

A Cause and Effect Analysis: Looking at the effects of a lack of skill-based education in Schools

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Abstract

Skill-based learning is where a student learns a specific skill, so the student will be able to retain and apply the skill more effectively. There has been a considerable lack of skill-based learning in school, which has affected schools and students vastly. We wanted to find the causes behind the issues and present possible solutions/remedies. For our research, we used a collection of research papers from various authors. We use data from other studies so we can understand the causes and effects of the lack of a skill-based education system. A lot of this data in the studies we use are observational and statistical. We analyze the results from such papers and provide more in-depth insight into these issues. Furthermore, we used the results from past studies to offer potential solutions. From those, we were able to explain why more schools should implement skill-based learning into their curriculum.

Introduction

Lack of skill-based education has continuously proven to be one of the most significant concerns in the modern education system. This comes as the United States' academic results in all subject fields have been ranking significantly lower than other countries on the international chart for years. For reference, the US ranks 15 out of 28 countries in reading literacy, 19 in mathematical literacy, and 14 in scientific literacy. The effects of the under-managed system are not simply illustrated by academic comparisons, but also by the citizens. Due to the poor development and enforcement of soft skills(communication/people skills), people find extreme difficulty in communicating, leading, and interacting with others. These skills are considered essential, if not more important, by many students of all ages and backgrounds. Even with the rise of new resources, such as the introduction of new technological materials, students have not

seen an improved or enriched curriculum designed for their personal and professional development. Skill-based education plays a large factor in the future success for the current demographic, and it is noted from an early age—as young as preschool. Additionally, skill-based teaching and learning, or the lack thereof, reflects on the many flaws of the traditional education system that is still being implemented today and highlights the many different issues and problems that have been present since its existence in the US. This remains a grand-scale national concern. If schools do not prioritize skill-based teaching and learning, the US will continue remaining inferior to other countries in terms of subject or grade-level proficiency.

When students graduate and pursue higher education, they realize the importance of soft skills in the real world. Studies have recognized the impact of a lack of skill-based education on future jobs and what students think of it. Graduates and university students all thought that soft skills are important for jobs. This article's results are as follows: some students thought that soft skills were more important than professional knowledge. University students and graduates perceived communication skills and sensitivity in communication as the most important skills. The researchers believed that the university students and graduates weren't active in enhancing their skills. Rather, they (the students) hoped that the university would help them garner those skills. The employers agreed with the students and graduates that soft skills were important in the modern workplace. Employers also agreed with the students that the university curriculum is outdated and didn't fit the modern workplace's needs. Furthermore, most employers tend to say that life skills are valued more than soft skills. Life skills, they said, needed to be applied in the real world and future employers should have enough experience with them. Surprisingly, many employers argued that many students who have a "communications" degree from the university couldn't communicate with others correctly in real life. Thus, employers believed students lacked emphasis on real-life application and experience. So, one major effect on university graduates with a lack of skill-based education is that it hinders their ability to have real success in the contemporary workplace. Specifically, the real-world experience is what matters most to employers, and without experience, one cannot meet or exceed expectations of their jobs. It is clear that a lack of connection to the real world is a major cause of a lack of skill-based learning in the modern education system. Without experience, students cannot gain real skills and could have a biased view of what they expect the workplace to be like. This will lengthen the time new employees take to adjust to the workplace's system which will of course lower efficiency in the workplace. A potential solution to this problem is to have designated days where all the students intern for a specific job and find what they are good at. This will not only relieve pressure off the students but also strengthen their skills and learn new things. Furthermore, having experience

early on will make all graduates ready to tackle their jobs at ease, thus increasing workplace efficiency.

The need for both hard and soft skills is evident, as they play a crucial role in all career fields. Yet, the education system has always emphasized the importance of hard skills and neglected to cultivate and develop soft skills that students also need. The imbalance between the two takes a toll on a student's education and career paths. The failure to develop soft skills at a young age leads to students struggling to connect and navigate with the real world even before reaching adulthood. To learn more about the relationship between soft and hard skills, a group of researchers conducted an analysis by running skills listed in job advertisements through the Multivariable Hawkes Process model. The analysis showed that hard skills, such as technological programming skills, predict the rise in soft skills, such as communication and collaboration. It also proves that even with the rise of data analytic, AI-related skills, and other hard skills, people's need to communicate ideas, lead, and negotiate is undeniable and essential.

The aforementioned soft skills and real-world skills can be trained and developed from a young age, as early as preschool. However, the lack of skill-based education in preschool becomes a hindrance as well. Consistently, it has been proven that quality preschool results in better educated and well-prepared children. A 37-year longitudinal study revealed that students who participated in the High/Scope Perry Preschool Project in a forty-year range were more likely to complete high school, have higher monthly earnings, and own property than their counterparts who did not attend preschool.(NCJRS) What deems High/Scope Perry Preschool Project a quality preschool is adhering to The National Association of Young Children's (NAEYC) standards, which calls for written statements of the program's goals and philosophy, supportive learning materials and equipment, reasonable staff-child ratios (one instructor per every six 2-year old children), and different staff qualifications (skill-based teaching) that enables immense support in every field to provide young children with necessary skills. Contrary to popular belief, quality preschools are great investments, as a 2004 study indicates. The Economic Policy Institute finds that if the nation provides quality early education for young low-income students starting in 2005, by 2050, the nation would have an enormous \$61 billion in revenue boost.

Though it has been shown that the US has neglected funding into quality preschools, total expenditures for public schools in 2015-2016 amounted to \$706 billion. By breaking this number now, one can see that about \$13,847 covers one public school student's enrollment. Stephen P. Heyneman, the author of a research paper called "The International Efficiency of American Education: The Bad and the Not-so-Bad News," provided a more in-depth look into these numbers by experimenting with examining factors and causes of inefficiency in the US. Education system. Heyneman also presents and analyzes different charts to compare results and

commissions from 17 different countries. Some critical information includes the US spending compared to other countries. For example, in Norway, about \$1,111 was spent per person for 46% above international 8th-grade mathematics. In the US., \$1,040 was spent per person for 45% above the international average. This indicates that the will need to spend around \$24 more

per person for a 1% increase. However, in Singapore and Japan, only \$7 per person would be required for the same 1% increase, and similarly in Thailand, around \$4 per person. In Romania, around \$2 to \$3 per person. A clear conclusion can be drawn from the data provided: the US. spends more for the same result. In addition, America's scores ranked 8th place out of 17 countries, but when looking at monetary efficiency, it drops down to 16 out of 17. As seen, the issue doesn't lie in the amount of money the country spends on education, but rather the way the current budget is being used. The money isn't efficiently used to the utmost ability to garner the necessary results. It leads one to wonder about the management of educational resources, whether that is funding towards the professionalization of education (skill-based teaching) or required learning equipment (skill-based tools).

When looking at the modern education system as a whole, one conclusion can be drawn—the 21st century is a digitalized era, without a doubt. From the 1990s to the present day, technology has made its way into classrooms, proving to be an efficient way of teaching and learning. Now, more than ever, communication has skyrocketed. Students can gain new insight and information simply from sitting at home, and teachers can compile large lessons and easily present new information through digital models. In this era, people worldwide are reliant on technology, so why is it that the US still suffers greatly from the Digital Divide? Due to a lack of proper investment, schools in lower-income districts do not have the means to provide more specialized equipment and technology that aids in a student's development. The same lack of correct investments is seen in teacher's salaries and the inability to fire less-than-qualified teachers, which continuously enables the lack of skill-based education that is so needed in this time and age. Digitalization continuously proves to be an asset in modern-day education, but nothing will replace the authenticity of traditional methods of teaching and specialization of teachers' skills.

Even with today's new technologies, Finland's education system continues to overshadow and garner better results from students than the United States. Finland's unique education system strategy states that a student who has fallen behind be granted additional teaching. A student who has difficulty learning has access to part-time special needs education. Although the US has passed the Individuals with Disabilities Act- that sought to provide free public education for

kids- local governments control the practices and implementation. In the US, there are two learning pathways for teachers: university-based and practice-based. The university-based requirements vary significantly from program to program, which doesn't guarantee the same skills and experience for every prospective teacher. However, in Finland, eight Finnish universities offer the structure of teacher education, all taking place in a research-based-university structure. Each university has a specific curriculum and strategies. After teachers get their five-year degree, they are required to take an exam that tests their knowledge of educational practices, take an interview, and have their resume looked over. America could take note of Finland's school system, as it teaches kids how to engage more with the real world.

Additionally, Finnish students are only required to take one standardized test during their entire primary/secondary schooling, a low stakes test that gauges how the Finland Educational system is doing. The National Matriculation exam has questions that don't shy away from real-world issues, which span across different subject areas. Some topics included socialist revolutions, ethics, popular music, violence, and evolution. In contrast, in the US, students are required to take two standardized tests annually from 3rd to 8th grade. The tests test basic knowledge in specific math/ELA skills, but certain strategies can help bolster the scores without students having to answer the questions authentically. Opponents have criticized this testing saying that students are only learning how to become better test-takers. In high school, there are plenty more standardized tests required/suggested to get into top tier colleges - the SAT/ACT, SAT subject tests, and AP exams. In Finland, tuition is free for any student accepted into a college or graduate program in Finland, including master and doctoral degrees. In contrast, the average student loan debt in American is \$35,397, with borrowings totaling to over \$1.64 trillion in total. If college was more accessible to everyone in the US, we would have a stronger workforce that has a vast span of skills. The US could modify its testing policies to allow for more students to learn skills and to get into higher education.

Conclusion

After examining the aforementioned possible factors, such as the possibility of underfunding, the issues of inefficient spending, and the question of traditional limiting curriculums that do not develop the essential skills and knowledge students actually need, it is clear that major reforms are needed in the modern education system. To be specific, professionalization of education must be the goal that the US attempts to strive in order to develop educated and prepared citizens, who will create a brighter future of endless possibilities for the US. To support that goal, the US must look to other educational systems around the world that have demonstrated themselves to be useful and successful in providing an enriching and

fulfilling education for their students, and all the while reflect on their own broken system and consistently seek out for ways to ameliorate in the areas that are lacking. That is the reform needed in order to improve and create a challenging curriculum that encourages competition, boosts college readiness, and prepares for a successful future.

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