Success in High-Need Schools Journal
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Journal Issue Theme: "Preparing for College Success in Middle and High Schools"

Although the Common Core movement to raise academic standards and No Child Left Behind's emphasis on school performance sought uniformity in the mission of secondary education, there is still widespread disagreement on the purposes of middle and high schools. While issues at the middle school level tend to revolve around early adolescence and the transition from elementary school to high school, the fundamental mission of high school has been widely contested. Three purposes have vied for priority: 1) high schools exist to prepare students for college; 2) high schools should primarily prepare students for employment; and 3) in the tradition of John Dewey, the purpose of high schools is to prepare students for citizenship in American democracy. In the midst of such mission debates, persistently high student drop out rates and weak preparation for college, especially in high-need schools, continue to loom large. Improving school performance was a centerpiece of No Child Left Behind and remains so under a more decentralized strategy with the new federal Every Student Succeeds Act. Time will tell if increasing responsibility and accountability for student outcomes at the state and local levels changes often disappointing school performance.

While lack of money is undoubtedly part of the problem, undue focus on ACT scores in predicting college success may get in the way of more comprehensive approaches beginning early in students' school careers that address individual student needs and circumstances, including their vocational interests. Several Chicago charter schools have achieved remarkable success by focusing on motivation, study skills, school culture, mentoring, college partnerships, and tracking student progress in college. Similarly, some mainstream high schools in Oregon, including Portland high-need schools, have dramatically increased their graduation rates using comprehensive approaches. Dual credit programs where students receive both high school and college credit in selected courses have helped to create a more seamless connection between secondary and post-secondary education. Unfortunately, dual credit access is much lower in urban areas, especially in high-need schools with large minority populations, than in rural, suburban, and mostly white high schools.

This issue of *Success in High-Need Schools Journal* shines a spotlight on programs at the middle and high school levels that reflect these issues and are making a difference in improving

student outcomes, high school completion, and college entrance and graduation. This issue of the journal also presents case studies of college and university teacher preparation programs and "Grade 6-16" partnerships designed both to promote engaging classroom instruction and mentoring and to provide a seamless pipeline for student success in college and careers.

Table of Contents

Publisher's Column: Preparing for College Success in Middle and High Schools

By: Dr. Jan Fitzsimmons

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For decades, educators, leaders in business, policy makers and society in general have debated the role and structure of secondary education. The current model represents one that was borne out of the Industrial Revolution. But surely, hasn't the need for secondary education changed dramatically as the world's progress has accelerated? And, while "Yes!" is the resounding answer, how secondary education should change and what it should look like varies from educator to educator, reformer to reformer and business leader to business leader. In this issue of *Success In High-Need Schools*, we explore some exemplary ideas and pilot programs for both secondary education students and teachers -- ideas not only conceptualized, but implemented under the watchful eye of researchers across the country.

In *The ISBE Vision for High School Reform*, Berberet summarizes the work of a statewide initiative to reform secondary education. In this statewide focus, multiple education and business partners collaborate under the vigilant eye of Illinois' State Board of Education to improve the quality of the educational experience for all high school students. This work is fueled by the *Every Student Succeeds Act* and the recently adopted Postsecondary Workforce Act. Critical components are discussed in the article.

In McGee's article, *Step Away from the Lasers: Refocusing on What Matters Most for College and Career Readiness,* we are questioned about the reform initiatives we've invested heavily in at the secondary level. These initiatives have focused our energies on achievement at all costs. And it is perhaps "out of the mouth's of babes," who McGee quotes so eloquently, that we find critical tools to reimagine and rethink the best way to educate middle and high school youth.

Doreen Huvaere's article, *Middle School Teacher Preparation at Lewis University*, examines not only the reform movements at the junior high and middle school level, but challenges us to consider that as ideas advocating change in the classroom evolve, so too must the preparation programs that bring teachers to those classrooms. Huvaere's article provides a template for

teacher “prep” reform taking into consideration not only reform initiatives and bureaucratic change, but research on the whole child!

In colonial America, males always outperformed females in all aspects of learning including reading and motivation for reading. Perhaps that is because females had little opportunity and were not encouraged to grow as readers and writers. But today, as McNally explains in her article, *Targeting Adolescent Male Reading Motivation as Preparation for College Success*, the tables are turned and females consistently outperform males as examined in tests of achievement and motivation. What explains this phenomenon and how can we address these gender discrepancies to allow equitable opportunities for learning to read and reading to learn in all neighborhoods? McNally explores studies over the last two decades that offer some insights.

In Jeong Choe et al’s article, a school district in California is implementing an integrated year long program of study that takes students from the foundations of classroom research in the sciences and the humanities to real world project and problem-based learning. Advanced Authentic Research (AAR) provides the opportunity for high school students to find and ignite a passion for study they might further investigate in college and grad school to advance the quality of life. They are paired with “real world mentors” for the year and develop the presentation skills, persistence and grit, and communication and social and emotional skills business leaders are hungry for future employees to have. Examine this article to learn just how these educators are addressing secondary reform and imagine ways to bring these ideas to capacity.

It was once thought that technology would revolutionize the educational classroom—maybe even replace teachers. Researcher, Julie Meyer, in her article *Perspectives on the Increasing Role of Technology*, examines the evidence and discusses whether that premise has lived up to its hype. Questions raised include whether the way we measure the impact of technology is at fault or whether we have equipped teachers with the appropriate background to effectively use “tech” tools to leverage student learning? As we consider secondary reform, what is the role of technology?

How does the context of a high-need community affect the development of social and emotional learning in adolescents and what does that mean for secondary schools and teachers?” In Rivera’s article*, Social and Emotional Learning to Support Adolescent Development in High Needs Schools*, she argues that the environmental factors of high-need-schools exponentially compound the already “stormy” effects of adolescent social and emotional development. Rivera goes on to document and support the importance of a

framework of social and emotional competencies to ground learning in all secondary classrooms and schools—especially in high-need schools!

What is peace? It is not just an absence of fights says John Horan in his article, *Social Justice at North Lawndale College Prep: The Peace Warrior.* In an endeavor to understand and implement social justice ideas and practices in two high schools on the west side of Chicago, Horan describes the transformation that had to occur and the impact it is having on the adolescents who call North Lawndale College Prep-HOME!

How should secondary education change and what should it look like? And, how should we prepare not only teachers but leaders to effectively facilitate new ideas about teaching and learning in the middle and high school classrooms and schools? We hope the articles in this issue of *Success in High-Need Schools* pique your interest and ignite a passion in you for working to develop model pathways to success in education for pre-adolescent and adolescent youth whose experiences are vital to advancing the quality of life in our global society.

The ISBE Vision for High School Reform

By: Dr. Jerry Berberet
Editor

Author Bio: *Jerry Berberet, Ph.D., is the longtime editor of Journal for Success in High-Need Schools.*

The Illinois State Board of Education (ISBE), in implementing the US Department of Education Every Student Succeeds Act (ESSA), has articulated a plan for high school reform in Illinois. Calling for a focus on "The Whole Child," ISBE envisions "an ecology of multiple and interconnected parts nesting in overlapping systems"—school, home, and community collaborating to address the cognitive, social, and emotional needs of each student. Within this framework, ISBE views its mission as providing leadership and resources that engage all stakeholders—legislators, students, parents, teachers, school administrators, and others—"in formulating and advocating for policies that enhance education, empower districts, and ensure equitable outcomes for all students." (Helfer and Reynolds, February 9, 2018) To fulfill this vision, ISBE envisions a "reimagining" of teaching and learning at all levels, building "competency capacity" within teacher preparation programs, and partnering with higher education to ease transitions from high school to college. In its focus on competency-based education, Illinois is one of approximately twenty states nationally to achieve "advanced state" status.

ISBE has set the ambitious goals of achieving ninety percent or more of ninth graders on track to graduate with their class cohort and ninety percent or more of students graduating from high school "ready" for college and career. To realize these educational targets, ISBE has set further goals that all students will be supported by "highly prepared and effective" teachers and school leaders, as well as experience a "safe and healthy" learning environment. Achievement will be assessed through multiple indicators of school and student success. Graduation rates will count 50% in measuring school quality, with lesser percentages assigned to such measures as SAT scores, English learner proficiency, reduced chronic absenteeism, 9th grade on track, college and career readiness, and safe and healthy school climate.

Primary student indicator measures will include Advanced Placement and dual credit grades and scores (minimum grade of C or score of 3+) in English language arts and math courses, ACT minimum subject scores of 18 in English, 22 in reading, and 22 in math, and SAT minimums of 480 in reading and writing and 530 in math. In addition to these fairly traditional measures of minimum student achievement, ESSA requires completion of at least three of the following career ready indicators as a way of better integrating college and career readiness in student learning experiences: workplace learning, industry credential, military service (including ROTC), dual credit career pathway course, career readiness program of study, consistent employment for minimum of 12 months, consecutive summer employment, 25 hours of community service, and two or more organized co-curricular activities.

In addition to alignment with ESSA, ISBE is implementing the Postsecondary and Workforce Readiness (PWR) Act. PWR is a highly integrated approach to college and career readiness involving partnerships of school districts with employers, postsecondary institutions, and civic and community organizations using competency based learning systems, college and career pathway endorsements, and a special focus on "transitional math" to improve student success in postsecondary math. A pilot competency-based graduation requirements cohort program with ten mostly high-need school districts was initiated in 2017. A second cohort of ten additional districts was named in 2018, and applications have been invited for a third cohort to be named in December 2018. Named in the second cohort, the Belvidere District, as an example, has identified four elements to create a more student-centered learning environment: personalization, student ownership, technology enhanced learning, and a competency based approach. Belvidere intends to increase student ownership of personal growth through "self-directed learning paths," while developing student social and emotional resilience and understanding and respect for individual and cultural differences.

Competencies are defined as learning that is "explicit, measurable, and transferable;" emphasizing "application and creation of knowledge, along with the development of important skills and dispositions" and assessment that is "meaningful and a positive learning experience." Students must demonstrate mastery of all required competencies to gain credit. If needed students will receive more time and individualized instruction to demonstrate mastery and to advance. Students must demonstrate an ability to attain postsecondary education and career-related competencies beyond those needed for graduation. Students are assessed using multiple measures to determine mastery, including through applications of knowledge beyond traditional coursework such as in supervised career development experiences outside the classroom. Educators and schools have the responsibility to "ensure that students receive timely, differentiated support based on their individual needs." (Reynolds et al, October 12, 2018)

The transitional math PWR pathway involves math instruction for high school seniors designed to guarantee placement in college-level math at Illinois community colleges. Pilot implementation of the traditional math program is occurring with more than thirty school district-community college partners. ISBE and the Illinois Community College Board (ICCB) are collaborating on a phased implementation plan and program benchmarks with the goal of achieving full statewide implementation of transitional math instruction in all school districts by no later than June 30, 2019.

PWR College and Career Pathway Endorsements is a voluntary program to recognize public high school graduates who complete the career-focused instructional sequence as well as requirements related to an individualized plan, professional learning, and readiness for non-remedial coursework. The endorsement certifies student readiness for college and careers and completion of instruction and professional learning experiences in a selected career interest area. An agency stakeholder interagency committee has been tasked to recommend a

sequence of minimum career competencies for particular high school occupational pathways during 2018 and ICCB and the Illinois Board for Higher Education (IBHE) will adopt requirements for postsecondary institutions.

Two pathway designations have been established for high school graduates with the following indicators:

1. Distinguished Scholar:
    - GPA – 3.75/4.0 scale
    - ACT – minimum 30; SAT – minimum 1400
    - At least one academic indicator in both English language arts and math
    - 3 career ready indicators during the junior/senior years
    - 95% school attendance junior and senior years
2. College and Career Ready
    - GPA – 2.8/4.0 scale
    - 95% attendance junior and senior years
    - College and Career Pathway Endorsement under PWR or all of the following:
    - Identify a career area of interest by end of sophomore year
    - One academic indicator in both ELA and math in junior/senior years
    - Three career ready indicators during junior/senior years

Taken together the ISBE plan for high school reform provides for a highly integrated approach to college and career preparation featuring both competency-based classroom instruction and career application experiences, partnerships among all educational stakeholders, a commitment to insure postsecondary preparation for all students, and a priority on English language arts and math, with a special focus on the latter.

References

This article is based on the following two webinar presentations by ISBE officials to the Center for Success partnership of colleges and universities:

Helfer, Jason and Mary Reynolds. *Vision for Illinois High School Reform* (February 9, 2018)

Reynolds, Mary, Dave Carson, and Shannon Becker. *Illinois Postsecondary and Workforce Readiness Act: Incubators of Innovation* (October 12, 2018)

In addition, the Illinois Competency Working Group, composed of ISBE staff and others has prepared a guidebook for pilot sites, *Developing Learner Competencies for Use in a Competency-Based Education System* (2018).

Step Away from the Lasers: Refocusing on What Matters Most for College and Career Readiness

By: "Max" McGee

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Abstract

How often have we heard educators and policy makers proclaim that we need a "laser-like focus" on improving student achievement so students are college and career ready? Whether or not this focus is producing the desired results is arguable as improvements and academic gains are far more episodic than systemic. Ironically, these lasers have induced temporary blindness to deeply understanding and actively addressing many of the social-emotional obstacles our middle and high school students face today that need to be surmounted in order for our children to become college and career ready. If, however, we can provide these students with guidance and support to develop their internal assets and tap external resources to face and tackle these challenges, it is highly likely their achievement will improve.

Introduction: Alarming Trends

There are numerous obstacles that induce extraordinary pressures on our middle and high schools students that interfere with their learning. These pressures have contributed to "near epidemic levels of anxiety among young people, with as many as one in eight children contending with diagnosable anxiety disorders." (Anderson, 2017). Consequently, we have seen disengagement in schooling as evidenced by increases in hospitalization holds, chronic truancy, and school "refusal," a term unheard of a decade ago. Worse, we see our children at higher risk of serious depression, self-harm, and suicide. The latter is of particular concern in several states:

> *"In California and across the country, suicide is the second leading cause of death among teens—a grim reminder that many high school students' primary barrier to adulthood is themselves. More young people take their own lives than the number killed by cancer, heart disease, birth defects, stroke, flu, pneumonia and chronic lung disease combined. And under legislation set to take effect in January, school systems up and down the state will be forced to confront the taboo topic head-on."* (Calefati, 2018)

> *"According to the Arizona Department of Health Services, there were 47 suicides among children in Arizona in 2015, accounting for six percent of all child deaths. This was a 26 percent increase from 2014 and an 81 percent increase since 2009."* (Coronel, 2017)
>
> *"Suicide rates in Utah jumped 85% between 2011 and 2014."* (Hyde, 2016)

Thus, it is time to shut down – or at least soften – the laser beam focus on improving achievement scores and instead shine a spotlight on what we can do to ensure our students have the self-determination, resilience, and internal and external assets and supports necessary to become responsible, capable, compassionate adults. The first step in supporting these students is realizing the pressures they face. Among the top three are: grades, omnipresent social media, and college admissions.

GPA Pressures

"Grade grubbing," i.e. arguing with a teacher over that tenth of a point that will make one's final grade a B- instead of C+ is hardly new. What is new is the pressure placed on students through systems of weighted grades, class rankings, and college admissions. Writes one student:

> *"Our school is comprised largely of perfectionist students who are terrified by the idea of failure. The race for a higher Grade Point Average (GPA) dominates in our community. Our worth and value in the eyes of our friends, family, and, worst of all, ourselves, is dictated by this number. Being ranked by GPA only worsens the crisis through constant comparison to each other. Mistakes, whether during lectures or on tests, become viewed by students, and even many teachers, as signs of weakness and stupidity.*
>
> *Fundamentally, if making mistakes is how we learn, and if those with the highest grades have by definition made the fewest mistakes, then when we compete for the highest grades, we compete for who has made the fewest mistakes, and therefore who has learned the least. Why, then, are our mistakes equivalent to failure? The answer lies, of course, in the GPA."* (A, 2018*)*

Weighting a grade means adding an extra point, fraction of a point, or even points to the student's course grade based on the difficulty of the course. Most middle schools and high schools have a four point system: an A is worth 4 points, a B 3 points, a C 2 points, and a D 1 point and will add that extra point, fraction, or more to harder classes. For example, in Palo Alto, sophomores, juniors, and seniors all receive an extra point for a C or better in any class designated as an honors or Advanced Placement (AP) class. In New Trier High School in Illinois, those same students could take an AP or "high" honors' class and receive an extra 1.33 points added to their grade. Meanwhile, at the Illinois Mathematics and Science Academy (IMSA) there is no weighting at all. Thus, a student getting a "B" in AP Calculus will have a 3.0 on his

report card at IMSA, a 4.0 in Palo Alto and a 4.33 in New Trier. Clearly, weighted grades cause extreme variations across different school districts and states, leading to unfair comparisons when it comes time to be considered for admission to the same college. As a result, most colleges use their own systems to calculate grades to assure a level playing field. Yet high schools persist in weighting grades.

Weighted grading creates undue and unhealthy stress, reduces enrollment in non-weighted elective classes, and exacerbates existing inequities in our school systems. Reporting weighted grades on transcripts creates a highly competitive, attainment-oriented culture that is highly stressful and unhealthy for many, if not most, students. Students who overload themselves with AP and Honors classes will generally have more homework and consequently less time to sleep, relax or play. Our students are already suffering from sleep deprivation; a weighted GPA system does nothing but drive students to pad their schedules with heavier workloads which impart more stress and further disrupt their sleep. Excessive stress eventually leads to higher anxiety, even depression, and consequently disengagement, truancy, and self-harm.

Another way in which weighted grades can hurt, not help, our students is through the disappearance of elective classes. Students striving to maximize their weighted GPA will focus on packing their schedules with Honors and AP classes rather than to pursue non-weighted electives that may interest them and allow them to express their creativity. In order to keep up with their fellow peers and achieve the highest GPA possible, students will change course selection habits to take more APs and Honors courses while they take fewer of the interesting, robust electives not designated for weighting such as journalism, Shakespeare, philosophy, and courses in the fine arts. In fact, students that take numerous weighted classes will likely have GPAs well over 4.0 such as a 4.2, 4.33, 4.4567, etc.. If these students take a non-weighted elective and get an A (4 points), their GPA actually DROPS. It is no wonder non-weighted elective classes become less popular in weighted systems.

A weighted GPA system has another downfall, this one with harsh ramifications. While recent initiatives have made Advanced Placement classes more accessible for all students, enrollment of historically underrepresented students in more rigorous classes is still nowhere near proportional. There are still barriers to full opportunity and access, the primary one being the early educational background of the students. In districts where there is a significant achievement gap, most low-income students will not have the preparation and foundational skills to succeed in multiple AP classes. With a weighted grading system, more affluent classmates who already have educational advantages and more opportunity and access to high quality programs and experiences – both within and outside of school – in elementary and middle school now have the additional advantage of extra points as they have been better equipped to take multiple AP and honors courses.

So what can be done? Let's bring in the student voice. One of my former students may have said it all when she wrote in her op-ed column:

"Instead of weighting GPAs, can we encourage inquiry-driven learning for the sake of learning? Can we harness the freedom that blended courses offer to grow beyond the constrictions of the AP and provide classes that are based on discussion, exploration and analytical debate? Can we celebrate passions without accolades? Can we require free time, adequate hours of sleep, time spent with friends, or reading books for pleasure? High school shouldn't be about manufacturing GPAs. This is our time to explore, take risks and develop skills we didn't know we had. We must feel free to choose courses that support the self-discovery and personal growth needed to carry us past bachelors and masters and doctorates to what matters most: the way our educations are put to use and how we shape our lives — the friends and partners we choose, the families we create, the companies we start, the books we write, the films we make, the people we heal, the technologies we invent and the lessons we pass down to our children."

Pervasiveness of Social Media

Turning to social media, one need only to spend a few moments on any middle or high school campus to see the impact of smart phones. At lunch time students sit alone with their phones or tablets watching videos, playing games, listening to music, snap chatting, making memes, or instagramming while other students sit in groups sharing the same. That is what we see … what we don't see is how students use these ubiquitous devices to cheat and to bully and for porn and for gambling. Smart phones are also excellent resources for learning, for fact-checking, for computing, for reading, and for exploration and discovery. The real issue, then, is not the device itself but their use; the challenge is not how we adults control their use but how we help students to monitor and control their own use. Some schools have banned cell phones outright, some use monitoring systems such as Social Sentinel to alert adults to threats and self-harm, several use monitoring systems in classrooms so teachers can mirror student screens, others black list or white list sites, and still others educate parents on an array of monitoring apps such as Teen Safe, Router Limits, and Web Watch. While schools deserve credit for attempts to manage this pervasive problem, the root causes of excessive technology use lay in the students themselves. Many of the causes are not new – peer pressure, establishing one's identity, and needing to connect with and belong to someone, somewhere … even if playing Fortnite long hours every night with peers from across the globe.

The answer is not to fight the battle to control access to technology. We adults may win battles, but we will lose the war in the long run. What we need to do is to ensure that each and every child is closely connected with his or her school. Every child must sense they belong, they are welcome, and they are safe. Every student must have a caring, trusted adult on campus who understands, empathizes, and listens to the student's needs. Having observed countless classes in my 37 years in educational administration, I have always found that the teachers who are caring, trusted, and engaging have few, if any, disciplinary problems and that the kids in their classes simply do not get distracted by their devices. Professional learning that supports administrators, teachers, and staff initiatives around fostering student connection, engagement, and belonging will reduce dependence on devices and increase student sense of self-worth and self-determination.

College Admissions

We have all heard stories of parents preparing students to get into the most prestigious pre-kindergarten programs in order to increase their chances to attend a top tier university. While these instances may be more entertaining than alarming, by the time students reach eighth and ninth grade, admissions mania is the alarming rule and not the entertaining exception. We call this the "Performance Arms Race." One principal described the effects of this arms race in a letter to his community:

> *"Our teachers and District have simply created and maintained a system that our community/country has demanded from us over the past 20 years since college admissions mania went into hyper drive, since vocational training programs were dismantled, and since earning "A's" in AP classes became the norm.*
>
> *Our teachers feel the pressure, administration and counseling feel the pressure, and now parents/students are really feeling the pressures. When we grew up nobody asked us what our GPA was, and it was "cool" to work on the roof of a house. This competitive culture has significantly impacted our young adults. We endlessly discuss test scores, National Merit Scholarships, reading scores, AP scholars, comparisons to other school Districts and this is when we start losing our collective souls--and our children."* (Klein, 2018)

Realizing that only a small number of students from any high school will be admitted to a highly selective college, kids will naturally compete for these spots. They will compete for better grades, for adding more AP courses to their resume, for glamorous service projects, for padding resumes with activities in the hope that they will get a leg up on their classmates. This competition results in students being over-programmed and overworked and, as a result, they sleep, socialize face-to-face, and relax less. When there is too much to do and too little time, students will sacrifice sleep and take shortcuts. When sleep deprived, students make poor judgments, such as turning to stimulants to keep them awake and finding ways to cheat on homework and tests. Cheating is a significant problem, yet it has become acceptable to share homework, cut and paste from unattributed web sources, and use technology in ways that baffle teachers.

Every competition, like every horse race, has winners and losers. Some of the losers realize early on that they can't compete and eliminate themselves from the race while others strive to catch the pack and perhaps even finish in the money, though in reality they generally fall further behind. As early as middle school students self-select or are placed into lanes that effectively determine whether or not they will compete for admissions to the top schools. Though all schools voice the importance of being "college and career" ready, there is a wide span between community colleges and the elite and between entry-level jobs and high paying careers. Those students who opt to sit out the Performance Arms Race do so by choice or placement. While they may be spared some anxiety, have the opportunity to get more sleep,

and have access to more discretionary time, these are the students who are disconnected from school, who do not engage in class, and who become the chronic truants. As schools define themselves by test scores and college admissions and as teachers increasingly are evaluated by student test scores, schools become focused on preparing students for tests and not on what these students need.

Above all students need caring, trusted, engaging teachers; they need opportunities and access to classes and programs that interest and motivate them based on their aptitudes; they need to be recognized for the assets they bring to school and not the deficits others too often see. They need teachers and counselors who devote time to them, who seek first to understand them, and who take responsibility for creating conditions and providing supports necessary to graduate and succeed long after they leave school. When they are absent from school, they need teachers and staff who check up on them and get them back to school without threats. They need alternative programming, but what they often get are low-level classes too often taught by beginning teachers or the "old guard" who believe that more drill and practice is the key to success. These are the students who drop out, sometimes physically, sometimes mentally. More often than not they are boys, boys who are made to sit still and told to sit up straight and to listen. They are boys who need to move, to act, and to be themselves. To use Dix's term, we see these students as the "collateral damage" of the Performance Arms Race.

As collateral damage, these students sense that they do not really matter. What then becomes of their identify. Ta-Nehisi Coates in *Between the World and Me* shares the determination of boys and young men - especially black youth - to find a way to prevent their identity and masculinity from being stolen and how fundamentally important it is to preserve their power. They arm themselves – often quite literally – and mask their anger, rage, and disappointment beyond a protective shield. When breached or when it becomes too heavy to hold, bad things can happen. Cutting classes or arms, dropping out and staying out, harming themselves or others are all consequences for these self-perceived losers.

But what about the also rans, those who finished the race but lost to the fastest. If the disengaged are "collateral damage," these are "cannon fodder." Dix writes:

> *"I called students who apply to high status, low admission rate colleges and universities "cannon fodder." Charging ahead to breach the walls of these institutions has increasingly become an exercise in futility even for the best, most accomplished students. Admission officers at these schools routinely tell audiences they could "fill the class two or three times over" from the reject pile. They supposedly mean this comment to be comforting, but it provides little solace to the rejected students lying desolate on the field of battle.*
>
> *I return to this metaphor because of the damage done to students entering the college admission process. Those inculcated with the idea that only a high status college will do for their post-secondary lives must endure a four-year slog through*

> *high school to position themselves for a virtually impossible result. When they're rejected, all that work seems to have been for naught. They have lost their four years of high school pursuing a fruitless goal, with the end results being cynicism about the system, regret over lost time, mental and physical exhaustion and a feeling that studying and being active don't really matter."*
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> *… It's clear that applying to these [elite] institutions is a losing proposition."* (Dix, 2016)

Clearly, solving the college admissions frenzy cannot be accomplished by middle schools and high schools alone. We are encouraged that colleges are beginning to change their practices and are clarifying what really matters to them: persistence, resilience, service, and self-determination. The University of Chicago is no longer going to use SAT scores, and the 80+ schools endorsing the Turning the Tide report are promising. We also must redouble efforts to educate parents and students about what college is and is not and remind them of the truth behind the title of Bruni's book, *Where You Go Is Not Who You Will Be*. Once again, the more opportunities and access students have to strengthen their sense of self-efficacy and ability to persist in the face of challenges, the more ready they will be for college and career.

In summary, college and career readiness cannot be measured only by grades and test scores. College and career readiness also requires more than the four C's of 21st century education: critical thinking, creativity, collaboration, and communication. While all of the above are important, real college and career – and life – readiness requires self-confidence, self-awareness, and self-determination, as well as resilience, persistence, and compassion. Rather than laser-focusing on achievement, we better serve and prepare our students by giving light to all three readiness components: achievement, the four C's, AND social-emotional well-being.

References

A, J. (2018, January 31). Overriding the Game: A student's perspective on creating school policy change to improve engagement and well-being. Retrieved May 08, 2018, from http://www.challengesuccess.org/blog/overriding-gamea-students-perspective-creating-school-policy-change-improve-engagement-well/

Almasy, S. (2018, January 17). 6 teen suicides in 6 months in 1 Ohio school district. Retrieved May 08, 2018, from https://www.cnn.com/2018/01/16/health/ohio-suicide-cluster/index.html

Appleton, R. (2016, December 16). Alarming cluster of youth suicides in Fresno County commanding attention of parents. Retrieved May 08, 2018, from http://abc30.com/news/alarming-cluster-of-youth-suicides-in-fresno-county-commanding-attention-of-parents/1659249/

Anderson, J. (2017, November 29). Coping Skills for Anxious Times. Retrieved from https://www.gse.harvard.edu/news/uk/17/11/coping-skills-anxious-times

Bodenner, C. (2015, November 22). 'All That Matters Is Achievement'. Retrieved May 08, 2018, from https://www.theatlantic.com/notes/2015/11/all-that-matters-is-achievement/417231/

Bruner, Tom. (2018, February 2). Not Just Another Suicide. Retrieved May 08, 2018, from http://brunersbreak.com/the-game-called-life/not-just-another-suicide/

Calefati, J. (2018, February 12). Teen suicide clusters prompt mandate for California schools to confront taboo topic. Retrieved May 10, 2018, from https://calmatters.org/articles/teen-suicide-clusters-prompt-mandate-for-california-schools-to-confront-taboo-topic/

Challenge Success (Ed.). (2017, Spring). Stanford Survey of Adolescent School Experiences Report. Retrieved May 08, 2018, from https://gunn.pausd.org/sites/default/files/Gunn%20HS%20Survey%20Report%20Spring%202017.pdf

Clinedinst, M., & Koranteng, A. (2017). 2017 State of College Admissions. Retrieved May 08, 2018, from https://www.nacacnet.org/globalassets/documents/publications/research/soca17final.pdf

College Board (Ed.). (2017). Admission Decisions: What Counts. Retrieved May 08, 2018, from https://professionals.collegeboard.org/guidance/applications/decisions

College Confidential. (2013, April). 15 year admissions trend for UChicago, Harvard, Stanford. Retrieved May 08, 2018, from https://talk.collegeconfidential.com/university-chicago/1318276-15-year-admissions-trend-for-uchicago-harvard-stanford.html

College Transitions (Ed.). (2018, March 28). Early Action/Decision vs. Regular Decision Admission Rates. Retrieved May 08, 2018, from https://www.collegetransitions.com/early-actiondecision-vs-regular-decision-admission-rates/

Coronel, J. (2017, November 08). Tragedy strikes Corona community. Retrieved May 08, 2018, from http://www.wranglernews.com/2017/11/08/tragedy-student-death-strikes-corona-community/

DeHahn, P. (2017, April 07). It's harder than it's ever been to get into the Ivy League. Retrieved May 08, 2018, from http://college.usatoday.com/2017/04/05/the-class-of-2021-is-shattering-ivy-league-admissions-records/

DeRuy, E. (2017, July 06). UC admission rate for Californian students drops slightly. Retrieved May 08, 2018, from https://www.mercurynews.com/2017/07/06/uc-admission-rate-for-california-students-drops/

Dix, W. (2016, May 24). Rethinking The Meaning Of Colleges' Low Acceptance Rates. Retrieved May 08, 2018, from https://www.forbes.com/sites/willarddix/2016/05/24/rethinking-the-meaning-of-colleges-low-acceptance-rates/

Fenton, M. (2018, February 22). There Has to Be a Better Way for Kids to Apply to College. Retrieved May 08, 2018, from https://grownandflown.com/better-way-kids-apply-college/

Fitzgerald, R. (2016, June 27). Admissions reviews more than 55,000 applications for fall of 2016. Retrieved May 08, 2018, from https://record.umich.edu/articles/admissions-reviews-more-55000-applications-fall

Friedman, J. (2016, September 22). Explore College Admission Trends at Top National Universities in 4 Graphs. Retrieved May 08, 2018, from https://www.usnews.com/education/best-colleges/articles/2016-09-22/explore-college-admissions-trends-at-top-national-universities-in-4-graphs

Holmes, L. (2017, August 04). Suicide Rates For Teen Boys And Girls Are Climbing. Retrieved May 10, 2018, from https://www.huffingtonpost.com/entry/suicide-rates-teen-girls_us_59848b64e4b0cb15b1be13f4

Hyde, J. (2016, December 15). The Lone Peak story: What you didn't know about affluence and teen suicide. Retrieved May 08, 2018, from https://www.deseretnews.com/article/865669275/The-Lone-Peak-story-What-you-didnt-know-about-affluence-and-teen-suicide.html

Ishkanian, E. (2014, February 08). Newton reels from mourns third teen suicide of school year - The Boston Globe. Retrieved May 08, 2018, from https://www.bostonglobe.com/metro/2014/02/08/newton-reels-from-mourns-third-teen-suicide-school-year/kH71sfsoBs6x6jcV3XKmYJ/story.html

Jacobson, J. (2018, May 08). Seventh teen suicide prompts community involvement in Herriman. Retrieved May 08, 2018, from http://www.good4utah.com/news/local-news/seventh-teen-suicide-prompts-community-involvement-in-herriman/1165932094

Klein, L. (2018, February 9). A Letter from our Community. Retrieved from https://theswordmovie.com/2018/02/01/a-letter-from-our-community/

Korte, L. (2017, May 30). Youth suicide rates are rising. School and the Internet may be to blame. Retrieved May 08, 2018, from https://www.usatoday.com/story/news/nation-now/2017/05/30/youth-suicide-rates-rising-school-and-internet-may-blame/356539001/

KSAZ. (2018, February 27). String of suicides devastate Queen Creek High School. Retrieved May 08, 2018, from http://www.fox10phoenix.com/news/arizona-news/string-of-suicides-devastate-queen-creek-high-school

Mulhere, K. (2016, January 08). Don't Pay for an Expensive SAT Tutor. Retrieved May 08, 2018, from http://time.com/money/collection-post/4172852/sat-tutor-worth-the-money/

Mulhere, K. (2016, October 21). College Acceptance Rates: Early vs. Regular Decision Pools | Money. Retrieved May 08, 2018, from http://time.com/money/4535515/college-official-acceptance-rate-misleading/

QuickStats: Suicide Rates for Teens Aged 15–19 Years, by Sex — United States, 1975–2015. MMWR Morb Mortal Wkly Rep 2017;66:816. DOI: http://dx.doi.org/10.15585/mmwr.mm6630a6.

Rosin, H. (2015, November 20). The Silicon Valley Suicides. Retrieved May 08, 2018, from https://www.theatlantic.com/magazine/archive/2015/12/the-silicon-valley-suicides/413140/

Scutti, S. (2017, August 03). Suicide rate hit 40-year peak among older teen girls in 2015. Retrieved May 08, 2018, from https://www.cnn.com/2017/08/03/health/teen-suicide-cdc-study-bn/index.html

UCLA. (2016). Profile of Admitted Freshmen Fall 2016. Retrieved May 08, 2018, from http://www.admission.ucla.edu/Prospect/Adm_fr/Frosh_Prof16.htm

Middle School Teacher Preparation Program at Lewis University

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Abstract
In recent times, teacher educators and teacher education programs have experienced significant changes to their preparation programs. Some changes reflect the ever-growing body of knowledge of how individuals learn. Others speak to an increased emphasis on collaboration and communication, and some are designed to prepare teacher candidates for curricular changes brought forth with the implementation of the Common Core State Standards.

In Illinois, teacher education has witnessed the restructuring of teacher credentials from a certification to a teacher license. With the advent of the Professional Educator License (PEL), separate endorsements for various specialties added to one's credentials. Most recently, teacher preparation programs and school districts have been adapting to a new format for grade level credentialing. Previously, Illinois teachers chose to teach the general curriculum at the elementary level or a content specialty in high schools, with middle grades being casually addressed in each of these grade level certifications. Lewis University's new middle school licensure program reflects these developments.

Introduction

There is a long history surrounding school organization. Dating back to the 19th century, scholars and practitioners called for the reorganization of schools to include a middle group that would help young adolescents transition from elementary school to high school (Juvonene, Le, Kaganoof, Augustine, & Constant, 2004; Quattrone, 1990). Most of this early repositioning focused primarily on reorganizing school buildings into different grade-level configurations to eliminate overcrowding. By the mid 20th century, there was a call not only for a change in the physical location of early adolescent students but also for restructuring the curriculum to better address the physical, social-emotional, and intellectual needs of these students. This call was reinforced with the formation of what is now the Association of Middle Level Education (AMLE) and the 1989 Carnegie Foundation report, *Turning Points*. The *Turning Points* report called for fundamental changes in the organization, curriculum, and methods of instruction. In stressing the need to nurture and expand on the physical, intellectual, and social changes experienced by 10-14 year old students, it was critical of the junior high model for early adolescent education.

Turning Points was reissued in 2000, and its findings were supported by publication of AMLE's *This We Believe* in 2010, which argued that it was a more difficult and complex journey to reach the maturity of late adolescence than previously considered. Therefore, middle schools should adapt their practices to reflect the growing body of knowledge related to adolescent development and understanding of the complexities that the larger culture has on student learning. Importantly, *This We Believe* articulated characteristics and values intended to guide a middle level program in any environment, departing from earlier reports which were largely a checklist of curricular items to be included. With the advent of the 21st century, AMLE advocated that middle schools should reflect current research and best practices needed to move beyond academics and include a range of elements from socio-emotional development, interpersonal skills, and critical thinking in additional to academic content presented in multiple ways.

Development of the Lewis Middle School Licensure Program

Supporting the growing body of knowledge about adolescent development, the Illinois State Board of Education (ISBE) revised its teacher educator licensing categories to include a separate grade level endorsement for the middle grades, 5-8. ISBE left the decision about how to define and address the middle level standards to each teacher preparation institution (ISBE, 2016). As Lewis University began to explore options for a middle licensure program, we considered the following:

1. Should the middle level license be a stand -alone program? If not, would it be better housed with the elementary or the secondary program?
2. Using the ISBE standards for middle level education and the *This We Believe* publication from AMLE, how do we create a program that is developmentally responsive, challenging, and fair for all learners?
3. What other principles and attributes do we want to impart to teacher candidates working toward a middle level endorsement?
4. How do we design a program that is comprehensive and yet does not require a burdensome number of credit hours?
5. Can we design a program that would also allow teacher candidates to consider more than one teaching endorsement?

With these questions in mind and the current pattern of enrollment in teacher education, Lewis University recognized it would be difficult to support a stand-alone program for middle level licensure. Capitalizing on the strong collaborative relationship between the College of Education and the College of Arts and Sciences for secondary majors, it was determined the middle level program would benefit from being linked to the secondary licensure program. Additionally, candidates in both programs would gain valuable developmental knowledge and pedagogical approaches with this structure. Content and pedagogical coursework specific to middle level education would be designed while other existing courses would be modified to support both middle and secondary candidates. This joint endeavor would also profit from the program content expertise of the secondary program. Faculty aligned to the secondary program included content specialists in English, math, science, social studies, and technology.

The expertise in each of these content areas along with faculty who had taught at both middle and secondary levels would provide a strong balance in structuring a program that addressed ISBE's focus on increased content rigor and best practices for learning. This structure would also benefit the secondary program pedagogical preparation by enhancing the emphasis on teaching approaches designed to engage learners.

Secondary program faculty met to examine the above documents and the collection of standards that would need to be met in this new program. These standards included Illinois Professional Teaching Standards, the Middle Level Teacher Preparation Standards, the Middle Level Dispositions Standards, the Social and Emotional Learning Standards, the Middle Level Literacy Standards, the College of Education standards, and the content standards put forth by the ISBE as well as those of various special professional organizations. While considering these standards, the faculty recognized the need to design a teacher preparation curriculum that encouraged candidates to consider the skills needed for success in the digital age. Foremost was the concern that candidates learn to create lessons that engaged learners as emerging thinkers. Their lesson plans and overall curricular approach needed to promote critical thinking, problem solving, and community and global awareness, as well as allow for changing forms of communication and alternative perspectives. The middle school candidates would also need to be immersed in understanding the uniqueness of early adolescent students and what separates this group of students (5^{th}-8^{th} grade) from other grade levels.

Teachers in the middle grades need to be prepared to address the physical, emotional, and social needs of their students. They need to be sensitive to the physical and emotional changes that are occurring at this age level. Early adolescent students experience a myriad of changes including increasing and fluctuating hormone levels, rapid growth spurts, bone pain, acne, and a plethora of new, uncharted emotional feelings. Teachers at this level also need to work within a different teaching structure than their counterparts at other grade levels. Middle schools embrace interdisciplinary and exploratory learning while providing an increasingly rigorous curriculum that requires varying levels of academic support, and middle school teachers must attend to their students' socio-emotional issues through well-structured advisories.

Teachers must create a learning environment which promotes inclusivity of all genders, races, ethnicities, and disabilities. It is essential that the classroom embrace a non-competitive atmosphere that fosters close relationships between the student and the teacher. The classroom should be a place where middle school students feel safe and where they can find the academic and personal support they need in a calm, friendly, relaxed, and respectful environment. Designing a successful middle school teacher licensure program that incorporated coursework for all of these items and addressed the practical reality of candidates completing a licensure program within a reasonable amount of credit hours and timeframe became our challenging task.

The secondary program faculty began by analyzing which courses would be included in the middle school licensure program. Three of the classes--Exceptional Learners, Technology for Teachers, and Foundations of English Language Learners--were already designed for the PK-12 student and would not be changed. Faculty also identified three courses in the existing secondary program that could be modified to incorporate more of the middle school ideology, courses where both middle and secondary teacher candidates would benefit from joint instruction.

Instructional Strategies for the Adolescent Learner is the first in a series of three classes that address curriculum design, methodology, and assessment. Instructional Strategies explores short and long range planning, various lesson plan models, and elements to include in a well-constructed lesson plan. It also targets classroom management theories and practices and provides an overview of the purposes of assessment. A key element of this course includes a 50-hour field experience. Previously, the department chose to require all 6-12 licensure candidates to complete a 50-hour field placement in a middle school setting. This was initiated to encourage candidates to consider teaching at the middle grades. From its inception, the number of candidates seeking middle school clinical placements, and later employment, was evident. Placement at the middle school for secondary candidates is revisited each academic year. Currently, the department feels it is worth continuing this practice.

The second class in the series, Pedagogy and Assessment for Learners, complements the Instructional Design class, while targeting best practices in instruction and furthering candidate understanding and use of assessment to make curricular designs. During this course, candidates also complete a 50-hour field placement but at their respective grade level. Lastly, candidates are jointly enrolled in the Special Methods of the content course. Special Methods targets “best practices” in instruction, assessment, and classroom management for a given content area. The decision to offer this as a joint course reflects the program investment in secondary candidates designing more student-centered curriculum, as well, as the practicality of adequate student enrollment in specialized classes. One additional class, Reading in the Content Areas, was selected to be part of the joint curriculum. This class concentrated on content area reading for grades 6-12, so no additions to the curriculum were needed.

Upon further examination of the secondary curriculum, two courses that have been the cornerstone of the ISBE middle school endorsement were identified: Characteristics of the Adolescent Learner and Curriculum and Instruction in the Middle School. The first course in this sequence focuses on the psychological development of adolescents (10-21 years of age). This class will continue to be required for all middle and secondary candidates. The second course in the sequence fulfills ISBE expectations for a class concentrating on the philosophy, curriculum, and instructional practices of the middle school. This class will be earmarked only for middle school endorsement candidates, allowing a greater focus on interdisciplinary teaching approaches, purposes and design of advisories, and various pedagogical practices that utilize real-world application and student-centered learning for the middle grades.

The next area to be considered was coursework exclusive to candidates seeking middle level licensure. ISBE and AMLE outlined a number of different areas that the program would be expected to meet. Several of the standard sets are met throughout all of our licensure programs. Collectively, all of the programs in the College of Education incorporate and measure candidate growth in meeting the Illinois Professional Teaching Standards, the COE unit standards and professional dispositions. Using components of AMLE's Middle Level Teacher Preparation Standards and ISBE's Middle Level Teacher Preparation as well as the Middle Level Literacy and Social and Emotional Learning Standards the department set out to define the remaining middle school licensure classes.

Educators working with middle level students recognize challenges early adolescents have in expressing themselves. Brain research tells us that during early adolescence, the emotional center of the brain is active and working at near full capacity; however, the frontal cortex is still developing, inhibiting adolescent decision-making and problem solving. This can be witnessed in young teens' inability to effectively communicate their thoughts and feelings. Through the combination of the expectations of the AMLE and ISBE standards along with understanding of a young adolescent's physical and emotional development, two classes were targeted for preparing middle school teachers to promote the communication and literacy skills of their students: Communication for Teachers and Foundational Literacy for Middle School Teachers.

In Communication for Teachers, candidates discuss various challenges and ways in which they can help their students become better communicators. Some of the discussion considers formal communication styles (oral and written) that are taught as part of the English Language Arts curriculum and other topics commonly found as part of a middle school advisory program, such as introducing oneself or accepting compliments. The Foundational Literacy course is linked to the Communication course by preparing middle school teacher candidates to consider ways to improve student vocabulary and reading proficiency.

The professional education coursework for middle level teacher preparation includes 44 credit hours and is composed of 11 three-credit hour classes, 2 one-credit hour field placements, and a nine-credit hour clinical experience (Appendix A). Of the 11 three-credit hour courses, only three (Curriculum and Instruction in Middle School, Communication for Teachers, and Foundational Literacy) are exclusively for middle level candidates. This was intentional to allow individuals a reasonable pathway to achieve dual endorsements in middle and secondary licensure.

In addition to the professional education courses, middle level candidates are required by ISBE to have at least 24 credit hours of study in a designated content area. Similar to the professional education coursework, much of the content coursework is determined by standards written by external specialty organizations (SPA).

Valuing the knowledge of the SPA as well as the practices employed by local school districts, the department established focus groups consisting of a COE content specialist, a College of Arts

and Sciences (CAS) content faculty member, and teachers from surrounding school districts. Each of these groups reviewed the standards and current coursework available in the CAS to determine which courses would serve the content needs of middle level candidates, as well as in what areas we needed to develop new coursework to better address the standards and current middle school curricular practices.

Due to the broad scope found in most English and social studies curricula, we were able to use a large percentage of the coursework currently required of secondary education majors. Twenty-four credit hours, ranging from Young Adult Literature to Linguistics, were selected as core course requirements for the English Language Arts candidates (Appendix B). Similarly, social studies candidates are expected to have knowledge in several of the sub-disciplines (economics, history, geography, and political science). Reflecting on the frequent inclusion of contemporary and global issues in a middle school curriculum, we included traditional Western Civilization, United States, and local history content as well as coursework in geography and contemporary issues.

Similar to Social Studies, the middle school science curriculum often addresses a broad range of topics. This range is recognized in the Next Generation Science Standards for the middle school and informed our selection of coursework for these candidates. Two of the required courses integrate the physical, chemical and biological sciences, and one centers on environmental issues. The greatest departure from the content coursework needed for secondary candidates is for those wishing to teach mathematics. There are seven required mathematics courses. Four courses align to the existing secondary program; however, three of the classes are particular to the content and theories taught in a middle school classroom. These three classes direct attention to algebraic theories, numbers and measurement, geometry and probability, and statistics. The COE secondary/middle licensure department will revisit the required content coursework following ISBE's release of the test frameworks for each of the contents. An earlier view of the social studies framework indicates it might be beneficial for candidates to take a class that shows the intersection of history, government, geography, and economics as well as how these are addressed in middle schools.

The call for middle school licensure programs from ISBE asked institutions to create programs that allow candidates to be highly qualified in more than one content area. Identifying the significant number of credit hours this would entail (including general education courses), and holding firm to our belief that middle school teachers should have substantial knowledge in adolescent development and socio-emotional and intellectual needs of young teens, we chose to align the curriculum with the secondary program and provide candidates with the option of either/or both middle and secondary grade level endorsements. This decision works well for English Language Arts (ELA), social studies, and to a great extent, science. There is significant crossover in content requirements for these three areas. An ELA, science or social studies candidate would need an additional nine hours (Communication for Teachers, Curriculum and Instruction in the Middle School, and Foundational Literacy for Middle School Teachers), and

complete a dual placement during student teaching, to earn both middle and high school teaching endorsements.

We continue, however, to discuss the challenges for mathematics teacher candidates. Since the high school math education curriculum parallels that of a math major, the majority of the coursework is calculus based and is offered at the 300+ level. The middle school math curriculum includes nine hours at the 100 level (algebra, geometry and probability and statistics), designed to reinforce commonly taught concepts and methods that are part of the middle grades curriculum. Secondary candidates earning a bachelor's degree in math would not have experience in working with middle level math concepts and skills and how these can be taught in an engaging and relevant manner to middle level students.

Current Program Status

The middle school teacher licensure program was launched in Spring 2015 and currently has 11 teacher candidates representing all four content designations. The most recent ISBE notifications indicated that the current six-credit hour middle level endorsement will be discontinued. We expect the enrollment in the middle level licensure program to increase once this endorsement option is no longer available. We were also pleased to see that AMLE has reinforced the emphasis on understanding adolescent development and the unique characteristics that should be employed in a middle school curriculum, when institutions seek Specialty Professional Organization Accreditation from AMLE as part of a teacher preparation programs CAEP accreditation.

References

Carnegie Council on Adolescent Development. (1989). *Turning points: Preparing American youth for the 21st Century*. New York, NY: Carnegie Council.

Illinois State Board of Education. (2016). *The future of Illinois middle grades*. Springfield, IL.: Illinois Government Printing Office.

Jackson, A. W., & Davis, G. A. (2000) *Turning points 2000: Educating adolescents in the 21st Century*. New York, NY: Teachers College Press.

Juvonene, J., Le, V., Kaganoof, T., Augustine, C., & Constant, L. (2004). *Focus on the wonder years: Challenges facing the American middle school*. Santa Monica, CA: Rand Corporation.

Lounsbury, J. H. (1996). ***Key characteristics** of **middle level schools.*** Urbana, IL.: ERIC Clearinghouse on Elementary and Early Childhood Education.

National Middle School Association. (2010). *This we believe: Keys to educating young adolescents.* Columbus, OH.: NMSA.

Quattrone, D. F. (1990, Fall). Carnegie's middle school ideas: Phases of program development. *Journal of Curriculum and Supervision*, *6*, 52-61.

Targeting Adolescent Male Reading Motivation as Preparation for College Success

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Abstract

Implementation of Common Core State Standards was intended to improve student college readiness. However, there continues to be a larger number of females entering college than males. In addition, females are outperforming males in both reading achievement and reading motivation. Thus, the challenge remains: how can we prepare and motivate our male readers to prepare for college success? This article shares research on strategies that motivate boys to read and provides specific classroom recommendations to target male reading motivation.

Introduction

In the fall of 2016, over 20 million students enrolled in colleges and universities across our nation (National Center for Education Statistics). This achievement reflected the goal of the Common Core Standards designed to increase student readiness for success in college. Yet, in preparing middle and secondary level students for the journey to college, schools are missing an opportunity to prepare adequately a significant portion of our student population. The population of students attending college in fall 2016 reveals only 8.8 million males compared to 11.7 million females (National Center for Education Statistics). Thus, the question arises: what is preventing boys from acting on the same opportunities for college readiness as their female counterparts?

In viewing data on gender discrepancies, females outperform males in both reading achievement and motivation to read. Since 1992, female students have scored higher than male students in reading achievement at both grades 4 and 8. This gender gap remains consistent in grade 12 with females outperforming males by 10 points (National Center for Education Statistics, 2016). In 2007, Pitcher et al. explored students' self-concepts as readers and the values associated with reading of adolescents in Grades 6-12. Their results demonstrated that girls scored significantly higher on self-concept as readers and the value of reading. Further, boys' value of reading decreased over time, while girls' value of reading increased. If males are lagging behind females in both reading motivation and achievement, it is not surprising that fewer males than females are attending college, which is historically dominated by reading assignments, lengthy textbooks, and the frequent writing of papers.

Engagement with reading is highly correlated with reading comprehension achievement (Guthrie, et al., 2001). Therefore, if schools can develop strategies to motivate and engage male readers, it would seem possible to narrow male and female achievement gaps and increase the number of males attending college. Fortunately, there are many practical strategies that middle and secondary teachers can implement to target the males in their classrooms in order to increase their reading motivation and desire to continue their literacy journey beyond high school.

Research on Strategies to Motivate Boys to Read

Smith and Wilhelm's powerful study, *Reading Don't Fix No Chevys* (2002), explored the literacy lives, both in and out of school, of a diverse group of 49 adolescent boys. Their study found that participants' decisions about what they chose to do in and out of school stemmed from five different characteristics. First, a sense of competence and control is an essential motivator for boys. As a result, boys enjoy reading genres that add to their personal interests and areas of expertise. Second, boys need to feel competent and rewarded by what they are reading immediately, or they will lose all motivation to continue reading. Next, boys are motivated to read books that contain appropriate challenges. If a particular book seems too complex and they cannot understand what is happening, they will develop a negative attitude about it and shut down. The fourth characteristic that leads to motivation to read is having clear goals and feedback.

Boys need to see a clear link between what they are reading and the real world. They also are motivated by a focus on the immediate. Rather than read a work that may help them become college-ready "someday," they prefer books that relate to their lives "right now." Finally, boys are motivated for social reasons. Thus, if a book is recommended by a peer, or if they can read the same book as a friend and talk about it, they are much more motivated to read it. Wilhelm and Smith (2014) found that allowing males to freely choose their own texts to read from among engaging and relevant books and providing an inquiry-based structure to learning—activating their prior knowledge and posing problem solving questions seen as relevant and important, are significant practices that teachers can implement to create a context that supports boys' motivation.

Baker (2002) explored strategies for overcoming reading resistance in middle school. Baker is also troubled by the widening gap in college readiness between students who read and those who do not. Based on the research previously cited which shows girls reading more than boys, her research is especially relevant for strategies to help boys become more engaged in reading. One strategy Baker promotes is reader choice. She believes it is essential for students to be able to choose their reading material so that they may pursue their passions. To aid this strategy, she recommends that teachers have a diverse selection of reading materials in their classroom. Most importantly, boys will need books that speak to their interest as readers.

Baker (2002) also emphasizes the importance of time. Teachers must give their students time to read and discuss their books. Finally, she stresses that the classroom atmosphere is essential for improving student engagement with books. Teachers must create a classroom community

that promotes respect for students of all cultures and allows students the opportunity to make personal connections with what they read. In a female-dominated profession, it is particularly important for teachers to ensure that their classrooms include texts with which males can connect and engage. Baker's strategies promote reading engagement for both boys and girls. However, to truly promote boys' engagement, the teacher must emphasize reaching boys through the implementation of these strategies.

Like Baker (2002), Jenkins (2009) also explored strategies to promote school reading success. Jenkins' article sought to provide teachers with recommendations to increase the achievement of male readers. Jenkins' first recommendation was to create a team to work together to ensure the success of the male reader. He believed it was critical for parents, teachers, tutors, and other school staff to work together for the success of the child. This ensures that the help the students receive is not disjointed. According to Jenkins, the support team members should discuss the child's reading successes or failures at least once a month.

Jenkins also feels it essential for teachers to build on the past success of the child. Unfortunately, teachers do not always effectively communicate with one another. If a struggling reader finds success with one teacher, that teacher must pass along their strategies to the next teacher to ensure continued success. Jenkins also recommended that teachers take care to connect reading to a particular student's world of experience and concern. This is especially critical for male students since the books chosen by female reading teachers will often connect more with their female students. Teachers must emphasize identifying and selecting reading materials with which boys can connect and thus be able to analyze using critical thinking in relation to their own lives. Like Baker (2002), Jenkins also suggested that students be able to choose their reading material in order to give boys a sense of ownership over their literacy learning.

Finally, Jenkins recommended that teachers of all subject areas provide their students with a variety of texts on a single topic. This will ensure that boys have access to magazine articles, song lyrics, photographs, blogs, and other texts to reinforce what they are learning. The variety of texts used will expose boys to the in-depth comprehension required to understand their topic of study. It is critical to remember that these strategies are not just helpful for boys, but will help all students become more engaged in reading.

Ivey and Johnston's (2013) study focused on engagement for both males and females with young adult literature and provides important insights into current challenges in engaging students in classrooms. In their study, 71 eighth-grade students were given a choice to read from 150-200 high interest young adult narrative texts. Students were given time every day to read from their selected text without any assignments, tests, quizzes, or projects attached to the book. Students reported high engagement with these texts, including reading in other classes, reading outside of school, and actually considering reading as an enjoyable hobby. One student noted,

> Before this year, we kind of had to read books they assigned to us, so I'd pretend to

> read it, and I just wouldn't care about books at all. But now they give us a choice if we want to read it, where we get to pick the book that we read. I actually read it instead of pretending to read it. (p.261)

Ivey and Johnston's research provides important insight into the power of choice and high interest texts in motivating adolescent readers.

Boltz (2007) expresses deep concerns over most school-age boys scoring lower than girls at every level on standardized tests of reading comprehension. Based on her own research, she believes that one reason boys read less is because the texts they receive in school do not connect with their interests. Like other researchers, Boltz stresses the importance of providing choices in reading, giving students time to read, and having a wide variety of reading material, including nonfiction, available in different forms. In addition, she also notes the importance of observing role models who read and valuing reading. This is an essential piece in promoting boys' reading engagement. Boys must see their male teachers, principals, fathers, brothers, and other male role models valuing reading. Reading must be depicted as "masculine" so that boys can proudly read and schools can begin to create a male culture that values reading.

One way to view reading as "masculine" is to introduce boys to positive images of masculinity through archetypes of manhood. Brozo (2002) provides examples of young adult literature that contains these archetypes, such as a healer, king, warrior, or trickster, to help boys understand what it means to be a man. Using such stories in the classroom will connect this literature to boys' lives and interests, further motivating them to read.

Popular children's book author Jon Scieszka has devoted much of his professional career to finding ways to help boys become readers. In his article "Guys and Reading" (2003), he writes, "Researching the problems boys have with reading, I've come to the conclusion that much of the cause of boys' reluctance to read can be reduced to a single, crucial element – motivation" (p. 18). He opines that, to motivate boys, we need positive male reading role models, must value non-fiction, magazines, newspapers, comics, and other forms of text, and we must identify books that boys like to read using their own peer recommendations.

In 2005, Taylor summarized current research on the issues that boys face with literacy and offered several strategies to help bridge this literacy gap. Taylor believed that it was essential for teachers to expand their teaching styles. Teachers must start including hands-on activities such as drama, or challenges that improve the confidence of male readers. Taylor also offered several innovative strategies such as inviting males to provide book talks, or creating a "Guy's Rack" collection of boys' favorite reads. Further, Taylor urged educators to be sensitive to the individual learning pace of each boy. In addition to the strategies of other researchers reviewed in this article, Taylor discussed the importance of broadening a school's definition of literacy. Rather than only viewing fictional novels as literacy, schools must start recognizing texts such as magazines, science books, multimedia-enhanced texts, and blogs, which boys tend to prefer over novels. Gee (2003) even makes a case for the positive use of video games as a new literacy that teaches problem solving and innovation.

Weih (2008) uses his own struggle with reading engagement in school, as well as his son's struggle to engage with school texts, to explore ways to promote male engagement with classroom texts. He cites Sullivan's 2004 article, "Why Johnny Won't Read," which argues that because the profession is female-dominated, most teachers do not respect boys' reading preferences. Sullivan contends that female teachers value "female literature," while dismissing boys' preferences for "yucky stuff and real things" as lacking in literary quality (p. 37). Weih argues, "boys need to have their reading interests validated in school, if we expect to see improvement in boys' reading scores on tests" (p.20). Based on his concern, Weih organized a book club for middle school boys to learn about their reading, including their interests, preferences, purposes, recommendations, and discourse about text. Based on his work with the boys' book club, Weih discovered several implications to improve middle school boys' reading experiences including using male role models, choosing books with characteristics that appeal to boys, and allowing boys to actively research and discuss topics related to the book on their own, instead of assigning tasks. Weih argues that "assignments related to the book could suppress the joy from the reading and sharing experience" (p.25).

Like Weih, Welldon (2005) also created a boys' book club at her school to help close the gender gap in reading. She found that creating reading competitions, using male role models, and selecting books that engage boys were key to the program's success. She specifically notes that texts do not have to be of high literary quality, but instead should appeal to reluctant readers and target boys' interests. In "Boys Are People Too: Boys and Reading, Truth and Misconceptions," Horton (2005) summarized current research on boys and reading conducted in Australia. Of the numerous studies reported, one key piece of research cited was Alloway et al (2002) which found that boys have a strong interest in electronic forms of literacy. This form of text is essential for all students to become literate in the 21st century.

Wilhelm and Smith (2014) argue that boys must embrace reading, not just for the sake of improving their reading ability, but also to "experience the manifold pleasures and the potential for growth that reading offers" (p. 273). They further assert that experiencing the pleasure and power of reading is essential for creating the lifelong reader who is a "civically engaged democratic citizen" (p.273). Helping boys find pleasure in reading is about more than improving their test scores. It can also help their social and emotional learning. One of the boys Wilhelm and Smith interviewed declared, "I learn about myself through books when I imagine myself in the different situations...it's learning about what you could be" (p.275).

Recommendations

Much of the research on improving adolescent male reading motivation includes best practice strategies that will help all learners, not just males, to be successful. However, classroom teachers must begin implementing these strategies with their male students specifically in mind. First, teachers should be aware of the texts in their classrooms and be sure their classroom library includes a variety of genres and forms of text. For example, classroom libraries can contain magazines, newspapers, comic books, graphic novels, how-to manuals, or fantasy novels. There can even be a specific "Guys Shelf" with books targeting the boys in the class. During reading lessons, students can read text through multimedia formats such as

reading articles online, using apps to download picture books, or listening to podcasts.

Next, students should have choice in determining what books they are reading on a daily basis. Choice can come in the form of a daily self-selected text, choosing which novel (out of a select few) they want to read for literature circles, or taking a whole class vote on which text to use for the next read aloud. In addition, students need to be given time to read. For example, carving out a small block of time at the beginning of class each day where students can read from their self-selected text in a quiet, reading-friendly environment can be an effective practice.

It is critical for students to see male reading role models in their school. Female teachers can invite male staff members to perform "read alouds" or to give a book talks about their favorite books. Fathers, uncles, cousins, grandfathers, or male community members can be invited as mystery readers into the classroom. Classroom walls can contain photos of male celebrities reading, such as the viral photo of Lebron James reading *Divergent* (Roth, 2011) during the 2015 NBA playoffs. A "boys only" book club, led by a male staff member, can also be used as a way for boys to see each other as peer male reading role models.

Finally, educators must implement hands-on activities that keep their students challenged, engaged, and active. For example, when teaching Problem and Solution, teachers might allow students to brainstorm things that bother them (problems) in their everyday life. Then, offer them the challenge of creating a blueprint for an object that could solve these problems (solutions). Or, put students in role-playing scenarios based on a character from a book. For example, if a character in a book cannot communicate, give students a group task to complete (i.e. lining up in order based on birthday) without speaking. Include bins of legos in classrooms so that students can recreate a setting and then share how the setting impacts the storyline. Allow exercise balls instead of chairs to increase movement and focus.

As educators, it is critical that we implement strategies to motivate our male readers. We want all students to feel inspired to continue their literacy journey beyond middle and high school. By implementing the recommendations born out of research in this field, classroom teachers are sure to find male students who are more motivated, engaged, and interested in continuing their education.

References

Baker, M.I. (2002). Reading resistance in middle school: What can be done? *Journal of Adolescent & Adult Literacy*, *45*, 364-367.

Boltz, R.H. (2007). What we want: Boys and girls talk about reading. *School Library Media Research*, *10*, 1-21.

Brozo, W.G. (2002). *To be a boy, to be a reader: Engaging teen and preteen boys in active literacy.* Newark, DE: International Reading Association.

Gee, J. P. (2007). *What video games have to teach us about learning and literacy. Second edition: Revised and updated edition*. Palgrave Macmillan.

Guthrie, J.T., Schafer, W.D., & Huang, C.W. (2001). Benefits of opportunity to read and balanced instruction on the NAEP. *Journal of Educational Research, 94*, 145-162.

Horton, R. (2005). Boys are people too: Boys and reading, truth and misconceptions. *Teacher Librarian*, *33*(2), 30.

Ivey, G., & Johnston, P. H. (2013). Engagement with young adult literature: Outcomes and processes. *Reading Research Quarterly*, *48*(3), 255-275. doi:10.1002/rrq.46

Jenkins, S. (2009). How to maintain school reading success: Five recommendations from a struggling male reader. *Reading Teacher, 63*(2), 159-162.

National Center for Education Statistics. (2016). *Fast facts.* U.S. Department of Education. Retrieved June 14, 2017 from https://nces.ed.gov/fastfacts/display.asp?id=372

Pitcher, S.M., Albright, L.K., Delaney, C.J., Walker, N.T., Seunarinesingh, K., Mogge, S., Headley, K.N., Ridgeway, V.G., Peck, S., Hunt, R. & Dunston, P.J. (2007). Assessing adolescents' motivation to read. *Journal of Adolescent & Adult Literacy*, *50*(5), 378-396.

Roth, V. (2011). *Divergent*. New York: HarperCollins.

Scieszka, J. (2003). Guys and reading. *Teacher Librarian*, *30*(3), 9-31.

Smith, M.W. & Wilhelm, J. (2002). *Reading don't fix no Chevys: Literacy in the lives of young men.* Portsmouth, NH: Heinemann.

Sullivan, M. (2004). Why Johnny won't read. *School Library Journal, 50(8),* 36–39.

Taylor, D.L. (2005). Not just boring stories: Reconsidering the gender gap for boys. *Journal of Adolescent and Adult Literacy, 48*(4), 290-298.

Weih, T. G. (2008). A book club sheds light on boys and reading. *Middle School Journal*, *40*(1), 19-25.

Welldon, C. (2005). Addressing the gender gap in boys' reading. *Teacher Librarian*, *32*(4), 44.

Wilhelm, J. D., & Smith, M. W. (2014). Reading don't fix no Chevys (yet!). *Journal of Adolescent & Adult Literacy*, *58*(4), 273-276.

Cultivating Innovation and Inclusiveness through Partnerships

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Abstract
This paper describes a two-part collaboration between the Advanced Authentic Research (AAR) program, Social Justice Pathway (SJP) program, and DreamCatchers (DC). The project evolved from an effort to merge innovative teaching and learning with inclusiveness. This paper aims to: first, describe each program, and second, discuss the implementation, results, and ongoing progress of this collaboration.

Advanced Authentic Research Program

Palo Alto Unified School District's Advanced Authentic Research (AAR) program strives to fulfill our mission of nurturing student interest and igniting student passion through real world, hands-on research enabling students to explore career pathways. The program innovatively adapts Career and Technical Education foundation standards in conjunction with Next Generation Science Standards for science and engineering practice, and our district's vision statement for students to explore topics in a wide variety of disciplines, including humanities and social sciences, business, science, and engineering. Advanced Authentic Research students bring passion, curiosity, and perseverance to the program.

The AAR Program is a unique opportunity for students in grades 10-12 to engage in original research in an area of their choosing. Students are paired with mentors who are experts in the field of the students' choosing. It is possible, and encouraged, for students to collaborate with one another on a given project. Mentors support and facilitate each student's work in the mentor's lab, office, or other appropriate environment. A process-oriented curriculum, developed by the AAR team, supports students as they research. Students are expected to spend about 60 hours per semester (3-4 hours per week) on their projects.

The AAR curriculum is built on the following three key elements:
Personalized Learning: As part of the application process, students share information about their area(s) of interest, their passions and their reasons for applying to the AAR program. The AAR team evaluates each application and matches the student with a mentor who is an expert

in the student's chosen area. Some iteration may be necessary based on the availability of mentors in given areas.

Integration of Knowledge and Process: Most projects begin with a literature review, during which students learn what has already been covered in their chosen area and work towards formulating their research question. The next phase is to perform appropriate experiments, collect data, and analyze this data. Students work closely with their mentors during this phase to ensure the scope is appropriate, the experiments are legitimate, and the data is valid.

Communication of Research Project: Developing students' communication skills is an integral part of the AAR curriculum. Students may use different forms of communication to share progress on their project. Students will have regular check-in meetings with the AAR coordinating team during this time. They will be communicating with their mentors and their peers about their work. Students are required to write a research proposal and a final paper, and to participate in the poster presentation, which is an end-of-year celebration of the program.

Social Justice Pathway Program

The Social Justice Pathway (SJP) at Palo Alto High School is a three-year program featuring self-direction and project-based learning in an interdisciplinary model rooted in community action and collaboration. The SJP program was created by a history/social sciences teacher and an English teacher during the academic year 2014-15. It is designed for students interested in empowerment and conviction, and with a passion to build a better world. The first cohort of twenty-six students joined the program during beginning of their sophomore year. Twelve percent of these students are also part of the Special Education program making the program more inclusive. All of the SJP seniors are conducting research as part of their senior capstone research project, through collaboration with the AAR program. The capstone project consists of Fall and Spring semester components in which the students will be guided through both qualitative and quantitative research methods, supported by the curriculum developed in this collaborative project.

DreamCatchers

DreamCatchers is a local nonprofit that runs a free after-school tutoring and mentorship program open to all low-income middle school students (Grades 6-8) in Palo Alto Unified School District (PAUSD). Their mission is to close the gap in academic and social support faced by low-income, historically underrepresented students in a high-performing school district. Whereas 95% of PAUSD parents recently surveyed have a bachelor's degree and 72% have a graduate degree, fewer than 5% of DreamCatchers' parents have a college degree and almost all are native Spanish speakers. DreamCatchers' students have faced a persistent and pernicious achievement gap for decades. On the 2016 CAASPP California Smarter Balanced test, only one out of four (25%) low-income Hispanic 8th grade students tested "at grade level" in English/Language Arts and, similarly, only 29% of 6th graders in Math.

The DreamCatchers program centers around Stanford students who volunteer as one-on-one tutors and as classroom leaders who commit to their role and their students for the entire school year. Founded in 2008 by a Stanford sophomore with a handful of friends, DreamCatchers has since grown to serve 75 students in 2016, with close to 100 volunteers and four education professionals on staff. In 2014, many students from PAUSD's two high schools became tutors when the tutor pool was expanded. The after-school sessions run out of Palo Alto High School and have full access to materials and technology. Because DreamCatchers is specifically focused within only one, high-performing school district, it has developed a very close partnership with classroom teachers and guidance counselors at each of the middle schools, and is able to take full advantage of the district's rich curricular resources and staff.

DreamCatchers students receive homework help and participate in activities designed to increase confidence in the classroom, hone study skills and social emotional learning skills, and improve healthy behaviors that help boost academic performance. Students are matched with their own personal, volunteer tutor, and this pair works together for the entire year to instill a passion for learning while also increasing academic performance and building life skills. Parents and school staff are consulted on a regular basis so that tutors can customize their support. STEM enrichment activities and guest speakers are designed to expand students' horizons.

Innovation and Inclusiveness through Collaboration

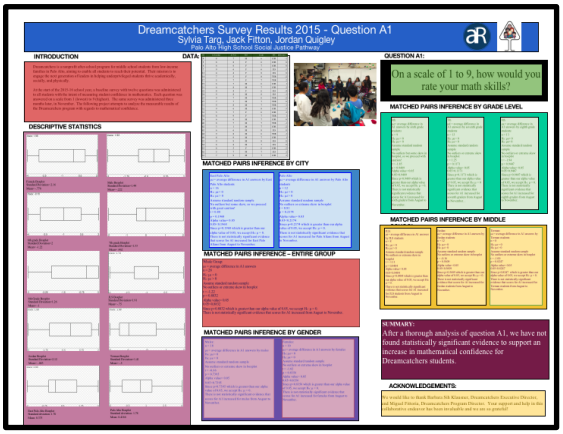
Year 1 Collaboration

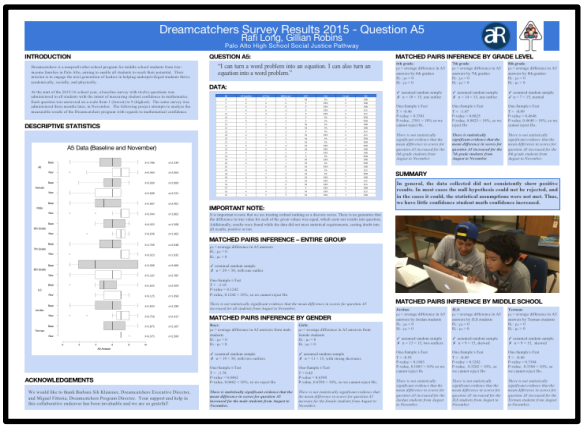
The AAR and SJP programs are in partnership with DreamCatchers. DreamCatchers worked closely with SJP students during their junior year in mini-research projects with the intent of measuring middle school student confidence in Mathematics (Table 1). While the DreamCatchers' Executive Director and Program Director served as mentors, the AAR Palo Alto High School liaison and math teacher guided students through the statistical analysis of mini-research projects (Figure 1) during the first year collaboration process.

Table 1. Mini-project survey questions. The list of mini-projects corresponding to DreamCatcher survey questions used to measure feelings of inclusiveness in mathematics courses among middle school students.

Mini project survey questions analyzed by the juniors
1. *On a scale of 1 to 9, how would you rate your math skills?*
2. *When I come up with a solution to a math problem, I always ask myself, "Does this make sense?" And, when a classmate solves it a different way, I can understand his/her strategy, explain it to others and compare it to mine.*
3. *I often ask questions when I don't understand something.*
4. *I often raise my hand to participate in class.*

5. *Math teachers want you to learn, so they ask that you listen in class, follow instructions, do the classwork, study for tests and quizzes and turn in your homework on time. On a scale of 1 to 9, which best describes the effort you put into learning math?*
6. *I like actively participating in group activities and discussions in class (Scale of 1 - 9).*
7. *I can turn a word problem into an equation. I can also turn an equation into a word problem.*
8. *I like learning new things in math. Sometimes I even do optional problems.*
9. *I try to remember exactly what we did in class because it's important to memorize the rules and formulas. A month or two after that lesson, I may forget how the rule works.*
10. *Math is like a puzzle to me. In my head, I connect different math lessons because I can see how the topics fit together (Scale Range: 1-9).*
11. *I estimate answers to problems before doing the calculations because I know it will help me get the right answer, and not because the teacher makes me do it.*





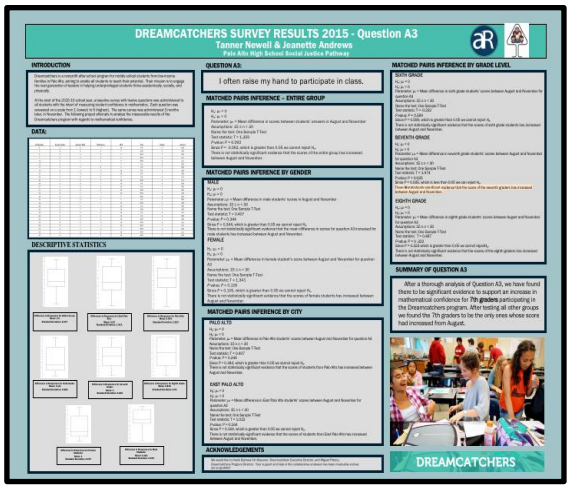


Figure 1: Example of student mini-projects from Year 1. This figure illustrates examples of the end of year concluding posters that highlights inter-organizational and disciplinary work of AAR, SJP and DreamCatchers.

Year 2 Collaboration

All the senior SJP students fit well into the current AAR research curriculum model as they receive support and guidance needed to execute their capstone research project from both programs. In order to execute their SJP capstone research project, students will need to define an area of interest, generate a research question, define parameters of their project, execute a literature review to survey existing data in the field of inquiry, and compose their research proposal. These initial requirements correlate explicitly with the AAR components and resources.

In more detail, the Fall component consists of an extended action research proposal in which students propose (supported by qualitative and quantitative research) action to address a social justice issue of their choice. The AAR program will support these students by placing them with mentors with similar interest in order to undertake research. In the Spring, SJP students implement their proposals under the guidance of AAR instructors. In addition, we are looking into developing curriculum that better teaches skills to junior students so they can become more effective at conducting research during their senior year. The benchmark goals of these year-long projects are aligned with the AAR research curriculum as shown in Figure 2.

Figure 2. Curriculum benchmark alignment between AAR and SJP. This figure illustrates how specific process-oriented benchmark goals from AAR and SJP are aligned.

In addition to the SJP and AAR collaboration, the AAR program is also working to bridge gaps students and surrounding community face through innovative technology use and corporate partnerships. One such partnership is between AAR and the City of Palo Alto Airport. Several AAR and SJP students will be working with their aviation team under two overarching projects: energy sustainability, and finance, marketing and operations. This partnership will cultivate community engagement while furthering hands-on learning for the students involved. Partnering with local organizations and corporations transforms experiential, hands-on learning into something that is tangible and attainable right in the students' neighborhoods.

Internally, AAR is working towards innovation and inclusivity by using a web-based project platform for students and mentors to collaborate. Centralizing all project aspects into one digital hub provides two-part accessibility. First, students are able to work remotely with the mentors and peers on a joint project without transportation burdens hindering the learning process. Second, a digital project hub allows students the opportunity to access professional resources, like mentors and literature, outside of their normal range of accessibility. For example, a student working on a biology-focused project can collaborate with their mentor, who lives in another state, and carry out experiments in our school's science lab. The integration of journaling and corresponding in class brings this project hub into the classroom, where AAR instructors can facilitate, monitor, and support online activity. Students will have a digital record of their collaboration and their project's process through the Google project site.

PROJECT OUTCOMES AND FURTHER IMPLICATIONS

Year 1 Project Outcomes

Students completed mini-projects where they analyzed and measured middle school students' confidence in mathematics from data collected in a DreamCatchers' survey. They represented their analysis and presented their conclusions on posters (Figure 1), which they presented in a symposium-style showcase.

Year 2 Project Outcomes

Students worked on achieving the following outcomes during the academic year 2016-17:

Part 1: Interest Exploration and Establish Relationship with a Mentor

a. Students will identify personal interests for the purpose of matching students with mentors.
b. Students will reflect to define possible areas of investigation (arts, music, humanities, sports, science, engineering, mathematics, etc.).
c. Students will be matched with mentors based on their interests.
d. Students will write and update their curriculum vitae and cover letter to share their skills and background with their potential mentors.
e. Students will form an interactive partnership to pursue a topic.

Part 2: Conduct Background Research and Write a Research Proposal

a. Students will select a topic area based upon their curiosity, general interest and connected to real life area.

b. Students will identify availability of research sites, equipment, and mentor support.
c. Students will conduct background research to refine focus leading to design of a research question.
d. In formulating a research question, students will think about variables, both dependent and independent.
e. Students, working with their mentors, will outline their research plans.
f. Students need to conceptualize and understand how to execute their research plans to include skills required, modeling opportunities, methods and sequence of data collection, estimated timeline and cost, and how results will be gathered and summarized.
g. At all times, students will maintain close collaboration with the project mentor, teachers, colleagues, and other supervisors, documenting this process as requested.

Part 3: Carry out the Investigation: Data Collection and Analysis and Documentation Following Ethical Conduct
a. Students will carry out experiments and electronically journal their results, observations, irregularities, new questions arising, data collection, and thoughts for suggested revision to procedures, among other issues.
b. Students need to understand that some research is proprietary with a degree of ownership of knowledge, or a need to protect confidentiality of the information.
c. Students will understand sometimes there are no clear right or wrong answers, but understand that tools for addressing these issues are available through law, ethics, professional associations, and personal reflection.
d. Students will understand the use of human tissue, genetic material, animal research, stem cell research, products and procedures that damage the environment or pose health risks, and technologies such as nuclear power that have risks as well as benefits, may cause ethical dilemmas or pose particularly challenging situations for researchers.
e. To be meaningful and useful to other researchers, the work and results must be completely factual: no parts, not even the very smallest aspects of the project be fabricated.
f. Data Analysis and Interpretation can be started concurrently with experimentation, both to guide protocol adjustment throughout the experimental process.
g. Students will need to distinguish clearly between “Data” and “Interpretation.” Critical thinking skills based on experimental evidence will be used and developed to begin analysis, organization, and interpretation of final results.
h. Presentation format for models, tables, and graphs will be explored in determining the most suitable format for providing evidence and drawing conclusions from the experimental data.

Part 4: Drawing Conclusions, Writing a Final Research Paper, and Sharing Findings
a. Brainstorming problems and unexpected results should be ongoing throughout the experimental process, using data as evidence for decision making.
b. Error analysis and proposed solutions for improved protocol revisions also can be implemented in an ongoing manner, and should be included in discussion of results.
c. Conclusions should be supported by evidence from experimental data, setting the stage for further experimentation to follow up on related new questions.

d. Students will understand that the work of each contributor and source is credited to that specific contributor and source. Accurate and complete citation of others' research work shows respect for the contributions of others, and fosters effective interactions between researchers. Failure to credit the work of others is plagiarism, and violates both laws and ethical practices.

Part 5: Common Core Related Learning Outcomes-Language Arts:
a. Students will integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively), as well as in words in order to address a question or solve a problem.
b. Students will write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
c. Students will produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
d. Students will conduct more sustained research projects to answer a question (including a self-generated question) or solve a problem; to narrow or broaden the inquiry when appropriate; to synthesize multiple sources on the subject, demonstrating understanding of investigation.
e. Students will gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; will assess the strengths and limitations of each source in terms of the task, purpose, and audience; will integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

Part 6: Common Core Related Learning Outcomes-History:
a. Students will evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.
b. Students will integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.

Further Implications

Collaborative teachers and program partnerships not only can strengthen personal understanding of common core standards, but also can provide opportunities to share insights with others. According to the inter-organizational collaboration research conducted by Phillips et al, the role of institutional fields are identified as “a source of rules and resources for collaboration,” whereas “the role of collaboration is in the reproduction, innovation and translation of rules and resources within and between institutional fields (Phillips et al, 2002).” In our case, each of the three programs serves as institutional fields. Each organization provides the necessary resources for interdisciplinary student-work. The student work and resulting mini research projects are the products of this collaboration. The process-oriented research emphasized in AAR, the social justice cornerstones of SJP, and the equitable access to learning demonstrated by the DreamCatchers program, interweave and synthesize multiple disciplines that students internalize. In addition, by efficiently utilizing different resources that each

institutional field provides, we can maximize the benefits of the collaboration to be more innovative and inclusive. Moreover, this collaborative process has provided better scalable infrastructure in terms of meeting our shared goals and the needs of our growing program.

The interdisciplinary nature of the student projects are heightened by having the Palo Alto Unified School District's AAR students analyze DreamCatchers' inclusive middle school math education survey through the lens of Social Justice Pathway views. According to the work of Jones, "interdisciplinary curricula is time consuming and takes collaborative team work to create…, but in the end, students and their teachers will advance in critical thinking, communication, creativity, pedagogy, and essential academia with the use interdisciplinary techniques (Jones, 2010)." We have found this to be true in our collaborative process, but the advantages, as mentioned, above outweigh the drawbacks of implementing this. It was a valuable process for all involved in terms of providing a personalized innovative experience available for all students. These efforts can lead to advancing students' creativity and critical thinking skills. Each of the three programs described serve as a mechanism for promoting and ensuring student growth, both academic and personal.

References

Jones, C. (2010). Interdisciplinary Approach - Advantages, Disadvantages, and the Future Benefits of Interdisciplinary Studies. *ESSAI,* 7(26), 76-81.

Phillips, N., Lawrence, T.B., & Hardy, C. (2002). Inter-organizational Collaboration and the Dynamics of Institutional Fields*. Journal of Management Studies* 37(1) 23-43.

Perspectives on the Increasing Role of Technology

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Abstract

Since the advent of computers in the mid 1970s, educators have extensively discussed the potential technology has for helping to improve student learning (Hew & Brush, 2007). Today, a plethora of instructional technological choices are available for use in the 21st Century classroom: e.g., Chromebooks, iPads, tablets, smart phones, laptops. Nearly twenty years later, the number of one-to-one initiatives in schools has steadily increased (Zheng, Warschauer, Lin, & Chang, 2016). Although disparities in technology access still exists, the vast majority of students in the United States are able to access the Internet from home or school (Pearson, 2013; Madden, 2013; Project Tomorrow, 2014; Information Capsule Research Services, 2014), meaning that most students have access to a plethora of information. However, even with the increased access, little consensus has been reached as to whether or not having instructional technology available has contributed to improved educational outcomes.

Research Findings

The research on the effects of technology in the classroom is increasing rapidly, but there seems to be much debate on whether or not technology has been making a significant impact on student achievement (Delgado, Wardlow, McKnight, & O'Malley, 2015). A meta-analysis study (Zheng, Warschauer, Lin, & Chang, 2016) found that one-to-one laptop programs, on average, had a statistically significant positive impact on student test scores in English/language arts, writing, math, and science. In another study by Morin, Thomas, and Saadé (2012), students perceived that using technological devices contributed the most to fostering critical thinking skills. Other studies analyzing the integration of technology in the curriculum have argued, however, that technology has had little effect on improving educational outcomes. One author suggested the learners' use of digital tools and other technology to support their learning in K-12 systems continues to be sporadic and often has not been observed, despite the proliferation of use of technology outside of school (Broekhuizen, 2016). Another declared whether the implementation and use of instructional technology in the classroom setting has made significant impact on student achievement has yet to be determined (Doran, Herold, 2016).

Another issue up for debate is how to measure the effectiveness of educational technology. In the past, some studies have measured the effectiveness of the tool, while other studies have measured the effectiveness of knowledge gained. A better research question, however, might be, "how might the use of educational technology affect an individual learner?" Indeed, Richard E. Clark argued years ago in 1983 that "media has no more effect on learning than a grocery truck has on the nutritional value of the produce it brings to market" (Glick, Aviram, & Greeener, 2011, p. 30).

Delgado, Wardlow, McKnight, & O'Malley (2015) contend, though there have been large investments made to integrate technology into K-12 classrooms in order to equip students with the skills needed to prepare for college and a career, the practical use of this investment has not been impressive. Kereluik, Mishra, Fahnoe, & Terry observed, "The rapid changes we see in the world around us brought about by the forces of globalization and technological and cultural change often make it difficult to gauge what exactly it is that our students need to be learning in schools and how teachers are to be trained in order to prepare our students for the future." (2013, p.133) Two-thirds of classrooms show no evidence of students using technology to solve problems, conduct research, or to work collaboratively (Barnwell 2016). From these findings, it can be surmised that although access to computers and digital devices and the Internet has increased, the effective use of educational technology for learning in K-12 classrooms remains sporadic at best. It seems clear that a good deal more research may be needed to quantify the role educational technology plays in the 21st Century classroom.

There appears to be several reasons why use of educational technology in K-12 classrooms may remain low, including teachers' lack of computer skills, demands of standardized testing, and the scarcity of professional development opportunities. Researchers have shown there is a strongly positive association between teacher computer skills and effective student use of computers (Becker, Ravitz, & Wong, 1998). Teacher education programs often face similar instructional inadequacies in the preparation of teacher candidates with classroom ready computer skills. The traditional skills necessary for success in the past have evolved. Students in the classroom today must continuously develop a toolbox of new knowledge, skills, competencies, aptitudes, and literacies that were not required for college and career success in the 20th century" (Magana, 2017). In addition, "Various employer and college groups are also sounding the alarm about the lack of readiness of students to be successful with advanced course work or have the right skills for today's jobs." ("Building Teachers' Capacity and Competency to Create New Learning Experiences for Students," 2017, p. 3).

The conclusion seems inescapable that it is simply not enough for teachers and students to have access to technological devices and/or tools. The ability of the classroom teacher to employ these tools effectively has a profound impact on student learning outcomes. Effectively used educational technology will enable classroom teachers to personalize the education experience for their student. ISTE (International Society for Technology Education) works to support educators, students and leaders with clear standards for the skills and knowledge necessary to move away from a factory model of teaching and towards a framework for

rethinking education along lines of individual student needs, adapting to a constantly changing technological landscape, and preparing students to enter an increasingly global economy. More professional development opportunities for teachers are critical to achieve a more successful use and integration of educational technology in the classroom.

It is true that most students entering the secondary education classroom are digital natives who have grown up using technology. However, Zheng, Warschauer, Lin, & Chang (2016) warn that providing a technological device to every student will not automatically increase student achievement. The teacher is the key to students successfully using technology as a learning and problem-solving tool. Students flourish when the teacher requires them to use technology not only for researching and writing but also to solve problems, work collaboratively, and develop creativity (Rasmussen 2015). "In 2016, the International Society for Technology in Education, formerly known as National Educational Technology Standards (NETS), modified the standards for students "to thrive in a constantly evolving technological landscape" (ISTE Standards for Students, 2018, para.1).

While America's students are taught about technology to support learning in subjects such as science, mathematics, and social sciences, use of technology has not been a central component of most K-12 instruction (National Assessment of Educational Progress, 2018). Today's students wait for their teachers to challenge them in engaging and innovative ways that mesh with individual student learning styles. In April 2016, the National Assessment of Educational Progress (NAEP) reported that only 37% of high school seniors in the United States are ready to tackle college level reading and only 25% can handle college level math (2017, p. 3). Collins and Halvorson (2009) concluded, "The technologies used at work and at school are getting further and further out of sync, and enthusiasts think that this gap between the old and the new technologies will force schools to adjust and incorporate new methods into the core of teaching and learning" (p. 10). Thus, the challenge for educators at all levels remains one of finding ways of harnessing the power and allure of educational technology in order to leverage student learning in the classroom in ways that result in measurable gains.

References

Becker, H. J., Ravitz, J. L., & Wong, Y. (1999). Teacher and teacher-directed student use of computers and software. Teaching, Learning, and Computing: 1998 National Survey Report# 3.

Broekhuizen, L. (2016). The paradox of classroom Technology: Despite proliferation and access, students not using technology. Retrieved from http://www. advanc-ed.org/sites/default/files/AdvancED_eleot_Classroom_Tech_Report.pd

Collins, A., & Halverson, R. (2009). *Rethinking education in the age of technology: The digital revolution and schooling in America.* New York: Teachers College Press.

Delgado, A. J., Wardlow, L., McKnight, K., & O'Malley, K. (2015). Educational technology: A review of the integration, resources, and effectiveness of technology in K-12 classrooms. *Journal of Information Technology Education: Research*, *14*, 397-416. Retrieved from http://www.jite.org/documents/Vol14/JITEv14ResearchP397- 416Delgado1829.pdf

Doran, L., & Herold, B. (2016). 1-to-1 laptop initiatives boost student scores, study finds. *Education Week*. Retrieved from https://www.edweek.org/ew/articles/2016/05/18/1-to-1-laptop-initiatives-boost-student-scores-study.html?print=1

Glick, D., Aviram, A., & Greeener, S. (2011). The relationship between mindful learning processes and course outcomes in web-based learning. In *Proceedings of the 10th European conference on e-learning* (ECEL 2011), 295-302.

Hew, K., & Brush, T. (2007). Integrating technology into K–12 teaching and learning: Current knowledge gaps and recommendations for future research. *Educational Technology Research & Development*, 55(3), 223– 252. doi:10.1007/s11423-006-9022-5 http://eds.b.ebscohost.com.ezproxy.saintleo.edu/ehost/pdfviewer/pdfviewer?vid=6&sid=91c98c0a-61d3- 47f8-88c6-5284448f56ee%40sessionmgr113&hid=110

Information Capsule Research Services. (2014). Bring your own device technology programs: National survey results. Retrieved from http://drs.dadeschools.net/InformationCapsules/IC1308.pdf

Kereluik, K., Mishra, P., Fahnoe, C., & Terry, L. (2013). What knowledge is of most worth: Teacher knowledge for 21st century learning. *Journal of Digital Learning in Teacher Education, 29*(4), 127-140. Retrieved from http://www.punyamishra.com/wp-content/uploads/2013/07/JDLTE-29-4-127-Ker.pdf

Madden, M. (2013). Technology use by different income groups. Pew Research Center. Retrieved from http://www.pewinternet.org/2013/05/29/technology-use-by-different-income-groups/

Morin, D., Thomas, J. D., & Saadé, R. F. (2012). Activities and resources in online learning: From a critical thinking view. *Proceedings of Informing Science & IT Education Conference* (InSITE) 2012, Montreal, Canada, 597-602. Retrieved from http://proceedings.informingscience.org/InSITE2012/InSITE12p597-602Morin0149.pdf

National Assessment of Educational Progress. (2018). Retrieved from https://www.nationsreportcard.gov/tel_2014/

Pearson. (2013). Pearson student mobile device survey 2013, National report: Students in grades 4-12. Retrieved from http://www.pearsoned.com/wp-content/uploads/Pearson-Student-Mobile-DeviceSurvey-2013-National-Report-on-Grades-4-to-12-public-release.pdf

Project Tomorrow. (2014). The new digital learning playbook: Understanding the spectrum of students' activities and aspirations. Retrieved from http://www.tomorrow.org/speakup/pdfs/SU13StudentsReport.pdf

Rasmussen, D., (2015). Digital native teachers become the majority: Now what?. edmentum.com Retrieved from: http://blog.edmentum.com/digital-native-teachers-become-majority-now-what

Zheng, B., Warschauer, M., Lin, C., & Chang, C. (2016). Learning in one-to-one laptop environments: A meta-analysis and research synthesis. *Review of Educational Research, 86*(4), 1052-1084. Retrieved from https://doi.org/10.3102/0034654316628645

Social and Emotional Learning to Support Adolescent Development in High Needs Schools

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Abstract
Adolescence is a unique developmental period characterized by tremendous change. Adolescents face remarkable changes in both their physical development and how they are relating to their environmental context. Middle and high school students living in high needs communities likely face unique stressors such as discrimination, poverty, and traumatic events that further challenge the developmental process. Social and emotional learning (SEL) is essential for all adolescents as they navigate the challenges of this developmental period, but especially so for adolescents growing up in high-need schools. Decades worth of research provides evidence for the value of social and emotional learning to benefit student growth and academic achievement and teacher perceptions of students as well as the overall cost benefits of effective programming.

Social and Emotional Learning to Support Adolescent Development in High Needs Schools

Since the early work of G. Stanley Hall, adolescence has been associated with a time of storm and stress. While later authors have disputed Hall's ideas that stress and conflict are inevitable and driven primarily by biology (Arnett, 1999), it is important to consider the transitional nature of adolescence and the distinctive characteristics of this developmental period when thinking about the need for social emotional support for the adolescents from high-need schools. Further, it is important to consider how the context of the high-need school may present unique stressors that need to be addressed to facilitate students' on-going development and transitions to post-high school experiences. This article will present a framework for considering adolescence as a transitional developmental period, present some of the unique needs of the high needs school as a developmental context, and present a case for the needs of SEL programming to support students, teachers, and educational systems.

Adolescence as a Time of Transition and Stress

To understand how to support social and emotional learning in middle and high school, it is important to start with a general understanding of adolescence as a distinct developmental period. The Association for Middle Level Education (2010), "young people undergo more rapid and profound personal changes between the ages 10 and 15 than at any other time in their lives" (p. 5). These changes, which continue into the early 20's, occur in all areas of development including physical, cognitive, social and emotional domains. Further, the changes adolescents face occur within a dynamic context.

Since the early 1900's the fast-paced changes in adolescence have been defined as a time of storm and stress characterized by conflict with parents, mood disruptions, and risky behavior influenced by individual biology. Contemporary theorists challenge the idea that this pattern of adolescence is universal and biologically based (Arnett, 1999). They argue that this notion of inevitable conflict can serve as a stereotype and cause people such as teachers and parents to underestimate the potential of adolescents (Hine & Paulson, 2006). The trend has been to move towards an understanding of adolescent development as a time of change and transition that is informed by both biology and environment. Arnett writes (1999), "biological changes in combination with changing family obligations and changing economic responsibilities are common to adolescence virtually everywhere" (p. 13). This statement provides just one example of the dynamic interplay between physical, social, and emotional development.

Hollenstein and Lougheed (2013) suggest an updated framework for understanding of adolescence based on the following tenants:

1. The biological changes of adolescence are inevitable and ubiquitous.
2. Adolescent biological changes drive various mechanisms of adolescent behavior.
3. Adolescent biological changes are shaped by biological influences.
4. Individual differences in adolescent emotional behavior changes are domain specific and vary in intensity.
5. There are individual differences in the age of onset and duration of adolescent changes.
6. Individual differences in the duration and intensity of transitions in emotional arousal are functionally modulated by emotion regulation skill.

Hollenstein and Lougheed's model defined adolescent development in terms of typicality, temperament, transactions and timing. This updated model promotes the notion of a complex developmental period that is shaped by both biological development and the context in which the individual is developing.

Xiaojia, Conger, & Elder (2001) provided further support for this more contextual understanding of adolescent development with a study that examined the impact of the timing of puberty on adolescent males. The researchers examined the relationship between pubertal status and timing on adjustment problems, externalized hostility, and internalized distress. They also examined interactions with stressful life events. The researchers determined that "the transition to adolescence, however, is not only indicated by the acquisition of a reproductively mature body, but also a plethora of challenges in almost every social domain of development" (Xiaojia, Conger, & Elder, 2001, p. 52.). These findings point to a more nuanced understanding of adolescent development that stresses the interactions between biology and environmental context.

Two environmental contexts that have a significant impact on adolescents are school and home. Adolescents not only spend a great deal of time in schools, but they also experience a

number of changes through their middle and high school years. Most individuals will transition into a new school environment two to three times during their adolescence. The transition to a new school creates stressors such as worrying about workload, navigating the school environment, developing and maintaining social relationships, and concerns about safety (Water, Lester, & Cross, 2014). Once in school, adolescents face continued changes and stressors both academically and socially.

The other significant environment that adolescents experience is the home. Home environments are also changing. The changes are impacted not only by the individual adolescent, but also other people in the home such as parents. Crouter and Bumpus (2001) have drawn connections between parents' work stress and adolescents' psychological adjustment. As the parent experienced stress and changes, the adolescent may experience various pressures. There is also a reciprocal impact of the adolescent's school transitions and the family (Everri, 2014). As adolescents move through different school experiences, their role may change within the family. For example, an adolescent who becomes more involved in school activities or employment may spend less time with the family.

Current definitions of adolescence as a developmental period focus on the interplay between biological development and the context in which the individual is developing. School and family are a significant part of the context. Individuals and schools considered to be high needs may have specific systemic challenges that shape development.

Unique Needs of High Needs Students and Schools

The United States Department of Education defines high-needs students as "students at risk of educational failure or otherwise in need of special assistance and support, such as students who are living in poverty, who attend high-minority schools (as defined in the Race to the Top application), who are far below grade level, who have left school before receiving a regular high school diploma, who are at risk of not graduating with a diploma on time, who are homeless, who are in foster care, who have been incarcerated, who have disabilities, or who are "English learners" (United States Department of Education). Students who fit into this high need category and the schools that they attend have some unique needs that create an even stronger case for the value of social and emotional learning.

High needs schools often serve students of minority racial and ethnic groups as well as students who are living in poverty. Both educational achievement and aspirations are significantly impacted by race and ethnicity, as well as levels of poverty and family structure (Nitardy, Duke, Pettingell, & Borowsky, 2015). Growing up in an impoverished community has also been associated with lower levels of work commitment and unemployment (Nieuwenhuis, Yu, Branje, Meeus, & Hooimeijer, 2016), exposure to violence (Carothers, Arizaga, Carter, Taylor, & Grant, 2016), and increased health problems such as depression and obesity (Goodman,1999), all of which have significant implications for long-term outcomes.

Additionally, many students of color experience discrimination (Yoshikawa, Aber, & Beardslee, 2012). Wong, Eccles, and Sameroff (2003) examined the impact of perceived discrimination on African American youth. Their examination was part of a larger study of over 5,000 youth. They found that perceived discrimination from peers and teachers creates "potential threats to adolescents' academic motivation, positive mental health, and self-esteem" (Wong, Eccles, & Sameroff, 2003, p. 1221). Youth that experienced discrimination were more likely to engage in problem behavior or engage in relationships with peers that promote negative behaviors. Positive connections to their ethnic group, however, did serve as a protective factor.

Many students from high needs communities also experience significant traumatic events. A 2004 study of over 2,000 urban youth determined that a high number of them indicated that they had experiences some type of trauma exposure (Breslau, Wilcox, Storr, Lucia, & Anthony, 2004). Traumas included violent assaults, injury or shocking events, trauma experienced by a close friend, or learning about an expected death. 82.7% of the youth in the sample reported experiencing a trauma. Trauma experiences were most frequently reported during teenage years. Approximately 7.1% of the population expressed symptoms consistent with post-traumatic stress disorder (PTSD). It is important to understand the impact of PTSD because other studies have shown a connection between post-traumatic stress symptomatology and suicidal ideas in youth (Mazza, 2000).

Beyond the typical transitions and stressors of adolescence, youth who are growing up in high needs communities and schools are likely to face additional challenges that arise from living in poverty, facing discrimination, and experiencing traumatic events. This additional layer of challenges underscores the need to equip youth from high needs schools to cope and develop skills to help them navigate the landscape of their lives. Therefore, social and emotional learning becomes even more significant for these students.

Defining Social and Emotional Learning

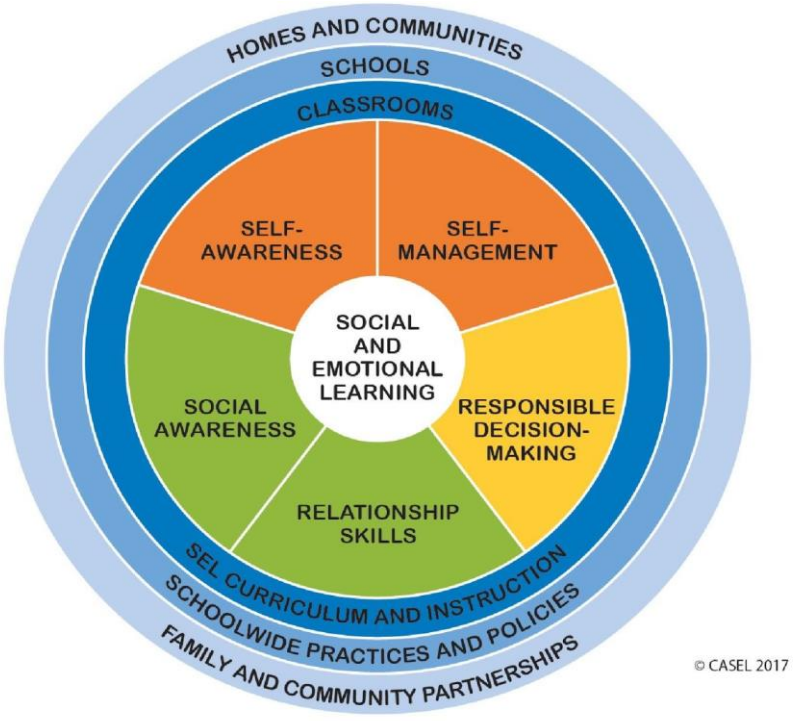
Researchers contend that social and emotional learning has its foundation in progressive education frameworks (Osher, Kidron, Brackett, Dymnicki, Jones, & Weissberg, 2016). Ideas about social and emotional learning gained more traction in the early 1990s. The work on social and emotional learning has been consistent with broader understandings of intelligence as promoted by theories such as Goleman's Emotional Intelligence and Sternberg's Triarchic Theory of Intelligence that highlight the importance of practical intelligence. Social and emotional learning focuses on more holistic views of learners within dynamic contexts. Contemporary work around social and emotional learning (SEL) promotes proactive efforts to prevent negative outcomes associated with school and life stress and reflects an understanding that emotions impact cognitive processes.

Definitions of social and emotional learning have been codified through the development of state learning standards. In 2003, the state of Illinois passed the Children's Mental Health Act which provided a structure for the definition and implementation of SEL in public school

environments. School leaders defined SEL as "a process for helping children and even adults develop fundamental skills for success in school and life" (O'Brien & Resnik, 2009). Education leaders called for active support and advocacy for SEL program implementation. Illinois leadership had an early and ongoing relationship with the Collaborative for Academic, Social, and Emotional Learning (CASEL), a Chicago-based leader on SEL policy and practice.

The Collaborative for Academic, Social, and Emotional Learning (CASEL) was formed in 1994 to promote social and emotional learning through original research, advocate for social and emotional learning programs, and support the development of tools for effective implementation of SEL programs in schools. CASEL has been very instrumental in building coalitions and collaborating to develop a definition of social and emotional learning widely accepted by the field. CASEL defines "social and emotional learning (SEL) that enhances students' capacity to integrate skills, attitudes, and behaviors to deal effectively and ethically with daily tasks and challenges" (CASEL, 2017).

Figure 1: CASEL Model of SEL



The five competencies that are highlighted in the center of the figure are broken down into the following descriptions of skills and behaviors:

Table 1: CASEL Core SEL Competencies

Core Competency	Description	Related Behaviors
Self-Awareness	The ability to accurately recognize one's own emotions, thoughts, and values and	Identifying emotions Accurate self-perception

	how they influence behavior. The ability to accurately assess one's strengths and limitations with a well-grounded sense of confidence, optimism, and a "growth mindset."	Recognizing strengths Self-confidence Self-efficacy
Self-Management	The ability to successfully regulate one's emotions, thoughts, and behaviors in different situations — effectively managing stress, controlling impulses, and motivating oneself. The ability to set and work toward personal and academic goals.	Impulse control Stress management Self-discipline Self-motivation Goal-setting Organization skills
Social Awareness	The ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures. The ability to understand social and ethical norms for behavior and to recognize family, school, and community resources and supports.	Perspective taking Empathy Appreciating diversity Respect for others
Relationship Skills	The ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups. The ability to communicate clearly, listen well, cooperate with others, resist inappropriate social pressure, negotiate conflict constructively, and seek and offer help when needed.	Communication Social engagement Relationship-building Teamwork
Responsible Decision Making	The ability to make constructive choices about personal behavior and social interactions based on ethical standards, safety concerns, and social norms. The realistic evaluation of consequences of various actions, and a consideration of the well-being of oneself and others.	Identifying problems Analyzing situations Solving problems Evaluating Reflecting Ethical responsibility

CASEL, 2017. Retrieved from: http://www.casel.org/core-competencies/

There are many social and emotional learning curriculum programs for schools to evaluate. In 2015, CASEL published a guide entitled, "Effective Social and Emotional Learning Programs." The guide presents a framework for selecting effective programming based on the following three principles:

> Principle 1: School and district teams--rather than an individual--should engage diverse stakeholders in the program adoption process to identify shared priorities.

> Principle 2: Implementing evidence-based SEL programs with systematic, ongoing district and school planning, programming, and evaluation leads to better practice and more positive outcomes for students.
>
> Principle 3: It is critical to consider local contextual factors (e.g. student characteristics, programs already in place) when using the CASEL Guide and gathering information in order to make the most effective decisions about which programs to implement.
>
> Effective Social and Emotional Learning, p. 20

The guide provides a very useful overview for educational leaders to review available curriculum models and guide their decision-making.

How SEL Programming Can Make a Difference

Benefits to Students

Kraag, Zeegers, Kok, Hosman, and Abu-Saad (2006) conducted a meta-analysis of school programs that target stress management. Their findings indicated that positive effects were connected to stress symptoms and coping skills. While effect sizes varied across studies in their analysis, they concluded that "primary prevention programs focusing on promoting mental health through school-based stress management training are most likely effective" (Kraag et al., 2006, p. 468).

A later meta-analysis explored the impact that social and emotional learning programs have on academic learning (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). The researchers examined over 200 studies, almost half of which focused on urban schools. Their findings indicated that SEL programs support positive development of social-emotional competencies and positive attitudes. Further, students experienced improvement in "behavioral adjustment in the form of increased prosocial behaviors and reduced conduct and internalizing problems, and improved academic performance on achievement tests and grades" (p. 417). In fact, a subset of the studies demonstrated an 11-percent gain in academic achievement. The researchers concluded that while there are ongoing efforts to support SEL programming through state learning standards, policy, and funding, many schools still do not use evidence-based programs, or do not implement the programs correctly.

Benefits to Teachers

Jennings and Greenberg (2009) described the importance of having teachers with strong social and emotional competence as well as a system that supports ongoing development so that teachers can best support their students. When teachers do not have strong SEL skills, they may experience fatigue and burnout that further challenges the teacher-student relationship. High needs schools are often challenged by teacher turnover and stress. In short, the authors make a case that SEL professional development and programming can support teachers which in turn supports the needs of the students.

Collie, Shapka, and Perry (2012) provided further discussion about the benefits of SEL programs on teachers. Their research concluded that teachers' perceptions of school climate and social emotional learning are associated with job stress, teacher self-efficacy, and job satisfaction, all of which potentially impact the delivery of educational services. These findings are important both because they point out the importance of supporting teachers as they implement SEL, but also underscore that both the students and the teachers can be impacted by SEL programming. Effective programming has the potential to positively influence the teacher's sense of impact and overall satisfaction which may contribute to more stable teaching positions.

Cost Benefits

Researchers with the Center for the Benefit-Cost Studies in Education, completed an analysis of six well-documented social emotional learning programs. They argue that cost analysis is essential for administrators and educational policy makers to understand the costs and values of educational programming. They admitted the limitations of an analysis based on only six programs, but nevertheless concluded, "there is a positive return on investments for all these educational reforms on social and emotional learning" (Belfield, Bowden, Klapp, Levin, Shand, & Zander, 2015, p. 5).

Understanding the cost benefit of SEL programs is important for educational administration and policy leaders who must continue to navigate the pressures for academic achievement and other public demands. Social and emotional learning is not only a cost effective educational practice, but when carried out with evidence-based practices SEL programming can yield positive results for all students.

Conclusion

Contemporary views of adolescence as a developmental period focus on both biology and context, but something common to both of these aspects of development is change. Adolescents are undergoing tremendous change as they move from childhood to their adult lives. A core set of skills that all people need to manage adulthood are the social and emotional competencies: self-awareness, self-management, social awareness, responsible decision making, and relationship skills. These skills take development and practice. Researchers have shown that these skills can effectively be taught through comprehensive, evidence-based programming.

Students who attend high needs schools potentially face additional challenges. Discrimination, poverty, and trauma are just a few things that both challenge the core social and emotional competencies and make these skills even more critical for middle and high school students to navigate their current lives and prepare for their future paths. Approximately half of the studies that were examined by Durlak, et al. (2011), took place in urban school environments. These studies provide support for the value of social and emotional programming to improve student outcomes for behavior, sense of self, and academic achievement. Other studies have shown that social and emotional programming benefits can extend to the teachers that are

serving these students and may lead to more positive perceptions of students and stronger teacher-student relationships. Finally, social and emotional learning has a documented cost benefit. Therefore, it is not only good for individual students, but it is good for educational systems and communities at large.

Even in states such as Illinois where there are established social and emotional learning standards, there is great variation in the implementation of SEL programming. There is an ongoing need for more professional development and support for teachers and schools in implementing evidence-based social and emotional programming, as well as continued research to document SEL effectiveness especially for high needs schools. CASEL is one organization that is continuing to promote research and working on developing effective assessment procedures that will assist with implementation practices.

References

Arnett, J. J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist, 54*(5), 317-326. http://dx.doi.org/10.1037/0003-066X.54.5.317

Belfield, C., Bowden, B., Klapp, A., Levin, H., Shand, R. & Zander, S. (2015). *The Economic Value of Social and Emotional Learning*. Teachers College: Columbia University Retrieved from: http://blogs.edweek.org/edweek/rulesforengagement/SEL-Revised.pdf

Breslau, N., Wilcox, H., Storr, C., Lucia, V., & Anthony, J. (2004). Trauma exposure and posttraumatic stress disorder: A study of youths in urban America. *Journal of Urban Health*, 81(4), 530-544. doi:10.1093/jurban/jth138

Carothers, K., Arizaga, J., Carter, J., Taylor, J., & Grant, K. (2016). The Costs and Benefits of Active Coping for Adolescents Residing in Urban Poverty. *Journal of Youth & Adolescence*, *45*(7), 1323-1337. doi:10.1007/s10964-016-0487-1

Collaborative for Academic, Social, and Emotional Learning. (2015). *2015 CASEL Guide: Effective Social and Emotional Learning Programs—Middle and High School Edition*. Chicago, IL: Author.

Collaborative for Academic, Social, and Emotional Learning. (2017). *Core SEL Competencies*. Retrieved from: http://www.casel.org/core-competencies/

Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social–emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, *104*(4), 1189-1204. doi:10.1037/a0029356

Crouter, A. C., & Bumpus, M. F. (2001). Linking parents' work stress to children's and adolescents' psychological adjustment. *Current Directions in Psychological Science*, *10*(5), 156-159.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta analysis of school based universal interventions. *Child Development*, *82*(1), 405-432.

Everri, M. (2014). Linking micro- and macro-transitions: A case study on systemic family processes during adolescents' transition to high school. *Journal of Family Studies*, *20*(3), 257-272. doi:10.5172/jfs.2014.20.3.257

Goodman, E. (1999). The role of socioeconomic status gradients in explaining differences in US adolescents' health. *American Journal of Public Health*, *89*(10), 1522-1528.

Hines, A., & Paulson, S. (2006). Parents' and teachers' perception of adolescent storm and stress: relations with parenting and teaching styles. *Adolescence*, *41*(164), 597-614.

Hollenstein, T. & Lougheed, J.P. (2013). Beyond storm and stress: Typicality, transactions, timing, temperament to account for adolescent change. *American Psychologist, 68*(6), 444-454. http://dx.doi.org/10.1037/a0033586

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, *79*(1), 491-525.

Johnson, S. L., Tandon, S. D., & Cheng, T. L. (2015). Career readiness: A potential pathway through which urban youth's exposure to stress influences adult health. *Journal of Community Psychology*, *43*(3), 321-337. doi:10.1002/jcop.21681

Kraag, G., Zeegers, M. P., Kok, G., Hosman, C., & Abu-Saad, H. H. (2006). School programs targeting stress management in children and adolescents: A meta-analysis. *Journal of School Psychology*, *44*(6), 449-472.

Lounsbury, J. H. (2010). *This We Believe*. Westerville, OH: Association of Middle Level Education.

Marikutty, P. J., & Joseph, M. I. (2016). Effects of emotional intelligence on stress, psychological well-being, and academic achievement of adolescents. *Indian Journal of Health & Wellbeing*, *7*(7), 699-702.

Mazza, J. J. (2000). The Relationship Between Posttraumatic Stress Symptomatology and Suicidal Behavior in School-Based Adolescents. *Suicide and Life-Threatening Behavior*, *30*(2), 91-103.

Nieuwenhuis, J., Yu, R., Branje, S., Meeus, W., & Hooimeijer, P. (2016). Neighbourhood

Poverty, Work Commitment and Unemployment in Early Adulthood: A Longitudinal Study into the Moderating Effect of Personality. *Plos ONE*, *11*(12), 1-12. doi:10.1371/journal.pone.0167830

Nitardy, C., Duke, N., Pettingell, S., & Borowsky, I. (2015). Racial and Ethnic Disparities in Educational Achievement and Aspirations: Findings from a Statewide Survey from 1998 to 2010. *Maternal & Child Health Journal*, *19*(1), 58-66. doi:10.1007/s10995-014-1495-y

O'Brien, M.U. & Resnik, H. (2009). The Illinois social and emotional learning (SEL) standards: Leading the way for school and student success. *Building leadership: Illinois Principals Association Bulletin*, 16 (7), 1-5.

Osher, D., Kidron, Y., Brackett, M., Dymnicki, A., Jones, S., & Weissberg, R. P. (2016). Advancing the science and practice of social and emotional learning: Looking back and moving forward. Review of Research in Education: Education Research—A Century of Discovery, 40(1).

Singh, R. (2016). Stress among School-Going Adolescents in Relation to Psychological Hardiness. *Journal of Educational Psychology*, *9*(4), 8-15.

Waters, S. K., Lester, L., & Cross, D. (2014). Transition to secondary school: Expectation versus experience. *Australian Journal Of Education*, *58*(2), 153-166. doi:10.1177/0004944114523371

Weissberg, R. P. & Cascarino, J. (2013). Academic learning + social-emotional learning = national priority. *Phi Delta Kappan*, 95(2): 8-13.

Wong, C., Eccles, J., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality*, 71(6), 1997-1232.

United States Department of Education. (n.d.) Definitions. Retrieved from: https://www.ed.gov/race-top/district-competition/definitions

Xiaojia, G., Conger, R. D., & Elder, J. H. (2001). The Relation between Puberty and Psychological Distress in Adolescent Boys. *Journal of Research on Adolescence*, *11*(1), 49.

Yoshikawa, H., Aber, J. L., & Beardslee, W. R. (2012). The effects of poverty on the mental, emotional, and behavioral health of children and youth: implications for prevention. *American Psychologist*, *67*(4), 272-284. doi: 10.1037/a0028015.

Social Justice at North Lawndale College Prep: The Peace Warriors

by John Horan

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Town Hall

"How many of you know one person who was shot in the last year?" The 100 or so high school students gathered in the library rolled their eyes as if to say, "Here is another lame adult whose question shows how clueless he is."

Almost all the hands shot up.

"How many of you know five people who have been shot in the last year?" Roughly 60% of the hands went up. Things began to get quiet. We were doing the math in our minds.
"How many of you know 10 people?" Students looked around wide-eyed, taking in the awful spectacle of 40 hands being raised. It was too much. Some put their heads in their hands afraid of what was to come next. Others left the room in tears, our counselors scooping them up like catchers in the rye.
"How many of you know 20 people who have been shot in the last year?" 10 hands were raised. Some teachers began to cry. Students hugged each other in small groups – they knew who had to be consoled. They knew the names behind the numbers.
Arne Duncan, the former Secretary of Education and founding board member of North Lawndale College Prep (NLCP), paused a moment, leaned forward and then quietly said. "I am so sorry. We adults have let you down. This is not normal. It is madness. What you are experiencing is unacceptable. We have to change this, and you have to lead the way."

The Way to Normal

13 years ago, after a spate of school fights, NLCP decided to go all in on peace. One of our teachers, Ms. Tiffany Childress, heard a presentation on Non-Violent Conflict Resolution based on Dr. Martin Luther King, Jr.'s principles of peace. It was the right program at the right time. Providence had moved.

A small group of adult staff and 15 students volunteered for a five-day training offered by the Institute for the Study and Practice of Non-Violence in Providence, Rhode Island. This group

then trained the entire NLCP staff during August professional development. The entire student body then was trained by the student leaders. At the end of these trainings, the school had a common language for peace. For example, we knew the difference between an upstander and a by-stander. We established a common goal for peace – at least 90% of our attendance days were to be conflict free. We were on our way to normal.
In a nifty counter-intuitive flip that adolescents are so good at, the students named themselves the "Peace Warriors." Originally, the Peace Warriors thought that their mission was to stop fights. And they were very good at that. That first year over 93% of our school days were peaceful – we had earned an "A". Very few disputes ended up in physical conflict and when there was a failure to keep the peace, the students who fought had to make an apology to the whole school community.

As peace became NLCP's norm, the Peace Warriors came to understand that peace is not just the absence of fights but the presence of robust human community. One of their favorite quotes was from Therese of Calcutta, "If we have no peace, it is because we have forgotten that we belong to each other." THAT was the job of the Peace Warriors – to remind us that we belong to each other, to become, in the words of Dr. King, the Beloved Community. Restorative justice practices and peer juries were established. Peace Warriors decorated lockers on birthdays and did consolation runs for their peers who lost a loved one. They conducted Peace trainings for parents and family members. Each week they taught "Peace Lessons" in each advisory. Every month the Peace Warriors organized a school wide celebration of our Peace with contests, dancing, food and whacky games. An annual peace march through the neighborhood ended each academic year. The Beloved Community had become the norm – we finished last year with over 100 trained Peace Warriors. It is the most popular group in the school (and it has the best T shirts!).

I'm Not Going to Throw Away My Shot

After the heart-breaking Town Hall with Arne Duncan, our Peace Warriors asked Arne's help to connect with other schools and youth groups in the city who might be interested in peace trainings. During the summer of 2017, thirty Peace Warriors lead trainings at 11 other schools serving 218 youth. This past summer 55 Peace Warriors went to 17 groups, training over 785 young people along the way.

Then came Parkland. With Secretary Duncan's help, 4 of our Peace Warriors went to Florida to meet with Parkland students. This group of remarkable young people reached across racial and socio-economic lines to proclaim to the country that ALL lives matter and that passing sensible gun control laws was a national priority. Our Peace Warriors participated in the March for our

Lives in Washington, DC, and are deeply involved in ongoing national planning for peace. It turns out that building the Beloved Community is a national imperative.
Recently, I asked one of our Peace Warriors what all of this meant. She had just seen "Hamilton." After a moment's pause she said, "I think this is our time. All this gun violence in the neighborhood, in Chicago, in the nation. It must stop. We have the nation's attention. We are like Hamilton and his boys…, we are NOT going to throw away our shot!" It turns out that Arne was right – our youth have to lead the way.

Dr. King's Six Principles of Nonviolence

1. Nonviolence is a way of life for courageous people.
2. Nonviolence seeks to win friendship and understanding.
3. Nonviolence seeks to defeat injustice, not people.
4. Nonviolence holds that suffering can educate and transform.
5. Nonviolence chooses love instead of hate.
6. Nonviolence believes that the universe is on the side of justice.