

Policy Proposal for Improving SDG 4, SDG 8, and SDG 9
Noah M. Kenney || November 11, 2023

The purpose of this policy proposal is to expand access to quality education and promote decent work, economic growth, and industrial innovation. This comprehensive proposal contains seven policies, each designed to be implemented at the secondary school level. This approach of focusing on secondary education is taken in order to increase college matriculation rates (quality education), increase both workforce salaries (decent work and economic growth), and improve industry, innovation, and infrastructure. College graduates make an average of \$1.2 million more over their lifetime than high school graduates, and those aged 22-27 with a bachelor's degree have a median salary of \$52,000 annually, versus a median of just \$30,000 annually for those with only a high school diploma¹. This difference is significant, and the resulting increase in wealth from a college degree also increases the chances of financial success for future generations. This is because wealth carries generational impacts, with a Georgetown study finding that being born into a higher income family is a larger indication of future success than intelligence².

Each proposed policy has the objective of aligning to one or more of the following Sustainable Development Goals (SDGs):

- 1). SDG 4 (Quality Education)
- 2). SDG 8 (Decent Work and Economic Growth)
- 3). SDG 9 (Industry, Innovation, and Infrastructure)

The proposed policies are feasible to implement without a significant increase in government spending/budget. This proposal acknowledges that many of these policies will take several years for implementation, and longer for measurable results. Thus, this proposal takes a long-term and prescriptive approach to local regulation. The order of the proposed policies is *not* indicative of their importance.

Policy #1: *Provide schedule flexibility and course credit for students gaining work experience in high school. Provide a centralized job board for students to find employment opportunities at local businesses.*

The percentage of high school students employed dropped from 58.0% in 1978 to 36.6% in 2021, with a median weekly salary of \$497³. Working while in high school provides several benefits to students. First, it allows them to earn an income which can help them afford higher education. Second, it allows them to experience industry at a young age, helping to determine which careers they may be interested in. Third, it teaches soft skills that may be difficult (or impossible) to acquire in an academic environment. However, working while in high school can be challenging for students for two primary reasons:

- 1). Difficulty of finding jobs that they are eligible for; and
- 2). Balancing their schedule with both work and school

Additionally, many businesses are not able to hire high school students since they are severely limited in what hours they are available to work.

This policy mandates that schools provide flexibility in schedules for students who are working, while allowing them to gain academic credit for their work. Given the numerous

¹<https://www.aplu.org/our-work/4-policy-and-advocacy/publicvalues/employment-earnings/#:~:text=The%20earnings%20gap%20between%20college,earnings%20are%20%2430%2C000%20a%20year.>

²<https://www.ctpublic.org/education/2019-05-15/georgetown-study-wealth-not-ability-the-biggest-predictor-of-future-success>

³<https://www.zippia.com/advice/high-school-job-statistics/#:~:text=High%20school%20jobs%20research%20summary.&text=Only%2030.5%25%20of%20teens%20ages,from%2051.7%25%20to%2036.6%25.>

benefits of having a high school job and the real work experience provided by one, students should be eligible to receive academic credit from work experience in the form of electives. Because the jobs would count toward course credit, students would be able to better arrange their schedule to accommodate both work and school. It would also make it easier for businesses to hire students, as the students would have more flexibility in terms of availability. Businesses would be responsible for providing an assessment of the student's work to be used in the student's academic grade calculations.

Additionally, this policy requires the development of a centralized job board for students to find employment opportunities at local businesses. This would help businesses streamline the hiring process, and make it easier for students to find and apply for jobs they are eligible for. By engaging with local businesses, students develop further devotion to the local Atlanta community and increase their desire to support industry, innovation, and infrastructure.

Alignment with SDGs:

This policy aligns with SDG 8 and SDG 9. By providing students with decent work opportunities and preparing students for higher income careers, the policy aligns with SDG 8. Additionally, by engaging students with local businesses at a young age, this policy aligns well with the industry goals of SDG 9.

Policy #2: Provide micro-grants or micro-loans to student entrepreneurs.

Fostering innovation and industrialization can often be accomplished through entrepreneurial ventures. Entrepreneurship encourages students to think creatively, solve problems, and learn how to apply essential academic skills (such as writing and mathematics) in the real world. High school is also an ideal time to pursue entrepreneurship, given that students do not (generally) have the pressure of bills, debt, and possibly supporting a family.

However, starting an entrepreneurial venture often requires at least a small amount of funding for initial inventory, marketing, and other expenses. Particularly for students from disadvantaged backgrounds, this is a difficult obstacle to overcome.

This policy involves the development of a program to provide opportunities to apply for micro-grants or micro-loans (between \$20 and \$500) for students with an entrepreneurial interest to be able to start small businesses. These loans have a very high repayment rate, with one study finding that between 95% and 99% of micro-loans are repaid⁴. The interest on these loans would more than cover the 1-5% of micro-loans which are not repaid. Thus, this program would pay for itself.

Alignment with SDGs:

This policy aligns with SDG 8 and SDG 9. By exposing students to entrepreneurship at a relatively young age, they are taught essential skills which allow them to contribute to industry and innovation, thus aligning with SDG 9. Through this micro-grant or micro-loan program, students can also learn about sustainable development, solving problems through innovation, and the impacts of entrepreneurship on the local economy (thus supporting SDG 8).

Policy #3: Provide ACT/SAT preparatory courses and resources to students.

Although many colleges and universities are moving to 'test-optional' admissions processes, standardizing testing (ACT/SAT) is still required by many universities. Additionally, empirical data shows that applying for college admissions with test scores increases chances of admission for students. At Fordham University in New York, for example, students applying with test scores were admitted at a 28.7% higher rate than those applying without⁵.

⁴ <https://www.cairn.info/revue-finance-et-bien-commun-2007-2-page-64.htm>

⁵ <https://www.leaprogram.com/blogs/college-bound/will-test-optional-increase-your-admission-chances#:~:text=The%20data%20they%20released%20for,those%20with%20ests%20was%2028.7%25.>

Unfortunately, students from lower income and disadvantaged backgrounds are significantly more likely to achieve lower scores on standardized tests. On the ACT, students coming from families with income <\$36,000/year earned average composite scores 4.3 points lower than those coming from households with income >\$80,000/year⁶. In turn, these students are less likely to gain admission to quality universities, and thus earn lower salaries in the workforce, perpetuating a generational cycle of economic inequality.

This policy mandates that every public high school in Atlanta develops a 40-hour ACT or SAT preparatory course for students and incorporates it into the required high school curriculum. A study done at a large Midwest high school showed that a pilot 20 hour prep course raised student scores by a considerable margin⁷.

Additionally, every public high school must provide access to ACT or SAT preparatory resources, including practice exams, answer explanations, and learning materials for difficult concepts. School systems may consider partnering with existing educational providers, such as Khan Academy, an organization which provides free SAT preparatory materials.

Alignment with SDGs:

This policy aligns with SDG 4 and SDG 8. Beyond primary and secondary school, considerable emphasis by the government should be placed on providing students with the skills necessary to both gain admission to and succeed in college or university. Thus, providing quality ACT or SAT preparatory courses and materials aligns with SDG 4. Once students graduate college or university, they are eligible for higher paying careers, thus also aligning this policy with SDG 8.

Policy #4: *Develop competitions encouraging students to propose solutions to infrastructure and sustainability problems.*

Competitions can be a powerful method of motivating, inspiring, and encouraging students⁸. The Institute of Competition Sciences also notes that competitions can teach students how to better deal with differing opinions, ideas, and even personalities⁹. Additionally, competitions can encourage students to engage with their local community, increasing their sense of belonging and ownership. This, in turn, incentivizes students to contribute to their local community in more meaningful ways.

Students are also a valuable resource, offering a fresh perspective on challenging problems. Thus, this policy mandates the development of competitions within school systems with the goal of encouraging students to propose solutions to infrastructure and sustainability problems. Local businesses should be recruited to sponsor and support these competitions, and may even wish to implement student ideas in their own businesses. By allowing students to compete to solve real world problems for the businesses they drive by every day, students are able to engage in their community in a meaningful way.

Alignment with SDGs:

This policy aligns with SDG 9. The development of competitions encourages students to focus on the challenges and problems in their local community, and use innovation to solve them, while emphasizing sustainability. Thus, students use the motivation of competition to inspire innovations in industry and infrastructure, aligning with SDG 9.

Policy #5: *Improve ratio of high school counselors to high school students to 1 counselor per 250 students.*

⁶<https://www.act.org/content/dam/act/unsecured/documents/5688-data-byte-2016-5-adjusted-differences-in-act-scores-by-family-income.pdf>

⁷<https://files.eric.ed.gov/fulltext/EJ992994.pdf>

⁸<https://www.edsurge.com/news/2023-02-08-competition-can-motivate-encourage-and-inspire-students-but-it-can-also-harm-them#:~:text=Competition%20can%20be%20thrilling%20and,negative%20feelings%20of%20self%2Dworth.>

⁹ <https://www.competitionciences.org/2016/07/04/10-ways-competitions-enhance-learning/>

Currently, Georgia mandates that there is only one counselor per 450 students, despite the recommendation of the American School Counselors Association to ensure that there are, at a maximum, 250 students per counselor¹⁰. The current ratio of students to counselors means that many counselors are too busy helping students plan courses and completing administrative tasks that they are unable to assist students in college planning. This can have an extreme adverse impact on the likelihood of a student enrolling in college. Data shows that students who met with a school counselor regarding college planning attended college at a rate 43.6% higher than those who had not met with a school counselor¹¹.

This policy mandates that the ratio of high school counselors to high school students is improved to 1:250, at most. This ratio improvement would allow counselors to increase the frequency of meetings with students and take a more active role both in encouraging students to pursue further education and in preparing students to do so. Additionally, students would be able to receive additional guidance from counselors on planning courses that align with their interests, and providing recommendations should they find themselves struggling in a course.

While this policy does have a cost, the cost is low enough to still be feasible for implementation. Currently, the average school counselor salary in Georgia is \$51,328¹². To use conservative numbers, we will assume the total cost of a school counselor including benefits is \$65,000/year. With the current ratio of one counselor per 450 students, this is a cost of ~\$145/student. If the ratio were improved to the suggested one counselor per 250 students, the cost would increase to \$260/student/year. This increase of \$115 per student per year is minimal, especially when divided among taxpayers and in light of the significant positive impacts on quality of education, and post-graduation outcomes.

Alignment with SDGs:

This policy aligns with SDG 4 and SDG 9. Since the primary role of a school counselor is to provide academic guidance and support to students, improving the ratio of counselors to students would have a direct impact on student success in secondary school and likelihood of pursuing further education at the college level. Thus, this policy aligns with SDG 4. Additionally, counselors can provide career guidance and inform students of opportunities to pursue careers which support industry, innovation, and infrastructure. Thus, this policy also supports SDG 9.

Policy #6: Mandate education designed to improve student computer literacy.

Adults with computer proficiency skills were employed at a rate 20.2% higher than those reporting lack of computer skills¹³. Additionally, there is strong empirical evidence showing that students with consistent computer use and skills have higher GPAs than those less familiar with computers¹⁴. The same study showed that a significant percentage of college courses require computer usage.

Accordingly, this policy mandates that all high school students are required to take basic computer training, including learning how to use basic word processing software, send professional emails, and conduct research effectively. This better prepares students to succeed both in school and in the workforce.

Alignment with SDGs:

This policy aligns with SDG 4, SDG 8, and SDG 9. Given that one of the goals of SDG 4 is promoting lifelong learning opportunities, it is essential that students are able to research, learn, and consume information in a digital format. Thus, promoting computer literacy aligns this policy proposal with SDG 4. Additionally, being computer literate makes students eligible for

¹⁰<https://freshtakegeorgia.org/georgia-schools-counselors-warn-of-lack-of-staffing-and-support/#:~:text=The%20mandated%20counselor%2Dto%2Dstudent,counselor%20to%20every%20250%20students>.

¹¹ https://tpejournal.nbcc.org/wp-content/uploads/2019/12/Pages_347-357-Tang-High_School_Counselor_Contacts_as_Predictors_of_College_Enrollment.pdf

¹² <https://www.indeed.com/career/school-counselor/salaries/GA>

¹³ <https://blogs.worldbank.org/jobs/improve-computer-skills-improve-job-prospects>

¹⁴ <https://irl.umsl.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1302&context=dissertation>

additional jobs, aligning with the goal of promoting decent work and economic growth outlined in SDG 8. Computers are a powerful tool and can be used to foster innovation by those with computer literacy, thus aligning this proposed policy with SDG 9.

Policy #7: *Develop a centralized platform for students to find college scholarship and grant opportunities.*

While attending college significantly increases the likelihood of financial success, it also comes at a high cost leading to the average student graduating with \$30,000 in student loans¹⁵. Scholarships and grants can bridge this gap, making it easier for students to attend college by reducing the financial burden of doing so. Scholarships and grants also allow students to reduce the number of hours they need to work while in college, thus allowing them more time to pursue their studies and earn higher grades.

Data shows that the issue is not the lack of scholarship and grant programs, but instead the lack of applicants. In fact, close to \$100 million in scholarships and \$2 billion in student grants go unclaimed each year¹⁶.

This proposed policy is designed to increase the number of students claiming college scholarships and grants through the development of a centralized platform for students to find these scholarships and grants. This is a low cost and easy to implement policy, and ensures that students are aware of scholarship and grant opportunities even if their school counselor fails to advise them of these opportunities. It also allows scholarship and grant programs to reach students easier, which could make the development of new scholarship and grant programs easier and more probable.

Alignment with SDGs:

This policy aligns with SDG 4. Students who receive access to funding are more likely to be able to afford the pursuit of higher education, thus aligning with SDG 4. Indirectly, SDG 8 is also supported as students who pursue higher education are able to earn higher salaries and thus contribute to economic growth.

CLOSING REMARKS: While past policies implemented in Atlanta have focused on adults, this policy proposal takes a different approach. By targeting improvements in secondary education, students are more likely to pursue higher education, leading to higher income jobs and increasing the likelihood of success for future generations. Additionally, these policies help ensure that students are able to contribute to industry, innovation, and infrastructure upon graduation.

There are many stakeholders in this policy proposal, with the most notable being high school students. However, these policy proposals have positive impacts for those of all ages outside of secondary school as well. Since many of these policy proposals are designed to foster innovation and industry, the entire Atlanta community would benefit from their implementation. Additionally, this comprehensive proposal of policies is designed to improve quality of education and, ultimately, post-graduation outcomes in the Atlanta community. This, in turn, promotes economic growth, improving the quality of life for constituents. While Atlanta is used as a case study, many of these policy proposals are applicable to other jurisdictions as well.

¹⁵ <https://www.goingmerry.com/blog/why-scholarships-are-important/>

¹⁶ <https://www.sofi.com/learn/content/unclaimed-scholarship-guide/#:~:text=It%27s%20estimated%20that%20close%20to,du%20to%20lack%20of%20applicants.>