AI and the Crisis of Legitimacy in Higher Education

Larry Liu
Morgan State University, USA

Abstract:

The rise of generative artificial intelligence (AI) within higher education raises many questions regarding the purpose of higher education, given that many core competencies, such as reading comprehension, writing essays, and taking exams, can now be outsourced to AI. This article states that the rise of AI, along with the waiving of college degree requirements for jobs and the demographic enrollment cliff, produce challenges to the legitimacy of the higher education system. I use Habermas' framework of legitimation crisis and Collins' framework of credential inflation and social closure to theorize the effects of AI and changes in the broader political economy on the higher education system.

Keywords: Artificial intelligence, Credential Inflation, Collins, Habermas, Higher Education, Legitimation Crisis, Social Closure

---

INTRODUCTION

The rise of Generative Artificial Intelligence (AI) within higher education raises a lot of questions regarding the purpose of higher education given that many core competencies such as reading comprehension, writing essays and taking exams can now be outsourced to AI and instructors are trying to figure out appropriate AI policies in their course syllabi, veering between very restrictive to very liberal. But beyond immediate curricula and instructional design decisions, AI poses a significant challenge to the legitimacy of higher education given that core competencies can be taught in AI tutorials rather than in a regular classroom. In the context of sociology, legitimacy is based on the belief of the subordinate class that the dominant class has the right to rule (Weber, 1978). In the context of higher

education, legitimacy is the collective societal believe that obtaining a higher education credential is essential for obtaining secure and desirable middle class jobs and maintaining or improving social mobility (Van Noord et al., 2019).

Technology skeptics will point out that AI can be no different from other education technologies such as the internet or Massive Open Online Courses (MOOC) that raised the risk of educational displacement but has not met its hype (Humble & Mozelius, 2022). If AI is on par with other similar educational technologies, then alarmism around AI is not warranted. But we have never before encountered a technology that matches the capabilities of AI. An example is the iterative communication with AI to give users better explanations and help learners in a personalized way, which human teachers cannot replicate in large classrooms. One educator has already shared her decision to leave the teaching profession due to the disruptive impact of AI on the learning process (Livingstone, 2024). The extent to which AI in education is hype will be revealed in the coming years and cannot be ascertained fully in this article. Colleges currently retain their legitimacy because wages and life expectancy for college graduates are still higher than for high school graduates, though that college wage premium is declining with rising high school graduate wages (Hummer & Hernandez, 2013; Bengali et al., 2023). It is conceivable that AI boosts college legitimacy because AI displaces a lot of jobs (Chen et al., 2022), which could increase the demand for higher education because displaced workers will seek additional credentials to become more competitive in the job market.

The second challenge to higher education's legitimacy comes from the increasing push by governments to waive college degrees for civil service jobs and promote more skills-based hiring and apprenticeships. Private-sector employers like IBM, Google and Delta Air Lines have also reduced the degree requirements for certain jobs (Schwartz, 2024). College enrollment has historically increased as employers have ratcheted up college degree requirements for entry-level positions, but two years from the end of the Covid-19 pandemic, the fall 2024 college enrollment in the US is 2.8% below fall 2019. The only positive for colleges has been the increase in undergraduate certificate programs and short-term credentials (Douglas-Gabriel, 2024). As students find lucrative non-college options the downward college enrollment trend could be here to stay.

The third challenge to colleges is the so-called enrollment cliff, though it is only tangentially related to legitimacy. Since the Great Recession of 2007 and 2008, US births have declined by 15%, which implies a significant drop in the college-age population from 2025 onward. This might explain why total college enrollment has been declining as early as 2012 (Drozdowski, 2023). International student enrollment is holding steady at about 1 million, but the increase has been smaller since the early-2010s (Loo, 2023). As birth cohorts are getting smaller, students are becoming increasingly scarce forcing all colleges to compete harder for them. Institutions that fail to attract enough students close their doors, which has happened to 20 colleges in 2024 (Donadel, 2024).

The argument in this article is not about unique skills for educators and students who are required to operate AI or the ethical concerns of their use. The contribution of the present article is to specify the crisis of legitimacy in higher education during an era of AI using Habermas's framework of legitimation crisis and Collins's framework of education credential inflation and social closure. While these sociological theories are not novel, their application in an era of AI is novel and should be examined by social and educational researchers. I conclude with some further thoughts regarding the options that educators face in response to these macro-level trends.

AI AND HIGHER EDUCATION

There is a burgeoning literature on the impact of AI on higher education. AI-driven systems can tailor educational experiences to individual student needs and adjust the content to student performance and preferences (Bond et al., 2024). Students using AI are provided with real-time feedback and their knowledge gap is identified and addressed immediately (Marengo et al., 2024). Students who have a high intention to use AI, a habit toward using AI and facilitating conditions favorable to AI are more likely to take advantage of AI in learning (Lavidas et al., 2024). There is also the downside risk that overreliance on AI will make students lazy learners (Ahmad et al., 2023). While ideally there is a synergy between human and AI instructors, there is a risk that human instructors can be displaced by AI. Human instructors have unique qualities like critical thinking, creativity and emotions but need to know how to integrate AI into their curriculum if they want to stay relevant (Chan & Tsi, 2023). On the other hand, high perceived risk of AI use among educators results in suspicion toward adopting AI in their instruction (Bhaskar et al., 2024).

Beyond the learning experience, AI helps higher education administrators with administrative tasks such as admissions, course scheduling and allocating resources (Fadlelmula & Qadhi, 2024). The downside risk for education administrators is the heightened risk of cyberattacks and data breaches (Toapanta et al., 2023). Education researchers can use AI algorithms to help them predict school dropout and graduation rates (Sorensen, 2018). AI helps researchers in data analysis, literature review and in the discovery of new research trends that cuts down on research time and promotes innovation, although there is a risk of heightened research fraud (Castillo-Martinez et al., 2024).

The review of the AI and higher education literature shows that there has been a lot of interest in this emerging phenomenon in the three major domains of instruction, administration and research, but these empirical studies are not drawing any connections to the broader social system in which higher education is embedded. Habermas and Collins theoretical framework establish this connection much more explicitly.

# HABERMAS' LEGITIMATION CRISIS OF THE STATE AND HIGHER EDUCATION

Jurgen Habermas (1973) is a leading German philosopher from the Frankfurt School, who formulated a critique of western capitalist economies in the 1970s. Advanced capitalist countries contained certain strains due to having to cover conflicting social and economic objectives. States have the responsibility to create conditions for private-sector profit and rising labor productivity, *and* they also need to provide expanded access to welfare services, including higher education, in order to maintain general public support in the capitalist system. Higher education contains a dual function of potentially raising labor productivity and capital accumulation and a social welfare feature to accommodate technologically displaced workers. States want to support higher education: rising labor productivity via an expansion of an educated workforce is necessary in order to increase tax revenues to fund the expanded welfare services that fund heightened unemployment from technological job displacement due to rising labor productivity.

The legitimation crisis comes from (1) an economic crisis that lowers capitalist investments and reduces the tax funds needed to redistribute enough resources to displaced workers in the form of the welfare state, while most of the existing growth is redistributed to the well-off; (2) even if economic growth is generated via rising labor productivity and population rises that same growth creates more strains on the natural environment via an increase in environmental pollution and global heating, which creates high adjustment costs for low income people who cannot afford them. The negative political effects of a legitimacy crisis are expressed in declining trust in government institutions, rising political polarization, growing popularity of anti-establishment political positions, and protests against economic inequality and corporate influence. In many democratic societies, younger generations (X and Millennial) have a diminished satisfaction with their political system compared to older generations (Silent and Boomers) for which support for democracies remained stable over time (Foa et al., 2020).

The higher education system is subsumed under the welfare state, which involve education but also things like unemployment insurance or social security spending (Figure 1). The state regulates the inputs into the higher education system by providing federal funds for research grants, financial aid for college students and specific laws germane to the activities of universities, e.g. Title 9 college sports laws or ethical guidelines on research methods. Cuts in state subsidies to higher education undermine higher education's welfare function. For instance, across all US states the average state higher education funding declined by $1,500 per student adjusted for inflation between 2008 and 2020 (Flannery, 2022). Furthermore, higher education cannot escape the contradictory interactions with the labor market in the same way that the state cannot automatically and simultaneously satisfy the needs of capital accumulation *and* popular legitimation.

Habermas (1973, p.81) describes how the educational system is expanding enrollment independent of changes in the occupational system. In other words, the number of lawyers may be constant, but the number of law school graduates may increase a lot. One weakness in this theory is that Habermas did not provide an in-depth theory on the functional logic of higher education but seeing it as an instrument of the state to maintain the legitimacy of the broader capitalist order. The difficulty of retaining legitimacy of higher education in the long-term has been theorized by Collins.

Figure 1: Habermas Scheme of Legitimation Crisis in Advanced Industrial Societies
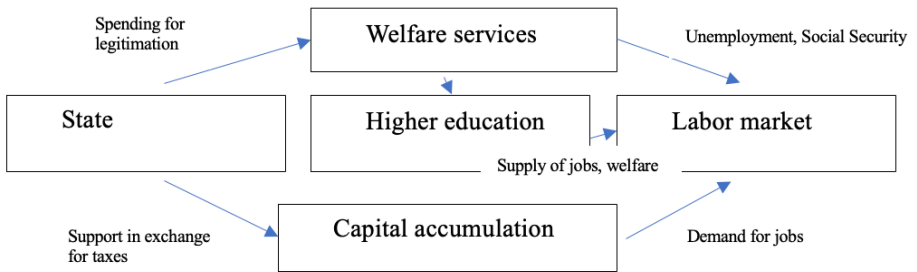
COLLINS CREDENTIAL INFLATION, SOCIAL CLOSURE AND HIGHER EDUCATION

If we accept the argument that educational degree attainment develops independently of the number of jobs requiring a college degree thereby devaluing the value of the degree over time, why is that process of credential inflation, i.e. the devaluation of college diplomas due to the supply of graduates outpacing demand for them, occurring? Collins (1979) argues that modern societies and the higher education system ensures the perpetuation of existing social hierarchies rather than provide the skills or training necessary in the labor market. A higher education diploma is a mechanism for social closure, meaning that it creates entry barriers to access certain professions like medicine, law or business. The degree allows employers to filter job applicants. College is not a source for technical training or job-ready skills. One of the few exceptions to this rule are graduate students, who receive on-the-job training to develop research and teaching skills that are useful for an academic career.

Higher education is an industry that uses the power of social closure to expand degree programs, as presidents are seeking more funding for their institutions, deans for their schools and department chairs for their departments. What is rational for every institution (i.e. to increase students and market share) is irrational for the whole society. The number of professional, white-collar jobs rises slowly

with the overall growth in the population and from slowly shifting demand, while the number of college graduates wanting to claim these jobs is escalating quickly. The mismatch between college graduates and jobs for them is a general source of political discontent (Turchin, 2013), e.g. many unemployed and underemployed college graduates in Egypt had participated in the Arab Spring uprising in 2011 that toppled the regime of Hosni Mubarak (Ghanem, 2016).

One weakness in Collins original formulation was that higher education is a status group that confers diplomas without taking into account the interactions with the entire economic system. In later work, Collins (2013) addresses the limitation by arguing that the modern capitalist economy with its technological innovations including automation and AI is putting chronic downward pressure on labor demand, thus increasing the necessity for higher education to become an employer and welfare state shelter of last resort: the demand for education rises as more students are sheltered from the worsening labor market, and the demand for teachers and instructors is rising correspondingly to meet the increase in the number of students. Both the political left and the political right have accepted higher education as a means of self-improvement and have subsidized the industry with Pell grants, student loans and student loan forgiveness programs. The left wants to assist disadvantaged and poor constituencies, and the right wants individuals to be self-sufficient earners. This political consensus explains why the US college graduate population increased from 7.7% in 1960 to 37.7% in 2022 (Statista, 2024).

But it is questionable whether this path can continue. Collins (2013) himself notes limitations to how much education can prevent an employment crisis. Goldstone and Turchin (2020) discuss the broader political economy in which higher education has to operate: the wealthy have rigged the political system to accrue more and more economic benefits for themselves. This is especially the case for the owners of tech companies, who own the infrastructure to displace or draw revenues from other businesses (e.g. Amazon displaces regular retailers; Google sells the ads of many companies to users). The wealthy then promote tax cuts for themselves, thus starving the government of revenues to fund programs like higher education. Government austerity then lowers the legitimacy of the political system which is expressed in a greater threat of political unrest or the election of populist leaders like Donald Trump. The anti-college resentment in the Trumpian movement that takes the cover of opposition to "wokeness", "political correctness" and DEI (diversity, equity and inclusion), among others, is further casting doubt on colleges as the safe haven for AI-related economic replacement.

Universities respond to austerity by hiking tuition but the fact that tuition inflation has been a little over 2% per year from 2020-2022 compared to the over 8% in the 1980s (Welding, 2024) suggests that they cannot endlessly hike tuition. The higher the cost of college, the more attractive are the alternatives to colleges such as trade schools or working jobs that do not require college degrees. All the aforementioned headwinds to college demand (AI, degree waivers, enrollment cliff)

will subject colleges to rein in tuition hikes, and thereby look for administrative cost savings that could burden faculty in the form of heightened teaching loads or result in administrative staff layoffs, each of which lower internal stakeholder legitimacy vis-à-vis the college administration.

CONCLUSION AND PROSPECTS FOR EDUCATORS

The integration of AI tools into the daily activities of academics and educators contains significant benefits and opportunities. For academic research projects, AI can aid academics in idea generation, structuring content, synthesizing literature, managing data, editing their writing and retaining ethical compliance, thereby improving research productivity and accelerating the knowledge frontier (Khalifa & Albadawy, 2024). Even the integration of AI in curriculums and college courses contains important benefits for instructors and students, delivering personalized and interactive learning, generating prompts to assess student learning and provide ongoing feedback to inform teaching and learning. These benefits contain the usual caveats of AI generating wrong information, having biased training data, augmenting existing social biases and diminishing privacy (Baidoo-Anu & Ansah, 2023).

But the argument provided in this article suggests that unrestricted AI development could undermine the legitimacy of the higher education system. As Habermas demonstrates, legitimacy is essential for any political or social system to operate successfully. Obstacles to capital accumulation limit the potential support for higher education as a supporter of capital accumulation and provider of social welfare functions. The personalized learning experiences provided by AI could make companies realize that the social closure function of the universities described by Collins is no longer a necessity. Governments and private-sector companies are already focusing more on skill-based hiring and are waiving the college degree requirement. The enrollment cliff that is unavoidable due to demographic trends could make labor scarce enough that the college degree waiving trend will further intensify.

There is another labor market trend that is becoming feasible with AI: to the extent that AI works more efficiently and productively than human labor, there will be much less demand for labor (Collins, 2013). This could drive up the need for higher education given that higher education contains a welfare function by sheltering potential workers from the labor market temporarily without raising the ire and opposition from conservative lawmakers and thought leaders, at least prior to Trump. The strength of the welfare function of higher education is reliant on the state commitment to fund these programs either directly (Pell grants, research grant expenditure, real estate tax exemption etc.) or indirectly (student loan guarantees/ forgiveness). If Goldstone & Turchin's (2020) selfish elite hypothesis holds, higher education might not be able to provide that welfare function anymore, displaced

individuals will no longer be accommodated, and the entire political system will face a decline in legitimacy.

Educators should be open to embrace the benefits of AI but should be aware of the downstream risks that originate from changes to the broader political economy that impact the higher education system. Habermas and Collins perspective help us recognize these connections more clearly. Educators should demand a seat at the table to shape the technological forces impacting them. Given that AI is an all-purpose technology, higher education is not the only industry where AI has a lot of unrealized potential impacts. Thus, discussions about the risks and benefits of AI should happen at the civil society level rather than be siloed by industry or within a single domain. At the very least, the study of the implications of AI should not be limited to the effects on learning and student outcomes but should examine their effects on legitimacy and college enrollment.

There are several limitations in this short article: This was not an empirical study that tested the applicability of legitimation crisis, social closure and credential inflation, and it has not explored the empirical applications of AI in higher education. The wide-ranging societal impacts of AI are continuing to unfold, and that can bolster or undermine the generalizability of the conclusions drawn from this study. The argument about lower legitimacy of colleges due to AI does not apply to all colleges. For instance, Ivy League universities are increasingly competitive precisely because credential inflation lowers the value of the general college degree while increasing the relative value of elite degrees, thereby directing more applications to these elite colleges while they are admitting the same number of students (Tracinski, 2024).

Future studies should apply Habermas' and Collins' framework to comparative educational institutions to test the continuing relevance of these theories. Important indicators include total college enrollment over time, decline in college tuition, social discourses and surveys around whether it makes sense for young people to attend college, and changing government policies on higher education in the form of degree waivers, financial aid programs, student loan forgiveness programs, research grant availability, among others.

REFERENCES

Ahmad, S. F., Han, H., Alam, M. M., Rehmat, M., Irshad, M., Arraño-Muñoz, M., & Ariza-Montes, A. (2023). Impact of artificial intelligence on human loss in decision making, laziness and safety in education. *Humanities and Social Sciences Communications*, *10*(1), 1-14.

Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. *Journal of AI*, *7*(1), 52-62.

Bengali, L., Sander M., Valletta R.G., & Zhao C. (2023). Falling College Wage Premiums by Race and Ethnicity. *Federal Reserve Bank of San Francisco.*

Bhaskar, P., Misra, P., & Chopra, G. (2024). Shall I use ChatGPT? A study on perceived trust and perceived risk towards ChatGPT usage by teachers at higher education institutions. *The International Journal of Information and Learning Technology*, *41*(4), 428-447.

Bond, M., Khosravi, H., De Laat, M., Bergdahl, N., Negrea, V., Oxley, E., ... & Siemens, G. (2024). A meta systematic review of artificial intelligence in higher education: a call for increased ethics, collaboration, and rigour. *International Journal of Educational Technology in Higher Education*, *21*(1), 4.

Castillo-Martínez, I. M., Flores-Bueno, D., Gómez-Puente, S. M., & Vite-León, V. O. (2024, August). AI in higher education: A systematic literature review. In *Frontiers in Education* (Vol. 9, p. 1391485). Frontiers Media SA.

Chan, C. K. Y., & Tsi, L. H. (2023). The AI revolution in education: Will AI replace or assist teachers in higher education?. *arXiv preprint arXiv:2305.01185*.

Chen, N., Li, Z., & Tang, B. (2022). Can digital skill protect against job displacement risk caused by artificial intelligence? Empirical evidence from 701 detailed occupations. *PLoS One*, *17*(11), e0277280.

Collins, R. (1979). The credential society: An historical sociology of education and stratification. Academic Press.

Collins, R. (2013). *The end of middle class work: no more escapes.* In Wallerstein, I. M., Collins, R., Mann, M., Derleugian, G., & Calhoun, C. *Does capitalism have a future?* (pp.37-70). Oxford University Press.

Donadel, A. (2024, Oct 17). College closures are surging. Can institutions pause the plummet? *University Business*.

Douglas-Gabriel, D. (2024, Oct 23). Colleges enrolled fewer freshmen, first decline since the pandemic. *Washington Post*.

Drozdowski, M. (2023, Jan 27). Looming Enrollment Cliff Poses Serious Threat to Colleges. *Best Colleges*. https://www.bestcolleges.com/news/analysis/looming-enrollment-cliff-poses-serious-threat-to-colleges/

Fadlelmula, F. K., & Qadhi, S. M. (2024). A systematic review of research on artificial intelligence in higher education: Practice, gaps, and future directions in the GCC. *Journal of University Teaching and Learning Practice*, *21*(06).

Flannery, M.E. (2022, oct 25). State funding for higher education still lagging. *NEA Today*.

Foa, R.S., Klassen, A., Wenger, D., Rand, A. 7 Slade M. (2020). "Youth and Satisfaction with Democracy: Reversing the Democratic Disconnect?" Cambridge, United Kingdom: Centre for the Future of Democracy.

Ghanem, H. (2016). *The Arab Spring Five Years Later: Toward Greater Inclusiveness*. Brookings Institution Press. http://www.jstor.org/stable/10.7864/j.ctt1657tv8

Goldstone, J, & Turchin P. (2020, Sep 10). Welcome to the 'turbulent twenties'. *Noema*. https://www.noemamag.com/welcome-to-the-turbulent-twenties/

Habermas, J. (1973). *Legitimation crisis*. Polity Press. https://www.ias.edu/sites/default/files/sss/pdfs/Crisis-and-Critique-2018-19/habermas_legitimation_crisis.pdf

Humble, N., & Mozelius, P. (2022). The threat, hype, and promise of artificial intelligence in education. *Discover Artificial Intelligence*, *2*(1), 22.

Hummer, R. A., & Hernandez, E. M. (2013). The effect of educational attainment on adult mortality in the United States. *Population bulletin*, *68*(1), 1-16.

Khalifa, M., & Albadawy, M. (2024). Using artificial intelligence in academic writing and research: An essential productivity tool. *Computer Methods and Programs in Biomedicine Update*, 100145.

Lavidas, K., Voulgari, I., Papadakis, S., Athanassopoulos, S., Anastasiou, A., Filippidi, A., ... & Karacapilidis, N. (2024). Determinants of Humanities and Social Sciences Students' Intentions to Use Artificial Intelligence Applications for Academic Purposes. *Information*, *15*(6), 314.

Livingstone, V. (2024, Sep 30). I quit teaching because of ChatGPT. *Time*.

Loo, B. (2023, Nov 27). Good News: International Student Enrollment in the U.S. Continues to Recover. *World Education News and Reviews*. https://wenr.wes.org/2023/11/good-news-international-student-enrollment-in-the-u-s-continues-to-recover

Marengo, A., Pagano, A., Pange, J., & Soomro, K. A. (2024). The educational value of artificial intelligence in higher education: a 10-year systematic literature review. *Interactive Technology and Smart Education* 21(4), 625-644.

Schwartz, N. (2024, Nov 4). Harris vows to nix 'unnecessary degree requirements' for federal jobs on Day 1. *Higher Ed Dive.* https://www.highereddive.com/news/harris-day-1-degree-requirements-eliminate/731947/

Sorensen, L. C. (2019). "Big Data" in educational administration: An application for predicting school dropout risk. *Educational Administration Quarterly*, *55*(3), 404-446.

Statista. 2024. Educational attainment distribution in the United States from 1960 to 2022. https://www.statista.com/statistics/184260/educational-attainment-in-the-us/

Toapanta, S. M. T., Durango, R. H. D. P., Díaz, E. Z. G., Trejo, J. A. O., Gallegos, L. E. M., Arellano, M. R. M., ... & Hifóng, M. M. B. (2023, July). Proposal for a security model applying artificial intelligence for administrative management in a higher education institution. In *2023 International conference on computer, information and telecommunication systems (CITS)* (pp. 1-5). IEEE.

Tracinski, T. (2024, Jul 8). The unnecessary crisis of elite college admission. *Discourse.*

Turchin, P. (2013). Modeling social pressures toward political instability. *Cliodynamics*, *4*(2), 241-280.

Van Noord, J., Spruyt, B., Kuppens, T., & Spears, R. (2019). Education-based status in comparative perspective: The legitimization of education as a basis for social stratification. *Social Forces*, *98*(2), 649-676.

Weber, M. (1978). *Economy and Society*. University of California Press.

Welding, L. (2024, June 28). College tuition inflation statistics. *Best Colleges*. https://www.bestcolleges.com/research/college-tuition-inflation-statistics/

BIO

_____

Larry Liu, PhD, is an Assistant Professor of Sociology and Anthropology at Morgan State University, Maryland. His major research interests are in technological change at the workplace, the future of work, and social policy responses to automation. His work has been published in *Socio-Economic Review, Social Forces, Ethnic and Racial Studies* and *Palgrave*. His email is larry.liu@morgan.edu.