National Center for Education Statistics, US Department of Education. (2013, December). *Enrollment in Postsecondary Institutions, Fall 2012; Financial Statistics, Fiscal Year 2012; Graduation Rates, Selected Cohorts, 2004-09; and Employees in Postsecondary Institutions*, Fall 2012. Retrieved from http://nces.ed.gov/pubs2013/2013183.pdf.

National Center for Public Policy and Higher Education. (2010, June). *Beyond the Rhetoric: Improving College Readiness Through Coherent State Policy*. Retrieved from http://www.highereducation.org/reports/college_readiness/CollegeReadiness.pdf.

National Information Center for Higher Education Policymaking and Analysis. (2015). *Retention Rates – First-Time College Freshmen Returning Their Second Year*. Retrieved from

http://www.higheredinfo.org/dbrowser/index.php?submeasure=228&year=2010&level=nation&mode=graph&state=0.

National Information Center for Higher Education Policymaking and Analysis. (2015). *Three-Year Graduation Rates for Associate Students-2009*. Retrieved from http://www.higheredinfo.org/dbrowser/index.php?submeasure=24&year=2009&level=nation&mode=graph&state=0.

New York City, Department of Education. (2015). *Cohorts of 2001 through 2011 (Classes of 2005 through 2015) Graduation Outcomes*. Retrieved from http://schools.nyc.gov/Accountability/data/GraduationDropoutReports/default.htm.

New York Immigrant Coalition. (2015). *New Report Shows Major Gaps in Access to Translation and Interpretation for Parents of New York City Students*. Retrieved from http://www.thenyic.org/PR/EDU-BuildtheBridge-report-6-16-15.

Ruiz, A. (2015, June 29). Diversity of New York City languages makes staying involved in kids' education difficult for immigrant parents. *Daily News*. Retrieved from http://www.nydailynews.com/new-york/education/language-issues-school-involvement-tough-immigrants-article-1.2274826

Saint-Louis, N., Fuller, K. & Seth, N. (2016). Curriculum integration: The experience of three founding faculty at a new community college. *International Journal of Teaching and Learning in Higher Education*, 27(3), 23-33.

Stella and Charles Guttman Community College. 2016. "*Fast Facts*", retrieved from http://guttman.cuny.edu/about/fast-facts/.

Tibbels-Jordan, J. (2014, Summer). "*Partnering for Educational Success in NYC: NYC DOE & CUNY*". Retrieved from https://philanthropynewyork.org/sites/default/files/Partnering%20for%20Educational%20Success%20in%20NYC.pdf.