

The Entanglement of Education and Employment in an AI Economy

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Introduction

Artificial intelligence (AI) has been ushering in a new wave of innovation. Yet the implementation of AI in the workplace has sparked controversy. Although robots taking over the workplace, or even society, has been a recurring trope since the industrial revolution, it resounds even more profoundly in today's society. Much like the anxiety that emerged when factory workers' jobs were being replaced by automation in the 1900s, today individuals' loss of value and economic security has taken center stage. Their anxiety is not without reason. AI has the potential to and has replaced human positions in many fields. However, much like the automation seen in factories, AI does not function without human support or collaboration.

A popular press article, "Amazon's New Robots Are Rolling Out an Automation Revolution," posted by Wired and written by Will Knight, highlights a potential boom in the AI economy given robots' ability to collaborate with humans in the workplace.

Amazon's new robots are called "Proteus." Proteus is designed to work "among humans" and "many of them take on tasks previously done by people" (Knight, 2023). Ultimately, "certain jobs will be eliminated as new ones will emerge" (Knight, 2023).

Amazon's desire to increase automation in their facilities is not unfounded.

Amazon is a highly efficient company. Their ability to fulfill orders quickly plays a huge role in consumer appeal. However, Amazon's efficiency has a downside. In the past, US regulators have commented on Amazon's "poor workplace safety" which has caused it to face "industrial action and walkouts in several US states and the UK" (Knight, 2023). Their poor working conditions also have created a "high staff turnover" (Knight, 2023) and created a breeding ground for litigation. In theory, these issues become obsolete when you replace these workers with robots who do not require humane, legally compliant or safe working conditions. In a capitalist economy, increased profits and productivity are a driver of change— and Amazon's transition to an automated workforce has increased their sales 10-fold. "Machine-learning" (Knight, 2023) is a technique that allows robots to continually learn. These learnings are then shared instantaneously. This implies that they can obtain and share immense amounts of data in a very short period of time, and data is the most valuable commodity in our current economy.

Regardless of corporate increases in profit and efficiency, there are still conflicting viewpoints on how automation will ultimately impact employment. "One US study found that each robot adopted in manufacturing replaced about three workers. However, other research shows that companies that deploy more robots sometimes add more jobs overall" (Knight, 2023). In the end, Amazon's transitions to automation have "ripple effects for millions of workers and thousands of other businesses who compete with Amazon" (Knight, 2023). What is happening in Amazon is not a stand-alone event. It sets the stage for how future economic transformation will occur.

The transition to automation is inevitable. Instead of denying the change, research should focus on what jobs will be replaced, what jobs will emerge, and how we can best help current and future generations adapt successfully. Ideally, preparing future generations of workers for an AI economy starts with education. We are still preparing students to be factory workers because “much of what is done in literacy education today reflects the philosophy of the industrial (or factory) model of education, which evolved during the late nineteenth and early twentieth centuries” (Leland, 2002). Even more privileged students, who are educated for professional or service economy jobs may still be unprepared for AI. It is not beneficial to be educating students and preparing them for jobs that are being replaced by automation. Instead, we should be instilling skills in our students that will give them the best chance at succeeding in an AI economy. The archaic education mindset will not be easy to shift. As a starting point, we should ask the following question: how is the educational system preparing students to participate in an AI economy? To answer this question, I propose a survey be sent to California school teachers that includes quantitative and qualitative data covering skills being taught to students and soliciting educator’s opinions regarding this data. By understanding educators’ perspectives, we can start to understand what skill sets an AI economy demands that are currently being taught or ignored by the education system. Ultimately, this paper will contribute to research that supports the transformation of the education system in a way that prepares future workers for a new economy.

Literature Review

To gain insight into the question, *what are educators' perspectives on how the educational system is preparing students to participate in an AI economy*, we must first break down the history of how automation has impacted employment and education. The background review of this paper will aim to address the history of automation and its effects on employment. Then, it will outline what AI is and its growing prevalence in employment and education.

History of Automation and Its Effects on Employment

Throughout this paper, automation will refer to both machine substitution for human labor as well as artificial intelligence as a substitution for human labor. Historically, people have been concerned about automation reducing opportunities for employment and creating salary disparities. There is mixed literature on this. What we know is that “changes in technology do alter the types of jobs available and what those jobs pay” (Autor, 2015). Throughout history, the looming idea of job destruction following technological innovation has reflected “the balance of power in society, and how gains from technological progress are being distributed” (Frey, 2017). In the 19th century, manufacturing technologies were substituting automation for workers through the simplification of tasks. “Manufacturing production shifted to increasingly mechanized assembly lines” (Frey, 2017) reducing the demand for unskilled labor but increasing the demand for skilled labor. Similarly, another form of automation, the Computer Revolution, “can go some way in explaining the growing wage inequality of the past

decades” (Frey, 2017). People who could work with computers earned more and accounted for a “substantial share of the increase in the rate of return to education” (Frey, 2017). Computers and automation have “caused a shift in the occupational structure of the labor market” because “computerization erodes wages for labor performing routine tasks; [so that] workers will reallocate their labor supply to relatively low-skill service occupations” (Frey, 2017). Overall in recent years, the demand for the lowest and highest skilled jobs have been increasing and the demand for middle-skilled labor has decreased.

Polarization has been used to describe how the labor market has left the middle class behind because jobs have disproportionately gone to those at the top and bottom of the income and skill distribution over the last few decades. Some believe that polarization, or the end of the middle class, will continue while others are less inclined to believe so. David Autor, a professor in the MIT department of economics, has argued against the persistence of polarization. He believes that “some of the tasks in many current middle-skill jobs are susceptible to automation” (Autor, 2015) and that “many middle-skill jobs will continue to demand a mixture of tasks from across the skill spectrum” (Autor, 2015). For example, medical support occupations are middle-skill employment opportunities that require mathematics, life sciences, and analytical reasoning and are not predicted to be replaced by automation. Autor continues to list jobs of this nature that are unlikely to be replaced such as: plumbers, builders, electricians, heating/ventilating/air-conditioning installers, and automotive technicians. Additionally, several middle-skill modern clerical occupations that provide coordination and decision-making functions, rather than simply typing and filing, are not at risk. Autor says

he expects, “a significant stratum of middle-skill jobs combining specific vocational skills with foundational middle-skills levels of literacy, numeracy, adaptability, problem-solving, and common sense will persist in coming decades” (Autor, 2015). He believes that many of the tasks bundled within these jobs can not be easily broken down with machines performing the middle-skill tasks and workers performing only a low-skill residual “without a substantial drop in quality” which suggests that “many of the middle-skill jobs that persist in the future will combine routine technical tasks with the set of nonroutine tasks in which workers hold comparative advantage: interpersonal interaction, flexibility, adaptability, and problem-solving.” (Autor, 2015). Combining the technical with the interpersonal will be the new middle-skill jobs.

The Role of Education in Automation

Rising inequality in demanded skills can also trigger “rising unemployment” (Prettner, 2017) because “automation also increases the skill premium and induces more higher education such that the supply of low-skilled labor declines” (Prettner, 2017). In response to the predicted growth of Artificial intelligence, the educational system needs to adapt. The question is, can it? “Education is often touted as the main solution to the challenges of automation (The White House, 2016, e.g.)” (Berg, 2018). If education can turn the ‘unskilled’ into ‘skilled’, this would reduce wage inequality and strengthen the demand for unskilled labor.

The transition of middle-skills is dependent on “the ability of the US education and job training system (both public and private) to produce the kinds of workers who

will thrive in these middle-skill jobs of the future” (Autor, 2015). Autor argues that automation is not the doom of middle-class workers, but instead that “human capital investment must be at the heart of any long-term strategy for producing skills that are complemented by rather than substituted for by technological change” (Autor, 2015). Looking into the past, in the 1900s, the typical American only had about a middle school level of education. “By the late 19th century, many Americans recognized that this level of schooling was inadequate: farm employment was declining, industry was rising, and their children would need additional skills to earn a living” (Autor, 2015). The United States economy found solutions to this challenge by mandating “universal high school education to its citizens” (Autor, 2015). This movement started in farming sectors and spread throughout the nation. Societal adjustments to technological advancement and automation are not “rapid, automatic, nor cheap” (Autor, 2015) but they are worth it. Economic success has been dependent on adjusting the educational system to support workers.

Oftentimes, new technology requires new jobs, and with this knowledge comes a fear of unemployment given the extinction of old careers. One book, “The Second Machine Age” written by MIT scholars Erik Brynjolfsson and Andrew McAfee suggests there is a negative perception of the effects of automation on employment. In short, it is hypothesized that automation will reduce the need for human employment. They believe that the ““rapid and accelerating digitization is likely to bring economic... disruption, stemming from the fact that as computers get more powerful, companies have less need for some kinds of workers. To combat this, new or special skills are needed with the

“right education” (Autor, 2015). The right education for workers allows them to “create and capture value” (Autor, 2015). This begs the question, what does the “right education” look like? As a starting point, there is “evidence that wages and educational attainment exhibit a strong negative relationship with the probability of computerization” (Frey, 2017). This implies that low-skill workers¹ will need to transition to tasks that are not susceptible to computerization. Skills non-susceptible to computerization and automation, like creative and social skills, need to be embedded in the educational curriculums for workers to thrive in our upcoming economy (Frey, 2017).

The Growing Prevalence of AI in Employment

AI is the up-and-coming technology of our age. One analysis found a “susceptibility to computerization in 702 occupations in the United States. For the authors, 47% of the jobs are in the high-probability category of automation, with 70% or more of automation risk” (Frey, 2017). Some theories predict that “AI evolution accounts for a threat, particularly for the jobs in the lower-intelligence categories” (Huang, 2018). One theory examines four types of intelligence required for service tasks: mechanical, analytical, intuitive, and empathetic. It proceeds to decide between humans and machines for accomplishing those tasks. “The theory asserts that AI job replacement occurs fundamentally at the task level, rather than the job level, and for “lower” (easier for AI)

¹ Of the 702 jobs examined in the article, “How susceptible are jobs to computerisation,” Frey lists the top 10 most susceptible jobs to computerization given the low-skills required by workers. Low-skill workers include: (1) telemarketers, (2) title examiners, abstractors, and searchers, (3) sewers, (4) mathematical technicians, (5) insurance underwriters, (6) watch repairers, (7) cargo and freight agents, (8) tax preparers, (9) photographic process workers and processing machine operators, and (10) new accounts clerks.

intelligence tasks first” (Huang, 2018). AI is expected to replace some service job tasks at first, and then it is expected to replace human labor entirely when it can take over all of a job’s tasks. This theory assumes that analytical skills will become less important for workers while intuitive and empathetic skills become more important for workers in the immediate future. AI is expected to shape the labor market in a “fourth industrial revolution” (Huang, 2018) where intuitive and empathic skills will become the most important for workers.

The Growing Prevalence of Education in Employment

Automation is seen as a great thing or a terrible thing depending on who you listen to. Some authors adamantly argue that “the education system determines how well skill supply can respond to increased demand from automation and subsequently whether automation will be beneficial or detrimental” (Kattan, 2018). Education quality can bridge the optimistic and pessimistic perspectives on automation. Overall, “educational attainment, cognitive skills, and select noncognitive skills are associated with avoiding automation-prone occupations” (Kattan, 2018). The article, “Automation and Labor Market Outcomes: The Pivotal Role of High-Quality Education” by Raja Karan, an Advisor for the Education Global Practice and Gender Global Lead at The World Bank, examined the impact of automation on various countries based on their income, industries, and education. This paper’s model suggested that “countries will be negatively affected by automation unless their education systems are of high enough quality to allow even those with relatively low innate ability to acquire higher skills” (Kattan, 2018). This

is a significant challenge for developing countries because increasing educational attainment is quite costly. However, countries like the US which have preexisting structures for higher education, have less of an excuse for failing to prepare workers. For employment rates to increase or be sustained with AI technologies, we need to have high-quality schooling that enhances skill acquisition in order to maintain the output per capita. The model and findings suggest that “to achieve the same growth with automation, the same levels of capital investment would need to be coupled with much higher levels of cognitive skills as well as non-cognitive skills” (Kattan, 2018).

In the future, “cognitive skills and non-cognitive skills including social intelligence and creativity are fundamental” (Kattan, 2018). To produce these skills, we need to have a “shift in our approach to research on growth and development” (Kattan, 2018). This research proposal intends to continue research on how education can play a role in the change of skills demanded from workers to improve employment in the fourth industrial wave. Going into the future, we will see a “race between education and technology” (Prettner, 2017) where some are winners and some are losers. It is important to give workers the resources, skills, and education they need to survive the transitions that AI will create in the workplace.

Analytical Framework

Artificial intelligence’s impact on automation and employment has been portrayed in the media as something to fear and as something to marvel. An interview titled, “The Future of Work in an Age of Artificial Intelligence,” Andrew McAfee, a principal

research scientist at MIT, discusses “how technology and artificial intelligence is going to change the world” (McAfee, 2019). McAfee expresses his beliefs that AI is going to help the world, however, this does not mean that it will “automatically make things better” (McAfee, 2019). McAfee points out two laws of technology, the first being that progress in technology “makes us more affluent [and] more prosperous overall,” and the second thing being that technological progress shifts how the metaphorical pie of wealth and employment is distributed— it does not get distributed evenly amongst people (McAfee, 2019). Technology changes the allocation of resources because “employment growth [is] decoupled from the output growth” (McAfee, 2019) which people often see as unfair. And it is unfair. As we have seen in the past, automation disproportionately impacts lower socioeconomic communities because the skills required in their jobs are the easiest to be fulfilled by advancing technologies. The challenge that needs to be addressed is how people who have difficulty pivoting and whose positions will be automated will adapt to an AI economy.

Education Falling Short

In the Industrial Revolution era, there had been “a thirst for lower skilled, less educated labor” (McAfee, 2019) and nowadays “those jobs are in the rear view mirror and they’re disappearing quite quickly” (McAfee, 2019). So, how do we help retrain these people? How do we prepare the next generation to adapt to different employment opportunities? McAfee expresses that, historically, mid-career retaining efforts do not have a positive impact. Therefore, I believe it's paramount to look at how we can

fundamentally change the educational system. The educational system can prepare students for an AI economy by teaching them skills expected to be desired in this new market.

McAfee believes that skills that an AI economy demands fall under the rubric of critical thinking skills. More specifically, three skills needed in the developing workforce are STEM skills—quantitative and analytical skills—, high level social skills—the ability to negotiate, to motivate, to persuade, and to coordinate” (McAfee, 2019)—, and problem-finding skills—“identifying the next thing to tackle or teaching people to ask questions and go poke at the world” (McAfee, 2019). Education has been proved to fall short of teaching these skills because historically education was used as a “vehicle for the efforts of one class to civilize another and thereby ensure that society would remain tolerable, orderly, and safe” (Leland, 2002). Education placed an emphasis on “explicit rules and regimented behavior” in order to “invest the poor with the values of compliance, punctuality, cleanliness, and knowing one’s place in society” (Leland, 2002). Therefore, the goal of public education “was to prepare young people for factory jobs that required them to perform some relatively simple task over and over again” (Leland, 2002). Historically, “discipline and reliability were the core virtues” (Leland, 2002) of education, not critical thinking skills, because discipline and reliability civilized immigrant masses to become factory workers. This ultimately means that current and former education systems were designed to maintain the status quo.

Knowing that the education system was designed to maintain social roles, it is no surprise that people are feeling ill-equipped for work in our current and future economy. People are feeling left out and left behind because of the disparity between skills being taught in the classroom and skills being demanded in the workforce. The future should prepare citizens. A study conducted by Tashfeen Ahmad, a professor of computer science, titled, “Scenario based approach to re-imagining a(?) future of higher education which prepares students for the future of work,” devised a practical model of plausible scenarios in the context of technology disruption to create possible future alternatives of work and learning. Ahmad reports the “importance of students’ ability to adapt, exhibit flexibility to change careers multiple times during their work life, acquire lifelong learning skills, in order to prepare them... to adjust to the new work requirements and displacement brought on by the onset of automation” (Ahmad, 2020). A change in the education system is what is needed but it is not going to be a breeze. If the goal is to disrupt the educational system, how is this accomplished?

A starting point is not easy to find. Technological advances are “making it challenging for higher education institutions to properly plan, strategize and predict the range of desired educational objectives” (Ahmad, 2020). Educational systems are supposed to “support student readiness for work” (Ahmad, 2020) and yet the disconnect between the education system and technology preparedness makes it near impossible “to enable them to discharge their responsibility as key players in supporting student readiness for work in the future” (Ahmad, 2020). McAfee advocates for blended learning approaches where the digital works in tandem with the interpersonal. One study

“organized co-design workshops with 15 K-12 teachers, where teachers and researchers co-created lesson plans using AI tools and embedding AI concepts into various core subjects” (Lin, 2021). This is progress in the sense that students are becoming familiar with technology— but it does not indicate any progress in skill-building. In this same study, researchers called for a “formal K-12 education to prioritize AI literacy and teach children to interact with AI using a critical lens.” This call to action should be realized as part of a much larger transformation in educational systems. When looking at teachers’ role in a transformation, they should feel “empowered to teach AI, yet teachers often feel they lack sufficient understanding to teach AI and the capacity to include more curriculum on top of their existing curriculum” (Lin, 2021). This questions the usefulness of our current school curriculums. If automation is more prevalent in our society and requires critical thinking and creative skills, why hasn’t the public school system prioritized these skills in their curriculum? A “lack of integrated AI curricula in core subjects” (Lin, 2021) has been identified as one of the limitations in a classroom. What if this problem can only be solved by adjusting the core curriculum and structure of the educational system? It is important to study the prevalence of AI skills in the current curriculum compared to alternative curriculums in order to understand which should be used to prepare students for an AI economy.

Proposed Goals of Education

In terms of developing curriculums that fosters skills valuable in an AI economy, technical and soft skills need to be prioritized in the next generation of students. The

World Economic Forum Soft Skills Survey identifies the “top 10 soft skill sets” that are most likely to be demanded in an AI economy: “Complex problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision making, service orientation, negotiation, [and] cognitive flexibility” (Ahmad, 2020). Some researchers advocate for the development of a new curriculum based on “six senses” (Pink, 2007): design, story, symphony, empathy, play, and meaning. Daniel H. Pink, is “the author of *A Whole New Mind*, which charts the rise of right-brain thinking in modern economies...[and] discusses the abilities that people will need to master in order to be successful in a world where many jobs are either automated or outsourced” (Pink, 2007). His reasoning falls in line with the overarching theme that “teachers and schools need to equip today's students with... abilities so they can be successful in tomorrow's economy” (Pink, 2007). His curriculum recommends strategies for teachers to integrate the six senses into their classroom by designing courses that teach “design in reading or story in math” (Pink, 2007). Pink argues that the “most employable” people in the new economy are able to move “smoothly across boundaries” and be “multilingual, multicultural, multidisciplinary” (Pink, 2007). People who are ‘multi’ show better problem solving skills and design sensibility. Going forward, “a new set of abilities matters more” (Pink, 2007) than maintaining old structures. Researchers agree that “schools...can do something to really help equip kids to develop those kinds of abilities” (Pink, 2007). In order to move forward with automation in a positive light, national and state policies need to endorse the importance of the skills needed in an AI economy.

Ultimately, the educational system needs to shift to teaching “tomorrow's skills instead of yesterday's skills” (McAfee, 2019) in order to prepare students for working in an AI economy. This implies that “we should be supporting the research to go understand what works” (McAfee, 2019) in terms of giving people skills. Our solution starts with funding educational approaches and research approaches. This paper has established that employment rates have been impacted by automation in some capacity and these shifts will continue into the future. Therefore, it is crucial to consider how the United States education system will play a role in preparing future generations for shifts to an AI economy. People are nervous at times of transition, the future is uncertain and trends are hard to predict. However, by using “a futures thinking, scenario planning approach” as a tool to guide “higher education policy makers in planning...their strategies on how best to respond to future complexities and outcomes” (Ahmad, 2020) then the public might feel prepared and accepting instead of feeling afraid. This requires considering how skills needed in this new economy are emphasized or taught in the classroom. I think it would be interesting to conduct studies that pinpoint: what skills are currently being taught in the classroom? What of these skills are beneficial for employment in an AI economy? What skills are not being taught yet that need to be? And, how does the educational system need to adapt their structure in order to accommodate the teaching of ‘valued’ skills?

Methods

This paper asks the question: are students being taught the skills that will prepare them to participate in an AI economy? More specifically, what are educators' perspectives

on how the educational system is preparing students to participate in an AI economy? As previously established, an AI economy is predicted to value soft-skills and critical thinking skills. This paper proposes a quantitative and qualitative study that will survey educators' perspectives. Educators' perspectives are important because they are key factors in children's educational experiences. Data collected from educators will be insightful because it demonstrates an overarching theme of general skills taught, or not taught, in the education system. Educators will be asked to complete a Likert scale survey, evaluating whether or not they strongly agree or strongly disagree that certain soft-skills and critical thinking skills are being taught within their classrooms. A survey best suits this study to collect quantifiable data on skills taught in classrooms and how well students are being prepared for an AI economy from an educator's perspective.

The survey provided will ask educators if they believe a set of soft-skills and critical thinking skills are being taught in their classrooms. This study will use the Education Development Center's (EDC) criteria for soft skills. The EDC developed the Educator Assessment of Learners' Soft Skill Ability (EALSA) as a formative soft skills assessment of students (EDC, 2020). Soft skills include communication, interpersonal skills, dependability, and problem-solving/critical thinking. "These soft skills standards were determined by subject matter experts to be the most important and useful for success in entry-level work, relatively achievable for youth to develop during their time as students, obtainable before beginning an entry-level position, and aligned with existing research on the skills linked to success in the workplace."

Critical thinking skills are based on the University of Tennessee Chattanooga criteria for critical thinking. This includes the 7 habits of critical thinking: truth-seeking (asking questions and following evidence), judicious (ability to make judgments amid uncertainty), inquisitive (striving to be well-informed on a wide range of topics), confident in reasoning (being trustful of one's skills to make good judgments), systematic (organized and thoughtful problem solving), analytical (identifying potential consequences of decisions), and open-minded (being tolerant of different views and being sensitive to personal biases) (UTC, 2024).

Examples of soft skills questions on the survey will include: "School curriculum includes requirements that foster the growth of students' communication skills over the academic year" or "Educators are encouraged to incorporate activities in the classroom that foster the growth of students' communication skills over the course of the academic year." Examples of critical skills questions on the survey will include: "Educators are encouraged to teach students to ask questions and follow evidence." In addition to Likert scale questions, the survey will also include free-response questions. Free response questions will be structured similarly to: "What are some activities, if any, that you incorporate into your classroom that foster the growth of students' communication skills?" Answers to free-response questions will be coded to discern activities that may be useful to implement in future curriculums.

This study will be conducted at the elementary, high school, and collegiate to assess which levels of education include, or do not include, the teaching of valued skills in

an AI economy. Surveys will be distributed through the California Teachers Association (CTA). The CTA is a union with 310,000 members who are “passionate advocates for students and public education” (CTA, 2024). Their goal is to make “public education work for the public” (CTA, 2024). The CTA consists of educators in California's public schools and colleges. By distributing this survey through the CTA, this study will reach a larger audience of public school teachers from the elementary to the collegiate level.

Given the mission statement of the CTA, there is reason to believe that they will support research endeavors that will contribute to public education and students' future well-being. The survey will be emailed to the CTA's database of teachers. The survey will be online and anonymous to ensure responses are forthcoming and honest. We hope to collect data from approximately 2,000 to 5,000 respondents over the course of 6 months. Teachers will be incentivized to respond by offering \$5 to each participant who completes the survey. Survey results will be categorized into elementary school teachers, high school teachers, and university teachers. Results will also be categorized by region including Northern, Central, and Southern California. There are no ethical considerations in the collection of data in this study. However, there are ethical concerns in the application of survey results. It should be restated that this study proposes to evaluate educator's perspectives on school curriculum; it does not evaluate skills acquired by students in the classroom. Therefore, this study's results can not be generalized to define what students are definitively learning or not learning. It may be informative to ask teachers what they think is important for students to know or be familiar with as it pertains to AI, given that teachers may have different concerns and emphasize different skills or lessons entirely,

however this is outside of the scope of this study but should be considered by future researchers. Going forward, this study will be beneficial in assessing what skills educational curriculums need to emphasize more to help students be prepared to participate in an AI economy.

Implications

Research conducted in this paper is a crucial starting point that warrants further studies and action. By understanding educators' perspectives, we can start to understand what skill sets that an AI economy demands are currently being fulfilled or not fulfilled by the education system. This study will provide insight into what skills are already implemented and what needs to be built on. For example, it will detail the types of assignments that students are doing and the skills that they are expected to reap from these tasks. This knowledge can be used by educators directly. This study will highlight classes and assignments that lead into new focus areas. Educators will then understand what tasks or courses are valuable to an AI economy. In the future, educators themselves will be able to prepare curriculum and classes that support student's acquisition of valued skills. This research supports educators in building out their new style of teaching. Ultimately, this paper will contribute to research that supports the transformation of the education system in a way that prepares future workers for a new economy. Further studies should be conducted at the personal, educational, and corporate levels.

Research derived from the study proposed in this paper should be viewed as the backbone of future studies. Once we understand the implementation of valued skills by

educators, researchers can then ask students if they feel that the educational system is succeeding at instilling these skills. Personal research should directly assess students' skill sets and it should assess students' feelings of preparedness or concerns for working in an AI economy. Understanding what skills students have attained and what concerns they still have will provide the educational system with other areas of improvement. At the educational level, school's environments should be studied further. It is important that we understand how things like the structure of a classroom or regimented schedules impact students' development of technical and social skills. At the corporate level, studies should be conducted assessing what skills are needed in various workplaces that plan to integrate AI into their business. Furthermore, employers should be surveyed to understand what skills they are looking for in the hiring process.

Post-research, policy change should be pushed. Research found in this study will contribute evidence as to why school curriculums and national standards of education should be updated. This research could also support greater changes in the education system. For example, the stereotypical classroom layout of linear rows may need to change in order to create an environment conducive for learning collaboration. Policy can ensure that the educational systems adhere to changes that support their students. This research can also be incorporated directly into an individual's day-to-day lives. If people understand what skills are valuable to their employability, then they can practice these skills independently, outside of work and school. Organizations can also use this research to examine how they can support transitions from the education system into the workplace. If corporations know the deficits of future workers, then they would be able to

create their own training programs to give good, prospective job candidates the additional skills they need to be hired and contribute successfully to the workplace. Research is key to understanding correlations between education and employment. It is the first step in a series of transformations that are needed to prepare future generations for being employed in an AI economy.

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