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# A University and Middle School Mentor-Scholar Partnership

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**ABSTRACT.** The State University of New York at Oswego (SUNY Oswego) and the Oswego City School district have created a campus-community partnership through a college program that matches SUNY Oswego students as mentors with at-risk youth in grades 7 and 8 in a structured environment in the school district. The structure is academically based for college students to earn credit based on the tenets of mentoring, youth development, and relationship building. The middle school students, or “mentees” come from an at-risk background that is academic, socially, or behaviorally based. The school district recommends students for inclusion in the program. This innovative program includes a course that is rich with the pedagogy of service-learning, builds leadership characteristics and teamwork through course discussions, workshops, and the mentor-mentee relationship. The community benefits with increased support to at-risk students and building a pipeline between the college and K–12 community. The Mentor-Scholar Program tracks K–12 impact through state assessments, grades, social-school success outcomes, college mentors course evaluations and grades. The program tracks the impact on college students through grade assessment and reflection. The program was formed five years ago and has grown from thirty mentors with sixty mentees to 120 mentors with 300 mentees this past semester. Initial research shows an increase in attendance and GPA for K–12 students enrolled in the program and leadership skill development for college students.

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## Introduction

The focus on the impact of mentoring and the benefits it provides to mentor, mentee, and the community at large has increased in recent years (Bayer, Grossman & Dubois 2015). Many models have had a high impact on communities, but there is not a functional model that incorporates widespread use, university-level pedagogy, and practical application of best practices. This article highlights the SUNY-Oswego Mentor-Scholar Program over a five-year period, and illustrates how the initiative brought stakeholders from the school district and campus community together to form a mutually beneficial relationship with reciprocity and shared investment as a base.

The literature documenting mentoring programs has increased steadily in recent years. The Mentor-Scholar Program is groundbreaking, as it encompasses academic and social support for district participants while creating credit-bearing experiences for university students that allow them to mentor in rural, city, and suburban school districts. This program fills a void: it can be replicated and scalable for both the universities that will be providing mentoring services and the school districts that will be receiving them.

## Background Information

To understand the background of the SUNY-Oswego Mentor-Scholar Program, it is important to appreciate first the cultural context which led to the program's formation. Many issues present in the Oswego community had deeply rooted social causes. The official poverty rate in 2014 in the United States was 15%, and in the city of Oswego, New York, it was 28.1% (U.S. Census Bureau 2016). To further analyze these issues, their causes, and their possible solutions, the United Way Community Needs Assessment (UWCNA) committee was founded.

In 2010, this committee identified a myriad of issues plaguing the Oswego community. To address these issues, a community task force was created that included stakeholders from local businesses, the chamber of commerce, the local government, the Oswego City School District (OCSD), and the State University of New York (SUNY) at Oswego. The needs

assessment identified widespread unstable family structures as a major issue in the community, which led to various other barriers. The term *instability* is often used in social science research to reflect change (Sandstrom & Huerta 2013). Children thrive in stable environments where they have a routine and their basic needs are being consistently met. Economic, employment, family, and residential instability all have serious impacts on children (Massachusetts Dept. 2008). The needs assessment identified unstable family structures as a high contributor to a negative view of education for youth and lack of social attainment. In the Oswego City School District specifically, this viewpoint has manifested itself in the form of low graduation rates.

The task force decided to focus on ways to support struggling students who lacked access to positive role models as well as those who could create trusting and supportive relationships. SUNY-Oswego President Deborah F. Stanley and acting OCSD Superintendent William Crist agreed that a partnership which allowed undergraduate students to work in a collaborative manner with “at risk” district students was one component of addressing these issues. As the talks between OCSD and SUNY Oswego leadership progressed, the Mentor-Scholar Program was created.

The charge for the Mentor-Scholar Program was to positively impact high school graduation rates. To create a program grounded in leading research in the field, a partnership with New York Campus Compact and AmeriCorps Volunteers in Service to America (VISTA) was established. In 2011, an AmeriCorps VISTA was granted to SUNY Oswego to start researching the fundamental groundwork for the program. The program would be targeting seventh- and eighth-grade students, as this is a critical transition period for many students, and it was believed that delaying interventions until high school would make altering a student’s fundamental views of education too difficult.

In establishing a mentoring program, it was argued that a tutoring program had too refined a focus. The program would have to include students who are traditionally high-performing academically but may struggle with behavior or social issues stemming from poor family dynamics, as well as students disinterested in academic pursuits. A solely academic-based intervention would create a one-dimensional view of impacting students and would leave a high volume of students underserved within the community.

## Literature Review

Higher education students who participate in mentoring are shown to have increased cognitive development, personal growth, and involvement in civic engagement. Recent research shows that college students who serve as mentors also have increased empathy. Empathy is defined as the ability to "walk in another's shoes." Julie Novak, Vern Markey, and Mike Allen (2007) conducted a meta-analysis that indicated college students who took service learning courses experienced greater application of knowledge and skills across settings than students who did not take service learning courses.

The Mentor-Scholar program is an ideal model to support the growth of empathy and learning in service learning students in higher education. Service learning courses provide a platform for students to develop empathy as the students participate in an organized service activity that meets identified community needs. In this instance, SUNY-Oswego students experience the social issues of middle school students first hand and begin to understand the impact of poverty and a lack of role models in the family home.

Robin Everhart (2016) developed a pilot study that researched empathy development in service learning classes. Research supported developing empathy-focused teaching tools to improve student empathy. This research is of particular importance to the Mentor-Scholar program as students often begin a class with preconceived beliefs about different upbringings and socioeconomic backgrounds. By developing empathy, students may resolve conflicts in their beliefs by rethinking attitudes and notions that will lead to greater acceptance of diversity, and the ability to scaffold their studies with a multitude of communities.

When creating the structure of the Mentor-Scholar Program, a variety of program designs were evaluated. The model was adopted after intense research of Big Brothers/Big Sisters due to the similarities in the two demographics incorporated: SUNY-Oswego undergraduates acting as mentors and OCS D participants acting as mentees (Herrera, et al. 2011).

Strong research supports the need for formal mentors and natural mentors. Our steering committee adopted an approach to bring formal mentors into the school setting to ensure a level of training, accountability, and consistency in programming for both cohorts of participants. We continued this structure in the afterschool setting to allow for direct faculty support at sessions following strong feedback from our community partner.

The Mentor-Scholar Program philosophy believes that creating strong and trusting relationships between mentor and mentee will lead to higher performance in a variety of areas. “Students who have close, enduring mentoring relationships tend to have higher academic achievement, improved social relationships, and enhanced self-worth” (Ben-Eliyahu 2015). As mentees come to trust their mentors, they practice positive academic skills while also learning important strategies for emotion regulation, which is a vital component to their social development. “Mentors are extrinsic emotion regulators, whose strategies and techniques are internalized by the mentee over the course of the relationship.” (Ben-Eliyahu 2015).

## Model

The Mentor-Scholar Program follows a replicable and scalable model for student participation. All mentors are matched one-to-one with an “at-risk” student. These students are identified as “at-risk” due to district concerns about their academic, behavioral, or social growth. Once a cohort of students has been identified by district contacts, the Mentor-Scholar Program meets with the student to foster interest and encourage the student to apply. This process requires close collaboration with community partners and stakeholders, as each student and family may have different perceptions of support and goals for participating. Once a student applies, the Mentor-Scholar Program removes any identifiable information from the application results and shares the information with the cohort of undergraduate mentors. The mentors then use this application information to select the mentee with whom they would like to work. Mentors are given preference because this allows for matches to be created based on academic proficiency or shared interests. The only time the Mentor-Scholar Program will create a mentor-mentee match will be in the event of extreme student need and an ideal skill set in a mentor who can address that need. For example, a mentee may be a refugee or immigrant from another country, so the program will match that mentee with a mentor who may be fluent in that mentee’s native language. District students are not discouraged from applying if they are experiencing academic or social success, but the Mentor-Scholar program will place a priority on those students who display the highest needs first. In the event that there are more applications than mentors, a waitlist has been implemented.

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For a typical mentoring session, undergraduates meet in teams on-site at the Oswego Middle School. Familiarity with the building reduces barriers to participation for district students and faculty. Mentors arrive immediately following daily school dismissal and separate into teams following the structure outlined at the middle school. In this instance, the student body is subdivided by grade and by teams representing various directions, such as “7 South, 7 West, 7 East, etc.” On each team, the students meet within that day’s supervising teacher’s classroom, where there are mentors. These mentors are matched one-to-one with mentees as well as a “Team Leader,” who can address any issues while facilitating sessions. The Team Leader is a returning mentor assigned to a team of mentor-mentee pairs to serve as support rather than to create a relationship with an individual student. In the event of an issue, the Assistant Coordinator for the program is present at each session while there is also an administration liaison who the Assistant Coordinator can bring issues to, if necessary.

To provide structure to mentoring sessions, each session is subdivided into academic and social portions. In after-school meetings from 2:30–3:20, the first 30–35 minutes are dedicated to academic support. The academic support provided to each mentee will be extremely individualized based on the needs of the student. Sample activities include working on that day’s homework, academic goal setting, binder and locker cleanup, creating notecards, and rewriting class notes. At the start of the session, each mentor is provided with a copy of the student’s grade report, which highlights any missing assignments, teacher comments, upcoming projects, etc. This is used by the mentor and mentee to set mutually agreed-upon goals for that week of sessions. Each mentor-mentee pair will meet twice a week following a format of Monday and Wednesday sessions for seventh grade and Tuesday and Thursday sessions for eighth grade. On a monthly basis, the Team Leader will hold a conference with both the mentor and mentee during a session to check on the progress of each mentee and provide direction on a more appropriate academic focus if necessary. Mentors can sometimes be reluctant to drive students toward areas of academic deficiency, as the mentee may be opposed to working on that area due to their struggles and their desire to impress their mentor. For example, a mentee may persuade the mentor that they should work on math homework at that afternoon’s session even though the mentee struggles in other content areas.

Mentors can be apprehensive to go against the mentee's wishes for fear of harming the relationship or lack of confidence in redirecting the mentee if they become frustrated. The Team Leader conference is an institutional support established to correct this issue.

At the conclusion of the academic portion, the Team Leader is responsible for facilitating a social activity. This may be a "free period" in which students are able to take advantage of playing cards or board games. On a day when the Team Leader has created specific activities, the team will participate. The activities Team Leaders create are vetted by the Program Coordinator prior to facilitation and are aimed at encouraging reflection from all participants while building each mentor-mentee relationship. These may include collage activities such as, "What does success look like to me," "Values Bingo," etc.

## **Program Hierarchy**

One of the components of the Mentor-Scholar Program that makes it truly unique is its structure. The program has a complex hierarchy that is replicated at the university and district levels. This hierarchical structure allows for increased transparency between partners and increased ways for interested individuals to become involved at different levels of commitment. The table below presents a breakdown of the program's administrative structure. (Note that "GST 311" is a SUNY-Oswego course described in detail in the next section.)



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District	University
<i>Mentees</i> - Students who complete an application to participate	<i>Mentors</i> - Students who are receiving credit through GST 311
<i>Cooperating Teachers</i> - Paid district employees to assist with supervision of program - Provide undergraduates with context to academic assignments	<i>Team Leaders</i> - Previous mentors who have been chosen for their exemplary skills to facilitate sessions and counsel their peers - Support GST 311 discussions
<i>Site Contact</i> - District person to address issues on a daily basis - Provide support with calendaring, field trips	<i>Assistant Coordinator</i> - Recruits district participants - Attends team meetings and is a bridge between campus/community - Assists with sessions and troubleshooting
<i>Principal</i> - Contact for faculty concerns - Assessment of program and goals	<i>Program Coordinator</i> - Recruits undergraduate participants - Assessment of program and goals - Long-term planning and program design
<i>Superintendent</i> - Budgetary and policy questions	<i>Director for Center for Experimental</i> - Budgetary and policy questions

## Accreditation & Pedagogy

SUNY-Oswego has a tradition of acting as a regional steward and increasing its students’ participation in the community. Community engagement serves as the foundation for creating a structured experience for students where they can receive academic credit for their learning while simultaneously impacting the community. A one-credit course was developed under the Center for Experiential Learning Department with a General Studies label and approved by University Governance. The course was assigned a 300-level designation, offering upper-division credit, due to the experiential component and commitment required of the students. Housing the course within General Studies avoided any confusion for students who may think the program’s required course is only for specific majors or may count in lieu of a course within their degree program. All majors and class years are allowed to participate in the program. The only requirements for acceptance into the program are enrollment in GST 311, the completion of an application and a formal interview.

The course, titled “GST 311 Mentor-Scholar Pgm,” requires that students attend four training sessions at varying times throughout the semester while

completing at least twenty hours of service. Student course meetings are for one and a half hours and take place every three to four weeks, depending on when the district calendar has breaks in instruction. Additionally, the gaps in instruction allow for students to partake in authentic learning experiences and apply course content within their matches while bringing new strategies and talking points to each subsequent course meeting as they develop their own best practices.

Mentor training and all course content is grounded in civic engagement and experiential learning principles. The course structure is based on Kolb's Cycle of Experiential Learning and the Deal Model for Critical Reflection, and it is infused with civic values, civic knowledge, civic skills, and civic action. The GST 311 learning objectives are focused on increasing the knowledge of students in youth development, community and civic engagement, identification of issues facing "at-risk" youth, critical reflection on the benefits of service to both provider and recipient, and the role that support systems such as the Mentor-Scholar Program play within the academic setting. The pedagogy associated with the course follows a traditional service learning format with content delivered in a blend of lecture and discussion. Course topics such as Carol Dweck's "Growth Mindset," Michelle Hayward's discussion of grit as a way to instill middle school students with the will to persevere as exhibited by Google's Steve Jobs, Howard Gardner's "Theory of Multiple Intelligences," boundary setting as defined in traditional mentoring between mentors and mentees, Erik Erikson's "Human Development Theory," and other content are presented to students in a format so that they learn the salient points. From the conversation on major points of multiple areas, students are then broken into teams which follow the teams they use on site. Within these teams, students discuss each topic area and share within their group how they can incorporate newly learned lessons and skills into their service. To provide guidance, each small group discussion is led by a Team Leader who can further break down content and relate to mentors how each principle can be applied in an individualized approach. This content overview is purposeful, as it is important to avoid overwhelming students with an abundance of content which will not be relevant on site, where mentors need to focus on the application of these principles.

The undergraduate mentors are not the only students required to enroll in a course to participate. SUNY-Oswego students serving in the Team Leader role must also enroll in a General Studies course to participate in the

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Mentor-Scholar Program. This course is GST 312 and is reserved only for Mentor-Scholar Team Leaders. In order to enroll in the course, students must have already taken GST 311 and completed an interview with the Program Coordinator. The learning objectives for GST 312 are that students will be able to demonstrate growth in leadership, set professional goals, troubleshoot situations, evaluate students and peers, and hone professional skills such as team management, professionalism, conflict resolution, assertiveness, and active listening. This course has a similar pedagogical structure as GST 311 with a few stark differences. The GST 312 course is two credits per offering and requires students to meet weekly for one and a half hours. The increase in credits and meeting time correlates to the increased level of responsibility demanded from these student leaders. Each Team Leader is assigned their own pod of mentor-mentee matches, with each pod ranging from eight to sixteen matches, and the Team Leader is tasked with supporting the matches on site and communicating program updates.

The GST 312 course includes a blend of seminar and discussion formats, and it focuses on leadership. Students discuss topics such as assertiveness, conflict resolution, situational vs. positional leadership, and others through the lens of their assigned service placement. The course framework aims at putting these topics into practice while Team Leaders are serving in the Mentor-Scholar Program and in any other leadership positions the student may currently fill. A large component of the course is the opportunity for each Team Leader to report on the status of their team and site while surveying their peers for support on various issues that arise throughout the course of the program. Peer discussion and review of best practices have been extremely valuable activities and are consistently highlighted as among the Team Leaders' favorite activities.

## Impacts

The Mentor-Scholar Program has created a rigorous assessment structure aimed at measuring district students' progress in four key areas: academics, attendance, behavior, and school connectedness. The program has had to cast a wide "assessment net" to be truly encompassing of the varied needs of district participants. Utilizing grades as the sole lens for measuring impact on students has been shown to tell only one part of the picture, as the program's function is to support student progress in both academic and

social components. This dual support coincides with the larger view of the Mentor-Scholar Program: that mentoring should maximize impact in many areas, as opposed to focusing on one specific area, and it should be based on each individual student's needs. Mentors in the Mentor-Scholar Program are instructed to transition away from student deficiency areas once the mentee begins to make progress, and mentor-mentee matches should continuously target new opportunities for growth. In other words, if a mentor is instructed to conference with a student on a low math grade, matches move to another academic area where the student is struggling once that math grade improves. This approach allows for the matches to expand, based upon best practices and momentum gained from academic progress, into additional areas.

To assess progress, a student's scores from a previous year serve as benchmarks for the student's work beginning in the new year. For example, sixth-grade scores serve as benchmarks for seventh-grade participants. This data is utilized to ensure that we are measuring program impact only against previously observed behavior to ensure that impact is isolated to that which stems solely from mentoring.

## **Impact: Academics**

The Mentor-Scholar Program utilizes two main components for tracking academic progress. The first is teacher-centered assessments and evaluations, and the second is STAR assessments. To track student progress via report cards and other measures, the Assistant Coordinator has been allowed access to a district-wide digital platform that houses student progress in a myriad of areas. Access to this system is vital to the Mentor-Scholar Program, as we share this information with mentors to provide targeted support/interventions and influence program design.

Listed in Table 1 is an overall breakdown of the academic impact the Mentor-Scholar Program has had on our 37 seventh-grade participants for the 2014–2015 program year. There is a slight increase in overall cumulative GPA for the cohort when measured against their sixth-grade benchmark. The interesting data point is the number of students who remained static or increased their grades from the previous year, as shown in Table 2. The average amount of growth for those students, 60% of the cohort, was six points on their cumulative GPA—the equivalent of two letter grades.

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<b>Table 1: 7<sup>th</sup> Grade Mentor-Scholar Participants in Program Year (37 total participants)</b>	Academics (Average cumulative GPA of participants)
Benchmark for 7 <sup>th</sup> Grade Mentor-Scholar participants (Participant 6 <sup>th</sup> Grade averages)	72%
Mentor-Scholar 7 <sup>th</sup> Grade participants in program year	73%
Oswego Middle School average for program year (if applicable)	N/A

<b>Table 2: 7<sup>th</sup> Grade Mentor-Scholar Participants in Program Year (37 total participants)</b>	Academics (Average cumulative GPA of participants)
Average cumulative GPA of participants	73%
Percentage of participants showing improvement in cumulative GPA or at 6 <sup>th</sup> grade average	60%
Average increase in cumulative GPA for those showing improvement	6%

Tables 3 and 4 continue to highlight the academic impact of the Mentor-Scholar Program on eight-grade participants. This cohort had varying ranges in participant attendance, with 60% of mentoring sessions attended identified as an appropriate benchmark to include the largest cohort available while considering realistic mentoring impact. It is important to note that the benchmark figure compared to total cumulative GPA of the participants did not show an increase, but those participants who did show growth saw an increase in their cumulative GPA of 4%. Unfortunately, many of the individual successes within this population are masked due to the high needs of individual matches. This can be an area for further study, as the appropriate metrics for documenting mentoring impact have been scrutinized (Rhodes 2016).

<b>Table 3: 8<sup>th</sup> Grade Mentor-Scholar Participants in Program Year (37 total participants, 23 with over 60% session attendance)</b>	Academics (Average cumulative GPA of participants)
Benchmark for 8 <sup>th</sup> Grade Mentor-Scholar participants (Participant 7 <sup>th</sup> Grade averages)	78%
Mentor-Scholar 8 <sup>th</sup> Grade participants in program year	78%
Oswego Middle School average for program year (if applicable)	N/A

<b>Table 4: 8<sup>th</sup> Grade Mentor-Scholar Participants in Program Year (37 total participants, 23 with over 60% session attendance)</b>	Academics (Average cumulative GPA of participants)
Average cumulative GPA of participants	78%
Amount of participants showing improvement or at average	52%
Average increase in cumulative GPA for those showing improvement	4%

## Impact: STAR Scores

The second component of academic progress the Mentor-Scholar Program tracks is STAR scores. STAR, which is originally the acronym for “Standardized Test for the Assessment of Reading” but is now also an assessment of skills other than reading, is utilized district-wide as a predictor of student performance on state assessments. The timing of this assessment correlates with the start and end of yearly programming, making it an ideal metric. One of the difficulties in tracking academic impact on district students is that instructional and collegiate schedules do not align, and this makes isolating mentoring impacts difficult as some mentoring periods do not coincide with the start and end of marking periods.

The two STAR assessments used in partnership with the Mentor-Scholar Program are the STAR Math and STAR ELA (“English Language Arts”). These assessments are both issued in the fall and spring semesters and provide a different lens to focus on mentoring impact. Utilizing solely a student’s academic scores through a teacher-facilitated curriculum poses issues in

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calculating and isolating mentoring impact, as there may be differences in the amount of homework given, the acceptance of late assignments, assessment types, student perceptions of teacher disposition, etc. The STAR data reflects student aptitude in academic disciplines void of such discrepancies.

Table 5 highlights the STAR scores in Math for the 2014–2015 seventh-grade cohort. An interesting data point is the percentage of students who showed improvement in these scores, 56%, and the average percent of their improvement, 25%. While the scores on the STAR assessment have no bearing on the student’s academic status within the district, it is a strong indicator of their anticipated performance and growth on state assessments.

Table 6 highlights the STAR scores for the 2014–2015 seventh-grade cohort in English Language Arts (ELA). 72% of seventh-grade participants show growth in this area, with an average increase in their scores from fall to spring of 28%. This growth can be reasonably attributed to students showing increases in self-confidence and expression through interactions with a positive role model.

Table 7 shows the 2014–2015 eighth-grade cohort’s growth on their STAR Math assessment. The Mentor-Scholar Program was unable to receive access to the scores of this cohort in seventh grade due to confidentiality reasons.

Table 8 demonstrates the 2014–2015 eight-grade cohort’s growth on their STAR ELA assessment. The Mentor-Scholar Program was unable to receive access to the scores of this cohort in seventh grade due to confidentiality reasons. As shown in the seventh-grade cohort numbers, there is a similarly high increase in the percent of eighth-grade participants who increased their STAR ELA scores by a considerable margin.

<b>Table 5: 7<sup>th</sup> Grade: STAR Data - Math (32 participants)</b>	
6 <sup>th</sup> Grade (Benchmark)	Test not issued
Amount of Mentor-Scholar 7 <sup>th</sup> Grade participants showing improvement on their Spring assessment when compared to their Fall assessment	18 (56%)
Average percentage increase for Mentor-Scholar 7 <sup>th</sup> Grade participants showing improvement on their Spring assessment when compared to their Fall assessment	25%
Amount of Mentor-Scholar 7 <sup>th</sup> Grade participants showing regression on their Spring assessment when compared to their Fall assessment	14 (44%)
Average percentage decrease for Mentor-Scholar 7 <sup>th</sup> Grade participants showing regression on their Spring assessment when compared to their Fall assessment	5%

6 <sup>th</sup> Grade (Benchmark)	Test not issued
Amount of Mentor-Scholar 7 <sup>th</sup> Grade participants showing improvement on their Spring assessment when compared to their Fall assessment	21 (72%)
Average percentage increase for Mentor-Scholar 7 <sup>th</sup> Grade participants showing improvement on their Spring assessment when compared to their Fall assessment	28%
Amount of Mentor-Scholar 7 <sup>th</sup> Grade participants showing regression on their Spring assessment when compared to their Fall assessment	8 (28%)
Average percentage decrease for Mentor-Scholar 7 <sup>th</sup> Grade participants showing regression on their Spring assessment when compared to their Fall assessment	9%

7 <sup>th</sup> Grade (Benchmark)	Data Unavailable
Amount of Mentor-Scholar 8 <sup>th</sup> Grade participants showing improvement on their Spring assessment when compared to their Fall assessment	17 (89%)
Average percentage increase for Mentor-Scholar 8 <sup>th</sup> Grade participants showing improvement on their Spring assessment when compared to their Fall assessment	13%
Amount of Mentor-Scholar 8 <sup>th</sup> Grade participants showing regression on their Spring assessment when compared to their Fall assessment	2 (11%)
Average percentage decrease for Mentor-Scholar 8 <sup>th</sup> Grade participants showing regression on their Spring assessment when compared to their Fall assessment	2%

7 <sup>th</sup> Grade (Benchmark)	Data Unavailable
Amount of Mentor-Scholar 8 <sup>th</sup> Grade participants showing improvement on their Spring assessment when compared to their Fall assessment	12 (71%)
Average percentage increase for Mentor-Scholar 8 <sup>th</sup> Grade participants showing improvement on their Spring assessment when compared to their Fall assessment	24%
Amount of Mentor-Scholar 8 <sup>th</sup> Grade participants showing regression on their Spring assessment when compared to their Fall assessment	5 (29%)
Average percentage decrease for Mentor-Scholar 8 <sup>th</sup> Grade participants showing regression on their Spring assessment when compared to their Fall assessment	13%



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The disparity between the increases in Math and ELA scores is interesting and a topic the authors encourage for future research. Initial thoughts are that the undergraduate mentors are able to provide a higher level of support to areas of ELA due to their familiarity with subject matter and that the skills needed to be successful in ELA match closely with the skills that mentors use in their own academic pursuits at the university level. Conversely, the initial theory for the lack of similar growth in areas of STAR Math scores is that, as a result of the shift in K–12 Math curriculum to Math A, Common Core, etc., the transition has made it increasingly difficult for mentors to support mentees in this field, as the content is taught in a marginally different fashion.

## **Impact: Attendance**

One of the pillars of the Mentor-Scholar Program is positively impacting the attendance of district participants. Increasing school attendance has been a priority for OCSD and institutions throughout New York State. The Mentor-Scholar Program tracks attendance for all participants, not only in sessions attended, but also in instructional days attended.

Table 9 documents the impact that the Mentor-Scholar Program has had on 2014–2015 seventh-grade participants' attendance totals. The Mentor-Scholar Program has been able to keep district students at their benchmark for attendance at 171 instructional days attended. Participant attendance has been counted twice in this chart as our participants are also included in the Oswego Middle School's average attendance rate of 168 days attended. When comparing the attendance of participants from sixth grade to seventh grade, 43% of participants have increased their average attendance by an additional four days attended. This is a remarkable figure; it represents that some students are attending school for almost an additional week of instructional time.

Conversely, Table 9 also reflects that 57% of the 2014–2015 seventh-grade cohort have shown a decrease in attendance. To further expand on these figures, these numbers are taken solely on a quantitative scale and do not reflect the difficulties that some district students have experienced on an individual scale. Taking this into account, although many students may be missing traditional school days, they have attended on average 87% of mentoring sessions. In other words, students may still be missing a considerable number of instructional days, but they are attending school on the days there are mentoring sessions.

Oswego Middle School Average during program year (Instructional days attended)	168 (93%)
Mentor-Scholar 7 <sup>th</sup> Grade participants average instructional days attended in 6 <sup>th</sup> Grade (Benchmark)	171 (95%)
Mentor-Scholar 7 <sup>th</sup> Grade participants average instructional days attended in program year	171 (95%)
Amount of Mentor-Scholar 7 <sup>th</sup> Grade participants showing improvement in instructional days attended in program year when compared to instructional days attended in 6 <sup>th</sup> Grade	15 (43%)
Average increase in total instructional days attended for 7 <sup>th</sup> Grade Mentor-Scholar participants showing improvement in program year when compared to average instructional days attended in 6 <sup>th</sup> Grade	4 additional days attended
Amount of Mentor-Scholar 7 <sup>th</sup> Grade participants showing regression in instructional days attended in program year when compared to instructional days attended in 6 <sup>th</sup> Grade	20 (57%)
Average decrease in total instructional days attended for 7 <sup>th</sup> Grade Mentor-Scholar participants showing regression in instructional days attended in program year when compared to instructional days attended in 6 <sup>th</sup> Grade	7 additional instructional days missed
Percentage of Mentor-Scholar sessions attended by Mentor-Scholar 7 <sup>th</sup> Grade participants showing regression in instructional days attended in program year when compared to instructional days attended in 6 <sup>th</sup> Grade	87%

Table 10 documents the impact that the Mentor-Scholar Program has had on the 2014–2015 eight-grade participants' attendance totals. The Mentor-Scholar Program has been able to keep district students at their benchmark for attendance at 171 instructional days attended. Participant attendance has been counted twice in this chart, as Mentor-Scholar participants are also included in the Oswego Middle School's average attendance rate of 168 days attended. When comparing the attendance of participants from seventh grade to eighth grade, 35% of participants have increased or stayed at their average attendance, whereas 65% have indicated a decrease. While this is a negative, the increase in negative attendance has not significantly impacted mentoring attendance, with overall mentoring attendance for this cohort at 81%. An important aspect to note with the attendance figures highlighted above is that the average instructional days are counted quantitatively and do not leave interpretation for those students who have had unforeseen challenges, such as injuries, illnesses, etc.

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<b>Table 10: 8<sup>th</sup> Grade: Attendance (20 participants)</b>	
Oswego Middle School Average during program year (Instructional days attended)	168 (93%)
Mentor-Scholar 7 <sup>th</sup> Grade participants average instructional days attended in 7 <sup>th</sup> Grade (Benchmark)	171 (95%)
Mentor-Scholar 8 <sup>th</sup> Grade participants average instructional days attended in program year	171 (95%)
Amount of Mentor-Scholar 8 <sup>th</sup> Grade participants showing improvement in instructional days attended in program year when compared to instructional days attended in 7 <sup>th</sup> Grade	4 (20%)
Average increase in total instructional days attended for 8 <sup>th</sup> Grade Mentor-Scholar participants showing improvement in program year when compared to instructional days attended in 7 <sup>th</sup> Grade	4 days**
Amount of Mentor-Scholar 8 <sup>th</sup> Grade participants showing no change in instructional days attended in program year when compared to instructional days attended in 7 <sup>th</sup> Grade	3 (15%)
Amount of Mentor-Scholar 8 <sup>th</sup> Grade participants showing regression in instructional days attended in program year when compared to instructional days attended in 7 <sup>th</sup> Grade	13 (65%)
Average decrease in total instructional days attended for 8 <sup>th</sup> Grade Mentor-Scholar participants showing regression in instructional days attended in program year when compared to instructional days attended in 7 <sup>th</sup> Grade	4 additional instructional days missed
Percentage of Mentor-Scholar sessions attended by Mentor-Scholar 8 <sup>th</sup> Grade participants showing regression in instructional days attended in program year when compared to instructional days attended in 7 <sup>th</sup> Grade	81%

### Impact: Behavior and School Connectedness

The additional areas tracked in the Mentor-Scholar program, including behavior incidents and school connectedness, are still being developed in partnership with the OCSD. One of the challenges to tracking such areas is a lack of uniformity throughout the district, within buildings, and among individual staff regarding what constitutes a behavior-related issue and how such issues should be tracked. This challenge extends to school connectedness because of the subjective nature of the content. Surveys are being developed which will allow for students to self-report before and after participation in the program. However, more comprehensive metrics can be developed. The authors advocate that the area of behavior and students’ perception of comfort within the school is an area in need of additional study.

## Conclusion

The continued scrutiny in the field of K–12 education has led to innovative and dynamic ways to impact youth. Research has shown that to positively impact youth, there need to be strong relationships between a child and an adult (Grossman 2015). As this research continues to find more support, the field of mentoring will grow along with it. To ensure that we are meeting the needs of diverse and unique students, diverse and unique solutions must be developed. School-based mentoring programs address these issues while creating new avenues for investment in the success of communities by including stakeholders who previously have not been involved in the K–12 education process. It is imperative that mentoring programs support students and are structured in effective and mutually beneficial ways to avoid negative impacts on students. It is with this goal in mind that this article was published and submitted to further expand the field of mentoring.

The Mentor-Scholar Program is unique in its structure and origins. The climate that has led to its creation and sustainability may have been original: the program had a university president and superintendent come together with a shared vision of success for all participants. However, regardless of this ideal situation, the roadmap created by Mentor-Scholar is one that can be replicated and shared across rural, urban, and suburban locales. As more districts face shrinking budgets, larger class sizes, and overwhelmed teachers, the role of programs such as the Mentor-Scholar Program becomes paramount. Of course, there is much left to explore and research. More universal studies are needed on best practices that holistically support student growth outside of the academic arena. There needs to be more clarity on which behaviors can be impacted through having a student mentor and how to streamline that impact. While these areas are still being explored, the Mentor-Scholar Program model and partnership outlined here can help to act as a guide.

## References

- Bayer, Amanda, Jean Baldwin Grossman, and David L. DuBois. 2015. "Using Volunteer Mentors to Improve the Academic Outcomes of Underserved Students: The Role of Relationships." *Journal of Community Psychology* 43 no. 4: 408–429.

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- Ben-Eliyahu, Adar. 2015. "Chronicle of Evidence-based Mentoring." *Five Important Ways that Mentors Help Youth Regulate Their Emotions*. <https://chronicle.umbmentoring.org/guest-research-corner-how-mentors-can-help-young-people-regulate-their-emotions/>.
- Everhart, Robin S. 2016. "Teaching Tools to Improve the Development of Empathy in Service-learning Students." *Journal of Higher Education Outreach and Engagement* 20 no. 2: 129–54.
- Hayward, Michelle. 2015. "Got Grit? Leading and Teaching for Success." *AMLE Magazine* 3 no. 3: 24–26.
- Herrera, Carla, Jean Baldwin Grossman, Tina J. Kauh, Amy F. Feldman, and Jennifer McMaken. 2011. "Mentoring in Schools: An Impact Study of Big Brothers Big Sisters School-Based Mentoring." *Child Development* 82 no. 1: 346–361.
- Massachusetts Department of Elementary and Secondary Education. 2008. *Kindergarten Learning Experiences*. <http://www.doe.mass.edu/frameworks/0408kle.docx>.
- Novak, Julie, Vern Markey, and Mike Allen. 2007. "Evaluating Cognitive Outcomes of Service Learning in Higher Education: A Meta-analysis." *Communication Research Reports* 24: 149–57.
- Sandstrom, Heather and Sandra Huerta. 2013. *The Negative Effects of Instability on Child Development: A Research Synthesis*. Urban Institute. [https://www.urban.org/research/publication/negative-effects-instability-child-development-research-synthesis/view/full\\_report](https://www.urban.org/research/publication/negative-effects-instability-child-development-research-synthesis/view/full_report).
- United States Census Bureau. 2017. "Income and Poverty in the United States: 2016." U.S. Dept. of Commerce. <https://www.census.gov/content/dam/Census/library/publications/2017/demo/P60-259.pdf>.