ADULT LITERACY IN DEVELOPING ECONOMIES: FROM ELSINORE TO MARRAKECH—A REVIEW

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ABSTRACT: Adult literacy is an essential subject to examine given its impact on human development indicators. A significant gap exists as nation-states progress on these indices, especially in developing economies. National governments and international and bilateral development organizations seek to improve adult literacy metrics for the developing world through policy interventions and initiatives. Being highly associated with economic development, education—and the outcomes of education, including literacy and numeracy is critical in this process in the reflection of the quality of human capital, gender equality, and reduced economic disparity. Since the first international conference on Adult Education in 1949 in Elsinore, Denmark, United Nations Educational, Scientific and Cultural Organization (UNESCO) member states have dedicated themselves to ensuring that adults can exercise the basic right to education. This was reiterated with the adoption of the Marrakech Framework for Action at the Seventh International Conference on Adult Education in June 2022. Over these 70-plus years, the landscape and understanding of adult education is evolving. That said, limited access to educational opportunities has 773 million adults lacking basic literacy skills; two of every three being women. In many developing countries, adult learning program initiatives still need to meet their objectives, hence the need to revisit the factors impacting adult literacy and to identify newer approaches and tools in efforts to achieve near-universal literacy. Improved functional adult literacy deserves attention and effort because it gives people the opportunity not just to survive, but to flourish.

Keywords: Adult literacy programs, developing economies, human development index

Adult literacy broadly refers to adults' ability to read, write, and understand information effectively; to function in society and achieve their goals; and to develop their knowledge and potential (McCaffery et al., 2007). Adult literacy is crucial for enabling individuals to engage with written content that is integral to daily activities in the current text-driven society. By extension, adult literacy has become crucial for personal empowerment and social development (Stromquist, 2009). Having adequate literacy skills allows adults to manage their health and economic affairs, engage with the community and government, participate in the workforce, and support their children's education. Literacy also opens doors to personal growth, economic opportunity, and social inclusion. Literacy is much more than the ability to read and write. Literacy impacts adults, families, and communities and provides a key input to nation-building (Henschke, 2013). Access to adult education and literacy programs is fundamental to enriching lives and creating an equitable society where everyone can thrive. According to the United Nations Development Program (n.d.) literacy serves a key input to human development indicators. The United Nations (UN) 2030 Agenda adopted by the UN national assembly also includes quality education and life-long learning as one of the key agenda items for sustainable development (UN, 2015).

Literacy varies in definition and distribution across cultures and historical periods with differing demands on differing socio-economic and cultural environments (LeVine et al., 2011). However, one constant across contexts is that literacy skills contribute to a range of valuable and desirable outcomes, leading to better placements on the Human Development Index (HDI). The connection between literacy and development has long been highlighted. Least developed countries have the highest illiteracy rates, supporting the observation that literacy unshackles untapped human potential and leads to increased productivity and better living conditions

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(Blaug, 1966; Mehrara & Musai, 2013). Adult literacy is a privilege not gained by all due to various social, economic, and political factors, causing people to lose out on getting the necessary education in the structured course of time. Such adults should have opportunities to renew their learning journey towards individual upliftment and, by extension, family and community upliftment. This paper provides an overview of adult literacy in developing economies highlighting countries and regions that need specific attention.

Adult Literacy Programs

The World Health Organization (2024) defines an adult as someone older than 19 unless specified otherwise by local country laws. The United Nations Educational, Scientific and Cultural Organization (UNESCO) (2004) defines literacy as the ability to identify, understand, interpret, create, communicate, and compute using printed and written materials associated with varying contexts. Literacy involves a continuum of learning enabling individuals to achieve their goals, develop their knowledge and potential, and participate fully in their community and broader society (Hanemann, 2015). A developing economy, also called a less developed economy or underdeveloped country, is a nation with a low industrial base contributing to GDP and a low HDI relative to other countries (Kammoun et al., 2020). There is no universal, agreed -upon criterion for what makes a country developing versus developed or which countries fit these two categories. However, general reference points exist such as a nation's GDP per capita compared to other nations. For the purposes of this review, developing economies will be identified as countries not included in the list of Organization for Economic Co-operation and Development (OECD) primary members. Studies show economic growth in OECD countries is higher than countries with lower HDI with a higher level of quality of life and level of wellbeing of citizens (Metzger & Shenai, 2021). In the context of adult literacy, in about 45 countries, mostly in sub-Saharan Africa and South and West Asia, adult literacy rates are below the developing country average of 79% (UNESCO, 2013). None of those 45 countries are in the OECD member countries list.

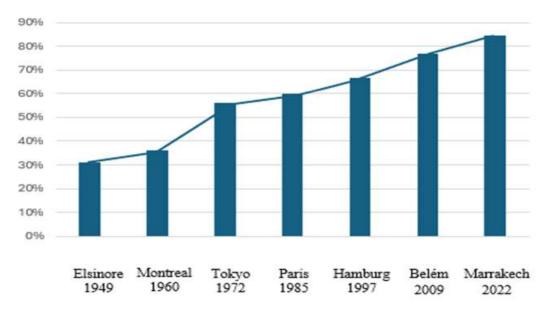
The cohesion of the three components "adult", "literacy" and "developing economy" for this review looks at adult literacy being a crucial life skill that enables individuals to participate more fully in the practices of their community. Higher adult literacy levels help reduce the gaps in achievement levels in developing countries that reflect the quality of human capital of the country (Mazumdar, 2005). Much of the review will look at the importance of Adult Literacy Programs (ALP), an important vehicle to improve adult literacy and numeracy skills, and their impact on increased labor market participation, income, civic awareness, and social benefits. ALPs can be defined as programs to assist adults to become literate and obtain the knowledge and skills necessary for employment and self-sufficiency (Mosenthal & Kirsch, 1989). ALPs can be particularly useful for upskilling populations with low levels of human capital across multiple dimensions of income, health, and safety, leading to improvements in community and civic participation.

Significance of the Review

Serious global institutional discussions in the field of adult literacy started in the post-World War II era. The first international conference on Adult Education was held in 1949 in Elsinore, Denmark underscored the fundamental belief that humanitarian, social, and political deficiencies in societies can be remediated through education (Knoll, 2007). Since then, major International Conferences on Adult Education (CONFINTEA), which is a UNESCO intergovernmental (Category II) conference for policy dialogue on adult learning and education

Figure 1

Progression of adult literacy rates in developing economies (non-OECD)



Note. Adapted from Historical data visualization: Adult literacy rates, by Harvard Business School (n.d.), Harvard University. Copyright by Harvard Business School (n.d.), Harvard University.

(ALE) and related research and advocacy have been conducted. CONFINTEA takes place every 12 to 13 years since the first conference in Elsinore in 1949; Montreal (Canada) in 1960; Tokyo (Japan) in 1972; Paris (France) in 1985; Hamburg (Germany) in 1997; and Belém (Brazil) in 2009. CONFINTEA VI led to the adoption of the Belém Framework for Action (BFA) which recognized the critical role of lifelong learning in addressing global educational issues and challenges. At CONFINTEA VII, which took place in Marrakech, Kingdom of Morocco, in June 2022, participating countries committed to making progress in five key areas of ALP: policy; governance; financing; participation, inclusion and equity; and quality (UNESCO Institute for Lifelong Learning, 2010). Significant progress is being made in adult literacy rates since CONFINTEA I. Figure 1, represents country level adult literacy rate averages in developing economies. That said, a population weighted average can provide further insights. Sub-Saharan Africa with 66% and Southern Asia with 73% adult literacy rates represent a significant portion of adult illiterates in the world (UNESCO Institute for Statistics, 2020). These regions house major population centers in the developing world and comprise more than 9.5% of the 773 million adults globally who lack basic literacy skills (UNESCO Institute for Statistics).

Factors Impacting Adult Literacy in Developing Economies

In developing economies, changes in demography, technological evolution, and labor markets are the key drivers that impact adult literacy numbers. Access to adult literacy is highly stratified, and the returns to educational re-entry vary across social, economic, and urban/rural divide categories. The decision of adults to seek literacy after stepping away from school into work, family, or other roles has become a prominent feature of social stratification. Several social and macroeconomic trends drive the increased incidence of adult literacy. Adults unable to continue with formal education due to social, economic, gender, and policy-related reasons

enter the workforce as unskilled labor. There is a need for institutionalized adult literacy program initiatives for this unskilled labor force to re-seek literacy.

Social Factors

Literacy attainment is a defining parameter for an individual's social origin and self-esteem. Freire (1972) speaks about the objectification of the oppressed in society alongside uncritical models of education, resulting in the internalization of oppression. Those aspects still hold when analyzing the key demographics of adult illiterates today, especially based on gender, poverty, and racial prisms. Social and political movements have integrated adult learning and education to support personal, social, and political empowerment (Mayo et al., 2009). In Tanzania, for example Julius Nyerere's vision of socialism embraced adult education as a means of mobilizing people for self-reliant community development and societal transformation (Omolewa, 2008). The introduction of adult education policies as a means for economic development redefined community-based political and cultural traditions of adult education (Bannon, 2016). Within the human capital frame, these policies were developed, either solely or partly, as learning outcomes primarily regarding return on investment (Goldin, 2024).

There is an emphasis on adult literacy as a part of overall adult education as a social movement for self-improvement and personal empowerment, where adult literacy helps individuals overcome the disadvantages of educational "late starts" or "delayed completions," thereby serving as a "second chance" for those initially left behind (Jarvis, 2007, p. 191). From a sociological viewpoint, adult literacy is a potentially important tool for lessening social inequalities that emerged in the earlier life course by improving the initial educational level, changing a qualification, and acquiring skills and knowledge. A "second chance" schooling significantly increases the likelihood that individuals will achieve more secure jobs with higher wages than lowest socio-economic rungs likely resulting from illiteracy. ALPs aim to arouse a sense of dignity, confidence, and self-reliance among the participants. As evidenced by Brazil's experience through the movement for literacy training of youths and adults (MOVA) project, these programs work in a social setting and are usually originated by non-governmental organizations, religious congregations, social movements, community organizations, and political parties, and can also be originated by various levels of government – municipal, state and federal (del Pilar O'Cadiz & Torres, 1994).

Arguably, literacy is a fundamental human right. Providing an opportunity to develop literacy and facilitate language development effectively is paramount to observance of Article 19 of the Universal Declaration of Human Rights (United Nations General Assembly, 1948). In contemporary society, literacy is important for decision-making, equality, and active participation in local and worldwide community affairs as it upgrades the individual's state of mind (Barton, 2007). Acquiring literacy skills helps adult learners view the world differently—they can understand their prevailing unfavorable conditions and their rights. Such an awakening and acquiring requisite knowledge and skills become tools for individual and social change (Addae, 2021). Studies in Botswana also show that participants in ALP programs reported improved confidence to participate more in community development activities than their non-participating counterparts (Kolawole & Pusoetsile, 2022). Adult education acts as an instrument to make informed citizens, and ALP programs provide for second chances driving social changes in various aspects, such as gender equality, equity and inclusion, and technology acceptance.

Economic Factors

Adult literacy is a crucial component of human capital advancement. The estimated cost of illiteracy to the global economy is estimated at USD 1.19 trillion, with a major portion of this economic loss contributed by non-OECD developing and emerging countries (Cree et al., 2023). Studies have shown the positive relationship between literacy levels and economic advancement (Chua, 2017). Cree et al. also show that countries with lower adult literacy and numeracy skills are likely to experience substantial economic loss, with the resident populations disadvantaged in finding suitable employment. Adult literacy programs can transform this into an opportunity to ensure that socio-economic well-being ensues. Adult literacy participants are more likely to move from economic inactivity and unpaid family work towards self-employment, especially in rural areas (Blunch, 2009); highlighting the need for adult literacy in supporting the transformation of developing economies from low-wage subsistence farm-based economies to value-added manufacturing and service-based economies – areas that need a literate workforce. Studies in developing economies such as Ghana have shown that households with literate adults and adults engaging in literacy programs had 8.5% to 14% higher incomes than households without literate adults (Blunch & Pörtner, 2011).

A nation with a higher literacy rate is more likely to attract a large pool of investors and entrepreneurs and an inflow of money, significantly impacting the nation's economy (Gulcemal, 2020; Robinson, 1998). China provides an example: since the 1970s, per capita income levels rose with implementation of universal literacy initiatives (Yeoh & Chu, 2012). However, there is also evidence that ALP initiatives are not always successful; in the case of Venezuela higher literacy rates have not translated into economic accretion (Blunch & Pörtner, 2011) but can be attributed to macroeconomic anomalies (Bull & Rosales, 2020). Literacy positively affects people and labor force status, and adults with literacy skills are more likely to be employed and command higher wages than individuals with weaker literacy skills (Appleton & Teal, 1998). Higher literacy rates impact the quality of human capital, which plays a key role in the economic development of developing countries.

Rural-Urban Divide

Literacy statistics also report higher illiteracy levels among rural than urban populations. Studies in Namibia (Lind, 1996) show the added pressure of lack of time in rural populations due to the high demand placed on their labor arising from low or absent domestic technologies and infrastructure and competing subsistence living priorities. The rural-urban divide in education appears to be more pronounced in developing economies where there is a correlation between socioeconomic development gaps and adult literacy levels (Glewwe & Kremer, 2006). Adults from rural areas face geographic and institutional disadvantages due to low population density and remoteness, limiting access to doorstep or near-door literacy opportunities. Much of the current rural literacy and education infrastructure in developing economies is geared towards primary and secondary schooling, leaving adults with fewer avenues to re-enter the education path (Agyekum, 2022).

Gender Related Factors

With two of every three adult illiterates being women, low female literacy is an issue that needs attention. The issue is more acute in high-population countries such as India, where the adult female literacy rate in 2021 projected to 65.66% based on the 2011 national census (Chattopadhyay, 2018). The situation in African countries is also not very encouraging.

Demographic and health survey data from one survey showed 31 nations with only a small percentage of adult women with literacy skills, especially in Western and Middle Africa (Smith -Greenaway, 2015). Investing in female education can improve a country's economic growth; more educated female workers participating in the labor force are an indicator of higher human capital levels (Cooray & Potrafke, 2011). Norton and Tomal (2009) stressed the importance of female education, stating that educating females can potentially affect economic growth because literate mothers can educate their children, having a positive, deferred impact on their children's generation.

Gender-based division of labor and patriarchal subordination also influence women's educational participation (Stromquist, 1990). Despite such constraints, women in developing economies understand that education is critical and leads to individual and family growth and development. Studies in India show that women understand that education could help them get better jobs, enhance their income, deal with challenges in daily life better, and boost self-confidence (Aggarwal et al., 2022). Considering the importance of female literacy, it is worthwhile to find the determinants of the gender gap in adult literacy in developing countries to reduce it and increase human capital (Liu & Feng, 2019).

Political and Policy-Related Factors

Adult literacy policy and governance needs to acknowledge the implications of lifelong learning in various forms such as formal, non-formal, and informal education (Chisholm, 2008; Colley et al., 2004; Du Bois-Reymond, 2005). Establishing comprehensive formal education and training systems is not as easy in countries with poorly developed education infrastructures as it is in more affluent nations. Therefore, adult literacy programs need to consider the significance of such learning for individuals and communities. Mazumdar (2005) stresses that government expenditure on education represents a country's commitment to its developmental goals. In most developing countries with a low ranking for education on HDI parameters, adult education is politically a low priority, institutionally weak, and substantially dependent upon external funding (UNESCO Institute for Lifelong Learning, 2022). Countries must devise progressive policy, create and support organizational structures, and provide funding for not only essential literacy skills but also contributions towards human capital development. For example, Tanzania will only achieve UNESCO's Agenda 2030, Tanzania Vision 2025, and Sustainable Development Goal 4.6 if national policy formulation and implementation become culture-sensitive with consistent local government funding (Fute et al., 2022). A critical first step is demonstrating that learning is socially valued and that public policy is committed both to fostering learning cultures and investing in ALPs. Despite the poor performance of ALPs in improving the literacy and numeracy skills of participants in many developing countries, other beneficial outcomes suggest that these programs are helpful policy options (Blunch, 2017). Some recent successful programs offer potential examples to follow, particularly the utilization of novel methods and modern technology as Arthur-Mensah and Shuck (2014) covered in their exploration of e-learning adoption in Africa with available technology resources and practices and its positive implications on workforce training and development.

The "systemic environment" of institutions plays a vital role in individual choices and decisions to participate in education and in constraining or facilitating educational returns to the labor market (Allmendinger, 1989). Hence, developing economies need to further strengthen this systematic environment to meet universal adult literacy. Such nations have the greater need to invest in education to encourage adult education (Kilpi-Jakonen et al., 2014). Comprehensively

designed and targeted ALPs that incorporate use of new technologies have the potential to be a powerful tool to achieve universal adult literacy (Wagner, 2012).

Conclusion

Literacy plays a crucial role in determining a country's Human Development Index (HDI) and its global ranking. Adult literacy rates are influenced by factors such as rural-urban divides, gender inequalities, disparities among social groups, institutional support, funding, and regional differences. Marginalized and illiterate individuals require literacy skills to cope with unprecedented changes in the context of the knowledge-based economy and globalization. Without policy and sustained ALP interventions, the lack of adult literacy in developing economies will continue to be a humanitarian challenge for many upcoming decades. Case in point: India – with its large, developing economy and significant adult population base will not achieve full adult literacy even by 2050 (Venkatanarayana, 2015).

Lessons should be learned from similar mass remediation drives that have shown positive results. The global polio eradication initiative eliminated polio in less than 25 years. Managed by the World Health Organization Executive Board and the World Health Assembly, combined efforts successfully mobilized: (1) political and social support; (2) policy development and strategic planning; (3) partnership management; (4) donor coordination; and, (5) operational support, oversight, audit, and monitoring (Cochi et al., 2014). It is notable to see similar overlapping populations and geographies lagging in adult illiteracy eradication. Establishing a central authority to oversee literacy initiatives—capable of receiving and managing financial resources, coordinating efforts between governments and NGOs, securing government commitments for funding, and mobilizing volunteers and instructors (Cree et al.); would be a valuable step in addressing adult illiteracy.

Implications for the Field of Adult Literacy in Developing Economies

Considering the contributions of various stakeholders practical steps must be taken to expand both the quantity and quality of adult literacy opportunities worldwide, within the broader framework of lifelong learning. These efforts should focus on a capability approach aiming to enhance overall human capabilities, including personal and economic development, social interaction, and political participation (Youngman, 2000). Furthermore, literacy education on multiple topics will enhance sustainable development in any knowledge economy. Such topics include environment, production, preventative actions, personal income generation, improved human capacity, and social justice through the sustenance of democratic institutional structure (Oghenekohwo & Frank-Oputu, 2017). Institutional support with the necessary funding and policy backing is crucial for Adult Literacy Programs (ALPs) to operate in mission mode to eliminate adult illiteracy.. Tanzania's case provides strong evidence where the adult literacy rate dropped from 90.4% reported in 1986 to 71% in 1997 (Fute et al., 2022), a drop of almost 20 percentage points in about 11 years due to a lack of sustenance of ALP initiatives.

Importance of Continued Research

Developing economies must implement more cohesive, rather than piecemeal, improvements and interventions in adult literacy. Many still need to establish a clear and unified definition of adult education and how it should be measured (UNESCO Institute for Lifelong Learning, 2022). Countries are still striving to establish a shared understanding of the broader scope of the adult education sector, which spans everything from basic literacy programs to higher

education, workplace professional development, and skill-building and vocational training initiatives. Digital literacy, e-learning, and various communication tools based on the internet and mobile technology further support the adult literacy paradigm. Application of policy coherence, creates a need for additional research to pinpoint gaps and apply targeted solutions in the eradication of adult illiteracy.

References

- Addae, D. (2021). Adults who learn: Evaluating the social impact of an adult literacy project in rural South Africa. *Social Sciences & Humanities Open*, 3(1). https://doi.org/10.1016/j.ssaho.2021.100115
- Aggarwal, S., Kher, J., Vaid, N., & Kaur, M. (2022). Building literacy skills of urban poor women through Each One Enable One approach. *Journal of Adult and Continuing Education*, 28(1), 208–226. https://doi.org/10.1177/14779714211006719
- Agyekum, B. (2022). Adult unmet educational needs: Higher education options amongst adults in rural and small towns in Ghana. *Journal of Adult and Continuing Education*, *29*(1), 195–214. https://doi.org/10.1177/14779714221096499
- Allmendinger, J. (1989). Educational systems and labor market outcomes. *European Sociological Review*, *5*(3), 231–250. https://doi.org/10.1093/oxfordjournals.esr.a036524
- Appleton, S., & Teal, F. (1998). *Human capital and economic development*. African Development Bank Group. https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/00157612-FR-ERP-39.PDF
- Arthur-Mensah, N., & Shuck, B. (2014). Learning in developing countries: Implications for workforce training and development in Africa. *New Horizons in Adult Education and Human Resource Development*, 26(4), 41–46. https://doi.org/10.1002/nha3.20084
- Barton, D. (2007). Literacy: An introduction to the ecology of written language (2nd ed.). Blackwell.
- Bannon, J. L. (2016). Emerging voices: Capitalizing on adult education: The economic imperative for literacy in 1960s federal policy discourse. *College English*, 78(4), 314–339. https://doi.org/10.58680/ce201628215
- Blaug, M. (1966). Literacy and economic development. *The School Review*, 74(4), 393-418. https://doi.org/10.1086/442786
- Blunch, N. H. (2009). Multidimensional human capital, wages and endogenous employment status in Ghana. In R. Kanbur & J. Svejnar (Eds.), *Labor markets and economic development* (pp. 367–385). Routledge.
- . (2017). Adult literacy programs in developing countries. *IZA World of Labor*, 374. https://doi.org/10.15185/izawol.374
- Blunch, N. H., & Pörtner, C. (2011). Literacy, skills and welfare: Effects of participation in adult literacy programs. *Economic Development and Cultural Change*, 60(1), 17–66. https://doi.org/10.1086/661219
- Bull, B., & Rosales, A. (2020). The crisis in Venezuela: Drivers, transitions, and pathways. *European Review of Latin American and Caribbean Studies / Revista Europea de Estudios Latinoamericanos y Del Caribe*, 109, 1–20.
- Chattopadhyay, A. (2018). A Study on the challenges and the progress of female literacy rate in India. In S. Bachhar (Ed.), *Women's education in India* (pp. 140–157). Crescent Publishing.
- Chisholm, L. (2008). Re-contextualizing learning in second modernity. *Research in Post-Compulsory Education*, 13(2), 139–147. https://doi.org/10.1080/13596740802141253
- Chua, K. (2017). Skill achievement and returns in developing countries: Evidence from adult skills surveys. *European Journal of Education*, *52*(4), 498–510. https://doi.org/10.1111/ejed.12236
- Cochi, S. L., Freeman, A., Guirguis, S., Jafari, H., & Aylward, B. (2014). Global polio eradication initiative: Lessons learned and legacy. *The Journal of Infectious Diseases*, 210(1), 540–546. https://doi.org/10.1093/infdis/iju345
- Colley, H., Hodkinson, P., & Malcolm, J. (2004). *Informality and formality in learning: a report for the learning and skills research centre*. Learning and Skills Research Centre. https://kar.kent.ac.uk/4647/3/Informality%20and%20Formality%20in%20Learning.pdf
- Cooray, A., & Potrafke, N. (2011). Gender inequality in education: Political institutions or culture and religion?. *European Journal of Political Economy*, *27*(2), 268–280. https://doi.org/10.1016/j.ejpoleco.2010.08.004
- Cree, A., Kay, A., & Steward, J. (2023). *The economic and social cost of illiteracy: A snapshot of illiteracy in a global context*. World Literacy Foundation. https://worldliteracyfoundation.org/wp-content/uploads/2023/09/The-Economic-Social-Cost-of-Illiteracy-2023.pdf

- del Pilar O'Cadiz, M., & Torres, C. A. (1994). Literacy, social movements, and class consciousness: Paths from Freire and the Sao Paulo experience. *Anthropology & Education Quarterly*, 25(3), 208–225. http://www.jstor.org/stable/3195842
- Du Bois-Reymond, M. (2005). What does learning mean in the 'Learning Society'? In L. Chisholm, B. Hoskins & C. Glahn (Eds.) *Trading up: Potential and performance in non-formal learning* (pp. 15-24). Council of Europe Publications.
- Freire, P. (1972). Pedagogy of the oppressed. Penguin.
- Fute, A., Xiu-Lan, W., Oubibi, M., & Bulugu, J. B. (2022). Adult literacy education and reduction of poverty in Tanzania: A review of policies and their implementation. *Journal of Education*, 203(4), 931–938. https://doi.org/10.1177/00220574221075204
- Glewwe, P., & Kremer, M. (2006). Schools, teachers, and education outcomes in developing countries. In E. Hanushek, S. Machin & L. Woessmann (Eds.), *Handbook of the economics of education* (pp. 945–1017). North-Holland Publications. https://doi.org/10.1016/s1574-0692(06)02016-2
- Goldin, C. (2024). Human capital. In C.Diebolt & M. Haupert (Eds.) *Handbook of cliometrics* (pp. 353–383). Springer, Cham. https://doi.org/10.1007/978-3-031-35583-7 23
- Gulcemal, T. (2020). Effect of human development index on GDP for developing countries: A panel data analysis. *Journal of Economics Finance and Accounting*, 7(4), 338–345. https://doi.org/10.17261/Pressacademia.2020.1307
- Hanemann, U. (2015). Lifelong literacy: Some trends and issues in conceptualizing and operationalizing literacy from a lifelong learning perspective. *International Review of Education*, *61*(3), 295–326. https://doi.org/10.1007/s11159-015-9490-0
- Harvard Business School. (n.d.). *Historical data visualization: Adult literacy rates*. Harvard University. https://www.hbs.edu/businesshistory/courses/teaching-resources/historical-data-visualization/details?data_id=31
- Henschke, J. A. (2013). Nation building through andragogy and lifelong learning: On the cutting edge educationally, economically, and governmentally. In V. Wang (Ed.), *Handbook of research on technologies for improving the 21st century workforce: Tools for lifelong learning* (pp. 480–506). IGI Global.
- Jarvis, P. (2007). Globalization, lifelong learning and the learning society. Sociological perspectives. Routledge Kammoun, S., Romdhane, Y. B., & Fakhfakh, M. B. S. (2020). Effects of economic and political risks on foreign direct investment: A panel data analysis in MENA region. In A. C. Prabhakar, G. Kaur, & V. Erokhin (Eds.), Regional trade and development strategies in the era of globalization (pp. 226–240). IGI Global. https://doi.org/10.4018/978-1-7998-1730-7.ch012
- Kilpi-Jakonen, E., Buchholz, S., Dämmrich, J., McMullin, P., & Blossfeld, H.-P. (2014). Adult learning, labor market outcomes and social inequalities in modern societies. In H.-P. Blossfeld, E. Kilpi-Jakonen, D. Vono de Vilhena, & S. Buchholz (Eds.), *Adult learning in modern societies: An international comparison from a life-course perspective. eduLIFE lifelong learning series* (pp. 3–28). Edward Elgar.
- Knoll, J. H. (2007). The history of the UNESCO international conferences on adult education–from Helsingör (1949) to Hamburg (1997): International education policy through people and programmes. *Convergence (Toronto)*, 40(3), 21–41.
- Kolawole, O. D., & Pusoetsile, T. (2022). What difference does literacy make among adult learners? Impact of adult basic education programme in a rural community in Botswana. *Journal of Adult and Continuing Education*, 28(1), 227–251. https://doi.org/10.1177/14779714211007495
- LeVine, R. A., LeVine, S., Schnell-Anzola, B., Rowe, M. L., & Dexter, E. (2011). *Literacy and mothering: How women's schooling changes the lives of the world's children*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195309829.001.0001
- Lind, A. (1996). Free to speak up: Overall evaluation of the national literacy programme in Namibia, NLPN. Gamsberg Macmillan .https://unesdoc.unesco.org/ark:/48223/pf0000194173
- Liu, F., & Feng, X. (2019). The impact of religion on gender gap in adult literacy in developing countries. *Journal of Asian Development*, 5(2), 57–73. https://doi.org/10.5296/jad.v5i2.14069
- Mayo, M., Gaventa, J., & Rooke, A. (2009). Learning global citizenship? Exploring connections between the local and the global. *Education, Citizenship and Social Justice*, 4(2), 161–175. https://doi.org/10.1177/1746197909103935
- Mazumdar, K. (2005). Socio-economic factors determining adult literacy in developing countries. *International Journal of Social Economics*, 32(1/2), 98–120. https://doi.org/10.1108/03068290510575667
- McCaffery, J., Merrifield, J., & Millican, J. (2007). Developing adult literacy: Approaches to planning, implementing, and delivering literacy initiatives. Oxfam.
- Mehrara, M., & Musai, M. (2013). The relationship between economic growth and human capital in developing countries. *International Letters of Social and Humanistic Sciences*, 5, 55–62.

- Metzger, N., & Shenai, V. (2021). Economic growth and human development in OECD countries: A twenty-year study of data 2000–2019. *Journal of European Economy*, 20(4), 585–631. https://doi.org/10.35774/jee2021.04.585
- Mosenthal, P. B., & Kirsch, I. S. (1989). Designing effective adult literacy programs. *Poetics*, *18*(3), 239–256. https://doi.org/10.1016/0304-422X(89)90002-8
- Norton, S. W., & Tomal, A. (2009). Religion and female educational attainment. *Journal of Money, Credit and Banking*, 41(5), 961–986. https://doi.org/10.1111/j.1538-4616.2009.00240.x
- Oghenekohwo, J. E., & Frank-Oputu, E. A. (2017). Literacy education and sustainable development in developing societies. *International Journal of Education and Literacy Studies*, *5*(2), 126–131. https://doi.org/10.7575/aiac.ijels.v.5n.2p.126
- Omolewa, M. (2008). Adult literacy in Africa: The push and pull factors. *International Review of Education*, 54 (5), 697–711. https://doi.org/10.1007/s11159-008-9091-2
- Robinson, P. (1998). Literacy, numeracy and economic performance. *New Political Economy*, *3*(1), 143–149. https://doi.org/10.1080/13563469808406341
- Smith-Greenaway, E. (2015). Educational attainment and adult literacy. *Demographic Research*, *33*, 1015–1034. https://doi.org/10.4054/demres.2015.33.35
- Stromquist, N. P. (1990). Women and illiteracy: The interplay of gender subordination and poverty. *Comparative Education Review*, *34*(1), 95–111. https://doi.org/10.1086/446905
- . (2009). Literacy and empowerment: A contribution to the debate. *Background study commissioned in the framework of the United Nations Literacy Decade for the biennium 2009-2010*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000187698
- Sundaram, A., & Vanneman, R. (2008). Gender differentials in literacy in India: The intriguing relationship with women's labor force participation. *World Development*, *36*(1), 128–143. https://doi.org/10.1016/j.worlddev.2007.02.017
- UNESCO Institute for Lifelong Learning. (2010). *Global report on adult learning and education*. UNESCO Institute for Lifelong Learning. https://unesdoc.unesco.org/ark:/48223/pf0000186431
- . (2022). 5th global report on adult learning and education: citizenship education: empowering adults for change. UNESCO Institute for Lifelong Learning. https://unesdoc.unesco.org/ark:/48223/pf0000381666
- UNESCO Institute for Statistics. (2020, February 02). Country-level data for SDG 4 on education.
- . Retrieved August 17, 2024, from https://infogram.com/sdg-4-data-dashboard-1hnq41z1k09p63z?live
- United Nations Educational, Scientific and Cultural Organization. (2004). *The plurality of literacy and its implications for policies and programmes*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000136246
 - . (2013). *Adult and youth literacy: National, regional and global trends, 1985-2015*. Institute for Statistics. https://uis.unesco.org/sites/default/files/documents/adult-and-youth-literacy-national-regional-and-global-trends-1985-2015-en 0.pdf
- . (2017). UNESCO moving forward the 2030 agenda for sustainable development. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000247785
- United Nations General Assembly. (1948). Universal declaration of human rights (217 [III] A). Retrieved from https://www.un.org/sites/un2.un.org/files/2021/03/udhr.pdf
- United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. UN. https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf
- United Nations Development Program. (n.d.). *Human Development Index (HDI)*. United Nations Development Program. Retrieved October 7, 2024, from https://hdr.undp.org/data-center/human-development-index#/ indicies/HDI
- Venkatanarayana, M. (2015). When will India achieve universal adult literacy? Status and prospects. *Journal of Educational Planning and Administration*, 29(2), 177–204. Retrieved August 17, 2024, from https://www.researchgate.net/publication/279299046 When Will India Achieve Universal Adult Literacy Status and Prospects
- Wagner, D. (2012). New technologies for adult literacy and international development. In D.R. Olson, & N. Torrance (Eds.), *The Cambridge handbook of literacy* (pp. 548–565). Cambridge University Press.
- World Health Organization. (2024). *Adolescent health*. Retrieved August 17, 2024, from https://www.who.int/health-topics/adolescent-health#tab=tab_1
- Yeoh, E. K., & Chu, K. (2012). Literacy, education and economic development in contemporary China. *China-ASEAN Perspective Forum*, 2(1&2), 11–83. https://doi.org/10.2139/ssrn.2207559
- Youngman, F. (2000). The political economy of adult education and development. Zed Books.