

El retorno del generalista: las humanidades, las artes liberales y la inteligencia artificial

*The return of the generalist: the humanities,
the liberal arts, and artificial intelligence*

Artículo de reflexión

“Muchas de las habilidades encarnadas por el “hombre renacentista” de los siglos XV y XVI y por el caballero erudito del siglo XIX son las que se necesitan en el siglo XXI. Por tanto, es hora de una mayor flexibilidad en el sector educativo. A los jóvenes se les debe permitir explorar, soñar y sentir. Una educación que priva a los jóvenes de su humanidad y los obliga artificialmente a emular la automatización y la fría estandarización de las máquinas priva a los estudiantes de sus habilidades más valiosas y, por lo tanto, los debilita y agota el capital humano de la sociedad”.

(Von Feigenblatt, 2024).

Autor

Otto Federico von Feigenblatt *PhD*

Correo electrónico: ofeigenblatt@alumni.harvard.edu

ORCID: <https://orcid.org/0000-0001-6033-6495>

Keiser University

Recibido: 15-02-2024

Aceptado: 02-04-2024

Resumen

Objetivo. Analizar como la creciente ubicuidad de la inteligencia artificial, la automatización de muchos trabajos, y la necesidad de tener una comprensión general de una amplia gama de temas en el siglo XXI, apuntan hacia un cambio paradigmático en la educación superior hacia las artes liberales y un renovado interés en las humanidades. **Método.** Análisis y revisión de fuentes secundarias para explorar la necesidad de una educación superior completa con un enfoque en las artes liberales y las humanidades para prepararse para un futuro incierto marcado por la creciente automatización. **Conclusión.** El hombre / mujer ideal del siglo XXI compartirá muchas de las mismas características del “ideal renacentista” encarnado por personas como Da Vinci.

Palabras claves: artes liberales, inteligencia artificial, humanidades, liderazgo educativo.

Abstract

Objective. To analyze how the increasing ubiquity of artificial intelligence, the automation of many jobs, and the need for a general understanding of a wide range of subjects in the 21st century point toward a paradigm shift in higher education toward the liberal arts and a renewed interest in the humanities. **Method.** Analysis and review of secondary sources to explore the need for a comprehensive higher education with a focus on the liberal arts and humanities to prepare for an uncertain future marked by increasing automation. **Conclusion.** The ideal 21st century man/woman will share many of the same characteristics of the “Renaissance ideal” embodied by the likes of Da Vinci.

Keywords: liberal arts, artificial intelligence, humanities, educational leadership.

Introduction

The rise of career colleges in the United States during the 1990s and the move towards greater specialization at the undergraduate level in the developing world gave the impression that the liberal arts and the humanities were ideals destined for the dustbin of history (Agresto, 2011; Lytle, 2013). Nevertheless, the advent of artificial intelligence, the glocalization of knowledge, and the rise of continuing education may signal the end of this trend. Moreover, many career colleges are opening interdisciplinary degrees at the bachelor's and even associate's levels. Employers are emphasizing soft skills, problem solving, and the ability to deal with diversity as key characteristics of the ideal employee (Frey, 2018).

Elite colleges mostly avoided joining the overspecialization career education bandwagon, but many mid-tier institutions saw their enrollments shrink during this period (Goldin, 1999; Mora, 2022). For over a decade, the liberal arts were under constant attack from a varied array of stakeholders who basically challenged the value of a liberal arts education when employers were looking for very specific skills and credentials (Grant, 2013; Roche, 2013; Scholz, 2013). Nevertheless, it soon became clear that soft skills were pivotal to the success of graduates and thus even medical schools started to revamp their curricula to reflect the need for a general understanding of human relations and communication (Mangu-Ward, 2008).

The recent spread of artificial intelligence applications in the field of education and the parallel automation of thousands of jobs

has brought about an opportunity to have a dialogue about the meaning of education and the value of a college degree. Moreover, the dialogue must include a vast array of stakeholders including youth to explore the uncharted waters of designing a curriculum for an uncertain future.

Methodology

The present study follows the historiographic research tradition and more specifically an applied historical approach. A historical approach focuses on identifying trends and patterns in distinct events and processes to identify connections and through them construct a wholistic narrative of a particular time period (Creswell, 2007). This study focused on the developments of the last five years with a special focus on the post-pandemic. Following the tradition of applied historical research, the present study aims to extract lessons from the historical narrative and to make recommendations for practice and policy. It should be noted that historical research and in particular applied historical research usually does not include an explicit theoretical framework (Creswell, 2012). This is the case because it is in essence an inductive approach and therefore aims to interpret discreet historical events and processes without superimposing macro level theories.

The Changing Workplace and Artificial Intelligence

The workplace is changing due to new technologies and the subsequent structural and organizational changes that come with their integration. Digitalization and automation are processes which are spreading at a rapid pace due to glocalization (HSIN-HUANG, HSIAO, & WAN, 2007). According to Mackinsey & Company between 400 and 800 million people will be affected by automation of their jobs by 2030 (Manyika *et al.*, 2017). This is particularly the case in manufacturing however the spread of artificial intelligence technologies can potentially have a similar effect in the service sector. Moreover, certain professions are undergoing profound changes due to the partial automation of certain core tasks and a combination of outsourcing and partial replacement by artificial intelligence applications. One example of this is the field of accounting which is in the process of reinventing itself with a more analytical focus to add value to the services they provide.

Therefore, the workplace is undergoing a profound transformation in which employees are being forced to perform tasks which require higher order thinking and skills. This change requires employees to reskill, basically to pursue continuing education to adapt to a constantly changing work environment. Moreover, the change comes with the implied threat of the automation of many positions and the merging of others. While the wording changes regarding the skills considered to be pivotal for the workplace as expressed by employers and human resource experts, the list tends to focus on soft skills. The human resource recruitment giant, “Indeed”, has created

a simple list of 18 skills employers consider to be important based on a large database of job postings and surveys. “Reasoning and ideation”, “self-management”, “leadership, and social influence”, “innovation”, “emotional intelligence”, inter alia, are some of the soft skills mentioned by Indeed (Birt, 2023). Thus, many of the skills required by employers match the skills emphasized by the liberal arts, the humanities, and the social sciences.

The Skills of the Future

One of the few common themes when exploring the topic of the workplace of the future is the consensus on the importance of soft skills such as communication, dealing with uncertainty, problem solving, and leadership, among others. Nevertheless, technical skills will also be important, but the spread of automation and artificial intelligence is pushing up the level of skills needed for managerial and professional level jobs. This results in the polarization of skills. The upper tier of jobs will require increasingly higher order thinking skills while unskilled labor will become increasingly physically demanding. It will result in a race to the top and a subsequent struggle at the bottom. Therefore, it is important to invest in human capital to help scaffold the many who will soon find themselves pushed to the bottom and those who are at the top but may feel unequipped for the increasingly complex tasks they are asked to perform.

At the core of the transformation that needs to take place to prepare for the future is a transition from a deductive mind-set to an inductive one. Deductive reasoning focuses on drawing

conclusions based on an existing theory or principle while inductive reasoning focuses on deriving a principle or pattern based on specific observations. Thus, deductive reasoning helps us apply an existing algorithm/theory to a vast array of problems and to lower uncertainty accordingly. Nevertheless, an increasingly rapidly changing world does not always lend itself to the application of previously developed theories and principles and thus requires high level cognitive skills such as identifying patterns and the development of models based on concurrently collected data and observations.

Moreover, transitioning to an inductive mind-set also requires a change in attitude. Our natural aversion to uncertainty has been well researched and leads to impulsive decision-making and to induce a tendency towards a phenomenon known as “group-think” (Levy, 2000). There are many reasons for our natural aversion such as helping us reduce stress and helping us psychologically navigate a complex world. Nevertheless, the suspension of evaluation which is ingrained in the minds of young researchers must become widespread. Those extra minutes or even seconds can make the difference between identifying the correct solution or impulsively jumping to a costly mistake. The increasingly ubiquity of artificial intelligence and the subsequent reduction in costs that will come about due to economies of scale will allow a wider portion of the population to have access to advanced analytical skills based on large databases and texts. Notwithstanding the great contribution of access to artificial intelligence to help a wide range of actors, ranging from microenterprises to large corporations, to analyze large quantities of data in a very short time, the task of

synthesizing and interpreting for decision-making will continue to be performed by humans for the foreseeable future.

The Liberal Arts and the Humanities

For many years the liberal arts and the humanities have been the target of criticism due to their emphasis on a wide breadth of subjects and on the development of soft skills such as communication, interpretation, and leadership (Agresto, 2011; Hanson, 2013). Those are the skills and the education that is needed to tackle an uncertain future. Youth needs to foster the ability to dream, to create, and to lead. It is also important for the future generations to understand and be able to harness their emotions to pursue their dreams. The humanities help us develop the range of soft skills that artificial intelligence cannot yet emulate. Thus, the key to dealing with an uncertain future is to connect with our humanity and a large part of the essence of our humanity is our emotions.

The liberal arts as a concept for curriculum design brings a much-needed balance between the humanities and other disciplines such as the social sciences or technical fields. Moreover, the liberal arts allow students to explore a wide range of disciplines to understand the interconnected nature of knowledge. Exploring poetry, economics, history, and other related fields while learning valuable skills such as rhetoric and problem solving prepares students not only to thrive in a changing environment but also empowers them to shape and guide society towards a sustainable and rewarding future. Exposure to a vast array of knowledge and

ideas enriches society as a whole and fosters tolerance and the ability to work with diverse teams.

Recommendations and Conclusions

Preparing for an uncertain future requires youth to develop the full range of human abilities with a particular emphasis on soft skills. Robots and artificial intelligence may be able to emulate certain human abilities but higher order thinking, and emotions continue to be the exclusive domains of humans. Thus, a broad education with a focus on the liberal arts and with a healthy proportion of the humanities can set the stage for the return of the generalist.

Many of the same abilities embodied by the “renaissance man” of the 15th and 16th centuries and of the gentleman-scholar of the 19th century are the ones needed in the 21st century. Thus, it is time for more flexibility in the education sector. The young should be allowed to explore, to dream, and to feel. An education that robs youth of their humanity and artificially forces them to emulate the automation and cold standardization of machines deprives students of their most valuable skills and thus weakens them and depletes society’s human capital.

References

- Agresto, J. (2011). The Liberal Arts Bubble. *Academic Questions*, 24(4), 392-402. Retrieved from <http://search.ebscohost.com.ezproxylocal.library.nova.edu/login.aspx?direct=true&db=eue&AN=69806919&site=ehost-live>
- Birt, J. (2023). 18 Future Skills for the Workplace. Retrieved from <https://www.indeed.com/career-advice/career-development/future-skills>
- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches* (Second ed.). London: SAGE Publications.
- Creswell, J.W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (4th ed.). Boston: Pearson.
- Frey, W. H. (2018). *Diversity Explosion: How New Racial Demographics are Remaking America*. Washington DC: Brookings Institution Press.
- Goldin, C. (1999). A Brief History of Education in the United States. *Historical Paper 119*, 119(August 1999), 1-75. Retrieved from https://www.academia.edu/48959462/A_Brief_History_of_Education_in_the_United_States
- Grant, M. A. (2013). Challenges of Introducing Liberal Arts Education for Women in the Middle East. *The Fletcher Forum of World Affairs*, 37(2), 15-24. Retrieved from <http://search.proquest.com.ezproxylocal.library.nova.edu/docview/1412868042?accountid=6579>
- Hanson, C. (2013). What Happened to the Liberal Arts? *New Directions for Community Colleges*, 2013(163), 11-19. Retrieved from <http://search.ebscohost.com.ezproxylocal.library.nova.edu/login.aspx?direct=true&db=eue&AN=91790662&site=ehost-live>

- HSIN-HUANG, HSIAO, M., & WAN, P.-S. (2007). The Experiences of Cultural Globalizations in Asia-Pacific. *Japanese Journal of Political Science*, 8(3), 361-376. Retrieved from <http://proquest.umi.com.ezproxylocal.library.nova.edu/pqdwweb?did=1417967361&sid=2&Fmt=2&clientId=17038&RQT=309&VName=PQD>
- Levy, J. S. (2000). Loss Aversion, Framing Effects, and International Conflict: Perspectives from Prospect Theory. In M. I. Midlarsky (Ed.), *Handbook of War Studies II* (pp. 193-221). Ann Arbor: The University of Michigan Press.
- Lytle, J. H. (2013). A Love Note to Liberal Arts Colleges: Don't Fear the Market. *Journal of College Admission, Winter*(2018), 12. Retrieved from <http://search.ebscohost.com.ezproxylocal.library.nova.edu/login.aspx?direct=true&db=eue&AN=85798926&site=ehost-live>
- Mangu-Ward, K. (2008). Education for Profit. *Reason*, 40(3), 38-45.
- Manyika, J., Lund, S., Chui, M., Bughin, J., Woetzel, J., Batra, P., . . . Sanghvi, S. (2017). Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages. Retrieved from <https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages>
- Mora, L. (2022). *Hispanic enrollment reaches new high at four-year colleges in the U.S., but affordability remains an obstacle*. Retrieved from <https://www.pewresearch.org/fact-tank/2022/10/07/hispanic-enrollment-reaches-new-high-at-four-year-colleges-in-the-u-s-but-affordability-remains-an-obstacle/>
- Roche, M. W. (2013). The Landscape of Liberal Arts. *New Directions for Community Colleges*, 2013(163), 3-10. Retrieved from <http://search.ebscohost.com.ezproxylocal.library.nova.edu/login.aspx?direct=true&db=eue&AN=91790671&site=ehost-live>
- Scholz, C. W. (2013). MOOCs and the Liberal Arts College. *Journal of Online Learning & Teaching*, 9(9), 249-260. Retrieved from <http://search.ebscohost.com.ezproxylocal.library.nova.edu/login.aspx?direct=true&db=eue&AN=90241780&site=ehost-live>