

DOI: https://dx.doi.org/10.54203/jems.2025.3

Educational development practices in higher education in Sudan, a case study in Eldaein University

Elssadig Ali Elssalig 🕩



Department of Education Management, Eldaein University, Eldaein, Sudan

ဳ Email: elssadigali7@glail.com

ABSTRACT

The study aimed to identify the educational development practices in higher education in Sudan. The sources of data for this research remained the public higher education institutions in Sudan. The researcher used a descriptive phenomenology method. Findings indicated that development of higher education in Sudan is facing some difficulties such as lack of budget and staff training. Also there was a lack of the comprehensiveness and generalizability of the research area. Since this study was limited to Eldaein University, it is necessary to conduct similar studies in higher education universities at the national level and achieve comprehensive and superior findings. There is a significant challenge in using development in higher education in Sudan. The higher education administration should pay attention to the educational development practices in Sudan, specifically public Sudanese university, to adopt the development and that can help in the academic achievement.

Original Article

PII: S232247702500003-15

Rec. 17 May, 2025 Acc. 24 June, 2025 Pub. 25 June, 2025

Keywords

Development, Higher education practices, Sudan.

INTRODUCTION

Education is the process by which man passes down through the generations his experiences, new discoveries, and values that he has gathered throughout the years in his fight for survival and growth. Through the acquisition of knowledge, abilities, skills, and attitudes, education empowers people and society to participate in the development process in a comprehensive way. Most would agree that educational development in higher education remains a developing field- one that includes practitioners (educational development staff), faculty, researchers, and those who assume all three roles simultaneously to focus on the improvement of teaching and learning in higher education (Amundsen & Wilson, 2012). Strengthening the capacity, ability, and culture of individuals and society to solve problems is one of the goals of education, beginning with basic education and continuing at all levels. Meijer (1994) set out his "educational development." This is more than just curriculum it also contains the end goal of changing educational practice. Development not only implies that implementation of the curriculum anticipated from the outset, it also implies that it preserves a teacher training, counseling, test development, and opinion incorporated in the development. By integrating science and technology into society, it aids man in enhancing, transforming, and conserving his surroundings for the sake of holistic growth. Education also plays a role in the promotion of respect for human rights and democratic values, creating the conditions for equality, mutual understanding, and cooperation among people.

Chusniyah, & Supriyanto (2025) Argue that Education for sustainable development is one of the most important goals of the 17 SDGs. Education that can foster sustainable values, attitudes and behaviors among young people is key to achieving all SDGs. Education does not operate in isolation; rather, it has to be integrated with research, practice, and development to contribute towards an all-round development of society. To date, it is known that our country's education is entangled with complex problems of relevance, quality, accessibility, and equity. The objectives of education do not take cognizance of society's needs and do not adequately indicate future direction. The absence of interrelated content and modes of presentation that can develop a student's knowledge, cognitive abilities, behavioral change by level to adequately enrich problem-solving ability and attitude are some of the major problems of our education system.

Definition of education

Education, in a very general sense, can be summed up at a basic level as referring to an experience or act that has a formative effect on the mind, character, or physical ability of an individual. In the sense that it is formative, it means that education serves to form something, and particularly something that will have a long-lasting effect on the person's mind and faculties. The most obvious example of this is the ability to understand and use language and mathematics, a skill that is then utilized throughout an individual's life (Wilson, 2005, p.3). Education is the manifestation of divine perfection, which already exists in man." - Swami Vivekananda (1863-1902). Such a manifestation is the outcome of the development of the individual in all aspects, namely physical, intellectual, emotional, and spiritual. The education one receives is the greatest input for advancing towards this objective, since education helps the total development of human personality. Education holds the key to human progress. Education plays an important role in bringing change. The Education Commission (1964-66) emphasized, 'Education is the one and the only instrument that can be used to bring about a change towards the social and economic betterment of India.' So, education must be used as a

Education is defined

Activities which aim at developing the knowledge, skills, moral values and understanding required in all aspects of life rather than knowledge and skills relating to only a limited field of activity. The purpose of education is to provide the conditions essential for young people and adults to develop an understanding of the traditions and ideas influencing society in which they live and to enable them to make a contribution to it. It involves the study of their own cultures and of the laws of nature, as well as the acquisition of linguistic and other skills, which are basic to learning, personal development, creativity, and communication (Wilson, 2005, p. 5).

The concept of education

Gandhi further explained the concept of education as, embrace that true education of the intellect can only come through proper exercise and training of the bodily organs. e.g., hands, feet, eyes, ears, nose, etc. In other words, an intelligent use of the organs in a child provides the best and quickest way of developing his intellect. But unless the development of the mind goes hand in hand with a corresponding awakening of the soul, the former alone would prove to be a poor, lopsided affair. By

spiritual exercise, I mean education of the heart. A proper and all-round development of the mind, therefore, can take place only when it keeps pace with the education of the physical and spiritual faculties of the child; they constitute an indivisible whole. Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. Educational methods include storytelling, discussion, teaching, training, and directed research. The methodology of teaching is called pedagogy. It is necessary to clarify the definitions of "education" and "training" as used in this paper. A research review of empirical work needs an introduction and a relatively simple technical understanding of its central terms (education, training, and skills) in order to clarify the various definitions of education, training, and skills qualifications in existing empirical surveys (Khana and Akhtar, 2013, p. 6).

Nature of education

Education is a process where a teacher and the social environment act and react with one another. It is a lifelong process. It is a process of individual development. It is both theoretical and practical. It is science as well as art. It is an instrument that is used to attain a better life. Education is essentially a process of growth and development that goes on throughout life. Education is the modification of behavior (Yizengaw, 2005, p. 23).

Aims of education

The aims of education are determined by human life. Since the basic form of human nature has remained unchanged over many centuries, the aims of education have also remained the same while humanity has passed through many centuries. For example, the human being is constituted not only of reason and intellect but also of emotions and the body; any system of education that seeks to fulfill its aims must provide for the development of all these aspects (Coldwell, 2017, p. 13). One of the aims of education is to strengthen the individuals and society's problem-solving capacity, ability, culture, starting from basic education and at all levels. Education enables man to identify harmful traditions and replace them with useful ones. It helps man to improve and change, as well as develop and conserve his environment for the purpose of an all-rounded development by diffusing science and technology into society. Education also plays a role in the promotion of respect for human rights and democratic values, creating the conditions for equality, mutual understanding, and cooperation among people. Education does not operate in isolation; rather, it has

to be integrated with research, practice, and development to contribute towards an all-rounded development of society (Yizengaw, 2005, p. 1). Improvement in education and vocational training leads economies to attain dynamic growth with the creation of high-paying jobs. It also tends to accelerate investment, economic diversification, and technological change and improves competitiveness (Khana & Akhtar, 2013, p. 7).

METHODOLOGY

In this research, a descriptive phenomenology method was employed, which has been the data gathered from the previous study. This approach is employed because it enables the researcher to conduct the data to describe the case of the study. In this manuscript, the target was limited to Eldaein University as one of the higher education institutions.

RESULTS AND DISCUSSION

There is a significant challenge in using development in higher education in Sudan. University cases applied in Eldaien university showed lesser practice of advance development. It implies that the educational development practices need to improve on the development of futures. The findings indicated that development of higher education in Sudan is facing some difficulties such as lack of budget and staff training, and lack of the comprehensiveness and generalizability of the research area.

The impact of education quality on development goals

It is commonly presumed that formal schooling is one of several important contributors to the skills of an individual and to human capital. It is not the only factor. Parents, individual abilities, and friends undoubtedly contribute. Schools nonetheless have a special place, not only because education and 'skill creation' are among their prime explicit objectives, but also because they are the factor most directly affected by public policies. It is well established that the distribution of personal incomes in society is strongly related to the amount of education people have had. Generally speaking, more schooling means higher lifetime incomes (EFA Global Monitoring Report, 2005, p. 40).

Education enables those in paid formal employment to earn higher wages

Better-educated individuals in wage employment are paid more to reward them for their higher

productivity. On average, one year of education is associated with a 10% increase in wage earnings. Returns to schooling are highest in sub-Saharan Africa, highlighting the need to invest in education in the region. Education helps protect taxpayers and women from exploitation by increasing their opportunities to obtain secure contracts. In El Salvador, only 5% of workers with less than a primary education have an employment contract, leaving them noticeably vulnerable. By contrast, 47% of those with secondary education work under signed contracts (Matsuura, 2004, p. 5).

Skills development is the process of

1) Identifying your skill gaps, and 2) developing and honing these skills. It is important because your skills determine your ability to execute your plans successfully. Imagine a carpenter trying to build a house. He has the raw materials but lacks good wood working tools. Skills development personal excellence.

(https://personalexcellence.co/blog/skills-

development) employability skills are grounded within institutional graduate learning outcomes as well as in professional society guidelines as provided by the to pursue their chosen career path, students need to prepare themselves for employment by building employability skills and forming an identity. To assist students in forming their identity, universities need to provide opportunities for them to develop workforcereadv graduates. Opportunities include a transitional framework between school and the workforce, a curriculum framework of connected generic and discipline learning outcomes, opportunities for experiential learning and curriculum-integrated development.

By building employability skills, students are contributing towards building effective career competencies, which are a collection of skills that relate to a chosen profession. As individuals progress through life, they build competencies composed of skills learnt from previous experiences or learning activities. To be successful at constructing career-related competencies, an individual needs to self-regulate their activities towards further skill development. Finding appropriate methods to build competencies and identity across varying disciplines (McKenzie & Neilson, 2017, p.4).

Career development

Research across disciplines such as psychology, organizational behavior, and workplace management demonstrates various applications and validations of theories and models to support career decision-making and career development. Decision-making models are conceptual frameworks useful for understanding how decision makers process information and arrive at conclusions (Harren, 1979, p. 5). Career decision-making explains an individual's internal psychological process that occurs as part of a broader career development process (Harren, 1979). Generally, the theories and models of career development can be classified into four categories:

- a) matching personal traits to occupations, aligning personality types to the work environment;
- b) the development of skills appropriate for different developmental phases and developing career and life argentic (self-directed) skills informed by social-cognitive processes (Bandura, 1986; Hackett & Betz, 1981; Lent, Brown, & Hackett, 1994). From an IT perspective, social cognitive career theory has been utilized as a way to characterize the career development of students and explain both academic and career behaviors SCCT considers individual cognitions and psychosocial states as well as economic and sociological factors, to explain career development (McKenzie and Coldwell, 2017, p.3) the ability of individuals to perceive the nature of skills is very important because help in the future in employment (Ashton and James, 1999, p.6).

Develop relevant skills

Effective managers are more oriented toward continuous learning and self-development. Learn about the key traits and skills necessary for the Skills Training for Empowerment. After identifying skills that need to be strengthened, it is wise to seek opportunities to develop these skills. Some training may be obtained in specialized management development workshops run by one's employer or by consulting companies. approaches Other developing new skills include challenging assignments, personal coaching, and selfdevelopment activities (Wilson, 2005, p. 12).

Developing the individuals depends on

- 1-Individual Abilities;
- 2-Education Investment;
- 3-Skills:
- 4-Employment Opportunities; and
- 5. Development of problem-solving capacity and culture in the context of education.

The combination of individual abilities, education investment, and employment opportunities creates valuable skills, represented by the three solid lines. To be successful, there needs to be a match between individual abilities and education investment,

between individual abilities and employment opportunities, and between education investment and employment opportunities (each represented by the dashed line in the figure). It is important to emphasize that current economic models treat these relationships as dynamic and uncertain. Employment opportunities are constantly changing as new technologies transform.

Production systems and whole industries

However, there is a wide range of educational institutions offering qualifications with a large variance in learning quality and relevance for employment. Individuals can discover their full potential abilities only by exploring different possibilities. This is a lifelong process (Paul, 2010, p. 14). Human capital is considered one of the most important sources of economic growth. Many empirical experts have found a positive association between the quantity of education and economic growth. Quality of education also matters not only average skill level, but also the pattern of skill distribution in the economy affects its industrial comparative advantage (Bombardini et al., 2009; Grossman, 2004; Grossman and Maggi, 2000).

Examining the quantity, quality, and distribution of skills and the mechanisms of how these skills are generated in an economy has important implications for understanding the path of economic development in the past and the future (Matsuyama, 2011, p. 1). The argument is that skill and education have at least enhanced employability. We say this not because we call into question the qualitative aspect of it. Our argument is that employability is always relative to employment availability. If a skilled and educated worker is not able to realize the price of his labor power, his ability has only intrinsic value and not extrinsic value. His labor power, which is a commodity, is peculiar, though it has value but doesn't have exchange value till he is able to realize the price of it by putting his intensified labor power, i.e., skill, to use. Hence, in reality, even employability (Essa, 2013, p. 5).

Individual benefits of education, training and skills

The simple assumption that education and training have short-term and long-term effects on life-course patterns, at least on the individual's career and life wages, is generally accepted, and its correctness seems to be fairly obvious. But when it comes to actual education and training benefits, questions arise: what do we understand by the term 'benefits' and—equally contentious—how can these

be measured? Furthermore, education and training can take quite different forms as regards their type, content degree of formality, and resources invested. This chapter therefore deals with current perceptions of the benefits of education and training, and their consequences for empirical investigation are often reduced to educational returns in terms of income or wage development avoidance costs, and other measurable economic benefits. Predominantly based on human capital theory that education and training are a means to empower people and improve the quality and organization of work enhance citizens' productivity, raise workers' incomes, improve enterprise competitiveness, and promote job security and social equity and inclusion Education and professional training are the key to establishing efficiency in wages and increased employment opportunities (Khana & Akhtar, 2013, p. 6).

Employability skills can be defined as a set of generic and discipline-specific skills developed education. through Opportunities include transitional framework between school and the workforce, a curriculum framework of connected and discipline generic learning opportunities for experiential learning, curriculum-integrated career development.

By building employability skills, students are contributing towards building effective career competencies, which are a collection of skills that relate to a chosen profession. As individuals progress through life, they build competencies composed of skills learned from previous experiences or learning activities. To be successful at constructing career-related competencies, an individual needs to self-regulate their activities towards further skill development (McKenzie and Coldwell, 2017, p. 2).

The training

Effective training and development programs aimed at improving the employees' performance. Training refers to bridging the gap between the current performance and the desired standard. Performance training could be given through different methods, such as through coaching and mentoring peer cooperation and participation by the subordinates. The teamwork enables employees to actively participate on the job and produces better performance, hence improving organizational performance. Training programs not only develop employees but also help organizations to make the best use of their human resources in favor of gaining advantage. Therefore, competitive it mandatory for the firm to plan for such a training program for its employees to enhance their abilities and competencies that are needed in the workplace (Elnaga, 2013, p. 3).

The Determinants and effects of training

In most empirical studies, training is distinguished from formal school and post-school qualifications (which are viewed as education) and is generally defined in terms of courses designed to help individuals develop skills that might be of use in their job (JSTOR, 1999, p. 9). Employability is a two-sided equation, and many individuals need various forms of support to overcome the physical and mental barriers to learning and development (i.e., updating their assets).

Employability is not just about vocational and academic skills. Individuals need relevant and usable labor market information to help them make informed decisions about the labor market options available to them. They may also need support to realize when such information would be useful and to interpret that information and turn it into intelligence. Finally, people also need opportunities to do things differently, to access relevant training, and, most crucially, employment (Hillage and Pollard, 1998, p. 5). Employability skills are transferable core skill groups that represent essential functional and enabling knowledge, skills, and attitudes required by the 21st-century workplace. They are necessary for career success at all levels of employment and for all levels of responding to the demand for post-basic education and development while sustaining the gains made in basic education. Expanding the skills development system while achieving and sustaining equitable access to quality skills development and lifelong learning (Palmer, 2009, p. 2), experienced skilled individuals enhances the efficiency and flexibility of the labor market, reduces skills bottlenecks, enables absorption of skilled workers more easily into the economy, and improves their job mobility. It is crucial to invest in education that helps quality and enhance their job mobility skills.

Although the government's coordinated Action on Skill development has brought about a paradigm shift in addressing the issues of relevance in skill development, the gaps in skill development are to be identified to achieve the objectives in terms of quantity and quality. For individuals (Tara and Kumar, 2016, p. 3), technical and vocational skills and education of the labor force through greater investment in training must help individuals in the future. Skills training for empowerment in the last two decades, 620 million people around the world climbed out of poverty through a labor shift that saw workers moving from the farm to the factory. 16

Economic growths saw the parallel rise of industries contributing towards nation-building. Subsequently, jobs in many sectors grew exponentially and met human resource needs through population growth. Many workers who left agricultural jobs transitioned into sectors such as manufacturing and construction, often with minimal exposure and training in those trades. The need for vocational training, differentiated from academic education by its focus on skill attainment and hands-on practice over theoretical learning, is urgent. Globally, there is an increasing understanding that a pragmatic approach to skills training is an ideal solution to meet workforce demands and contribute towards economic growth (Vasavada, 2012, p. 13). Training should not, in itself, be a skills measure that has been declining in reconsidered years as a guarantee of future employment (Comyn, 2014, p. 9).

Relationship between training and development

The training and development is the most significant factor required to obtain maximum output from human resources. It can be used to improve or develop job-related performance requirements of the employees. Let us explore the subject in detail. Training & development has emerged as a major function and is recognized as a profession with distinct theories and methodologies. It is a wellaccepted fact that an organization's success by and large depends on how well the employees are performing in their current role. Job performance of an employee depends on several factors such as motivation, commitment, and engagement, but several studies have reinstated the fact that training and development play the most significant part in improving the performance of the employees (Vats, 2016, p. 2).

Divination of employment

That the definition of employment continues to be based on work activity or job attachment during a specified calendar week, that it includes part-time workers regardless of the number of hours they worked or the reason they worked part-time (Stein, 1967, p. 2).

Creating education for employment ecosystems

We need to recognize and prioritize the importance of transitioning youth from school to work so that we can design more efficient and effective education for employment ecosystems. Education providers can make many internal strides to improve education for employment outcomes for young people, but this is only a part of what needs to

be accomplished to alleviate youth unemployment. Education providers need the support of many external actors to overcome challenges, which is why young people, educational institutions, companies, and governments need to work together to address this issue. Due to the impact each of these bodies can have on alleviating youth unemployment, we need more collaboration among our political, economic, and educational institutions so that we can construct outlets that enable all young people to gain skills and find opportunities in the market (Vogel, 2015, p. 20). Education is traditionally viewed as an investment for the future. There is abundant evidence in every-day life and scientific literature for the fact that the acquisition of education improves the future earnings and overall success of individuals. Another education (Aki, 2001, p. 4) is one of the most effective tools in a society, and it provides the best chance for economic benefit and growth for individuals.

The relationship of education with manpower and employment

Technological developments and changes directly affect and form the working life. With knowledge and technology entering into every aspect of our lives, the structural transformations in the field of employment have started happening. The share of employment in the services and information sector has started to increase, especially in developed countries. Therefore, a well-trained workforce is also needed in a country's economic development besides capital and technology.

Knowledge and skills acquired through education for achieving this will affect both communities' development and will decrease the negativity due to lack of education by individuals (Tamer & Ramazan 2010, p. 4). The skill strategy needs to take into account high dropout rates in the education space, low employability of the skilled, low enrollment in vocational education, and also low levels of in-service training (Vasavada, 2012, p. 3).

Employee satisfaction

Training & development of the employee improves the knowledge, skills, and attitudes of the employee. Thus, they are more confident regarding their work, which naturally improves their self-esteem and satisfaction levels. This newfound satisfaction brings about a kind of organizational citizenship behavior in the employee. He works harder as he feels a part of the organization, which results in their improved performance (Vats, 2016, p. 2).

CONCLUSION AND RECOMMENDATIONS

Education development practice faces many expectations and challenges, which must be addressed in order to make the Sudanese university Successful. This study investigated the educational development practices in higher education in Sudan. Based on the major findings of this study, the following conclusions were made. The results of this research supported the synthesis of the literature review and the overall purpose of this study. Furthermore, the findings indicated that development of higher education in Sudan is facing some difficulties such as lack of budget and staff training. Secondly, they lack the comprehensiveness and generalizability of the research area. When there are clear education policies and education goals are achieved in any country of the world, their education employs individual skills, but inadequate facilities, insufficient training of teachers, overcrowded classes, and shortages of books and other teaching materials all indicate the low quality of education provided. And all that does not enable education for individual skills development and employment. The researcher recommended that since this study was limited only to Eldaein University, that undertake similar studies in the Higher Education University at the national level and develop all-embracing and superior findings.

DECLARATIONS

Corresponding author

Correspondence and requests for materials should be addressed to Dr. Elssadig Ali that is currently the lecturer in Eldaein University in Educational Policy and Leadership. He was the head of the department and an active member of several committees. Email: elssadigali7@gmail.com; ORCID: https://orcid.org/0009-0002-9856-2046

Acknowledgements

I want to take this opportunity to thank everyone who helped me in this process. Also, I would like to thank the Editor for his guidance, support, and encouragement that he has given me during the whole process, and this outcome would not be possible without his great support. Thanks, for encouraging me to complete this paper and make it ready for publication.

Funding support

The authors declare that no funds, grants, or other support were received during the preparation or publication of this manuscript.

Competing interests

The authors declare no competing interests in this research and publication.

REFERENCES

- Amundsen, C., & Wilson, M. (2012). Are we asking the right questions? A conceptual review of the educational development literature in higher education. Review of educational research, 82(1), 90-126. DOI: 10.3102/0034654312438409
- Asuyama, Y. (2011). Skill formation through education and training: A comparison of China and India. In Industrial dynamics in China and India (pp. 107-134). Palgrave Macmillan, London. https://tinyurl.com/mrhf4rdt
- Bakan, I. (2000). The importance of formal employee education in the world of growing uncertainty. Challenges for Business Administrators in the New Millennium, 341-355. https://tinyurl.com/989f9n43
- Blundell, R., Dearden, L., Meghir, C., & Sianesi, B. (1999).

 Human capital investment: the returns from education and training to the individual, the firm and the economy. Fiscal studies, 20(1), 1-23. https://tinyurl.com/532vdw44
- Breslow, N. E., & Day, N. E. (1980). Statistical methods in cancer research. Vol. 1. The analysis of case-control studies (Vol. 1, No. 32). Distributed for IARC by WHO, Geneva, Switzerland. https://tinyurl.com/532vdw44
- Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. Higher Education Research & Development, 28(1), 31-44. DOI: 10.1080/07294360802444347
- Chusniyah, A., Makruf, I., & Supriyanto. (2025). Two decades of sustainable development studies in higher education management: a bibliometric analysis. International Journal of Sustainability in Higher Education, 26(3), 614-632. https://www.emerald.com/insight/1467-6370.htm
- Comyn, P. (2014). Linking employment services, skills development & labor market needs: Issues for India. The Indian journal of industrial I relation, 378-388. https://about.jstor.org/terms
- Dalziel, P. (2010). Developing the next generation: employerled channels for education employment linkages. In Beyond Skill(pp. 154-175). Palgrave Macmillan, London. https://tinyurl.com/2uyx34mb
- Gravemeijer, K. (1994). Educational development and developmental research in mathematics education. Journal for research in Mathematics Education, 25(5), 443-471. https://about.jstor.org/terms
- Hava, H. T., & Erturgut, R. (2010). An evaluation of education relations together with technology, employement and economic development components. Procedia-Social

- and Behavioral Sciences, 2(2), 1771-1775. doi:10.1016/j.sbspro.2010.03.982
- Hillage, J., & Pollard, E. (1998). Employability: developing a framework for policy analysis. London: DfEE. https://tinyurl.com/2aep3ahj
- Jamal, T., & Mandal, K. (2013). Skill development mission in vocational areas—mapping government initiatives. Current Science, 590-595. https://about.jstor.org/terms
- Khan, M., Akhtar, S., Mehmood, H. Z., & Muhmood, K. (2013).

 12- Analysing skills, education and wages in Faisalabad:
 Implications for labour market. Procedia Economics
 and Finance, 5, 423-432. doi: 10.1016/S22125671(13)00050-6
- Ki-Zerbo, J. (1972). Education and development. Prospects, 2(4), https://tinyurl.com/4dxnthvs
- Matsuura, K. (2004). Education for all: the quality imperative. United Nations Educational. https://tinyurl.com/mrxft2ks
- McKenzie, S., Coldwell-Neilson, J., & Palmer, S. (2017). Informing the career development of IT students by understanding their career aspirations and skill development action plans. Australian Journal of Career Development, 26(1), doi.org/10.1177/1038416217697972
- National Research Council. (2013). Education for life and work: Developing transferable knowledge and skills in the 21st century. National Academies Press. doi.org/10.17226/13398.
- Palmer, R. (2009). Skills development, employment and sustained growth in Ghana: Sustainability challenges. International Journal of Educational Development, 29(2), 133-139. doi.org/10.1016/j.ijedudev.2008.09.007
- Piece, T. T. (2012). Social protection: A development priority in the post-2015 UN development agenda. https://tinyurl.com/y3tpa8vw

- Sanghi, S., Subbiah, M. V., Reddy, R. M., Ganguly, S., Gupta, G. S., Unni, J., ... & Vasavada, M. (2012). Preparing a globally competitive skilled workforce for Indian economy: emerging trends and challenges. Vikalpa, 37(3), 87-128. https://tinyurl.com/3y8xc5pw
- Sharpe, A., Arsenault, J. F., & Lapointe, S. (2007). The Potential Contribution of Aboriginal Canadians to Labour Force, Employment, 20- 20- Productivity and Output Growth in Canada, 2001-201 7. Ottawa, ON: Centre for the Study ofLiving Standards. https://tinyurl.com/26z4enbk
- Singh, C. S. K. (2003). Skill, Education and Employment: A dissenting essay. Economic and Political Weekly, 3271-3276. https://about.jstor.org/terms
- Stein, R. L. (1967). New Definitions for Employment and Unemployment. Employment and Earnings and Monthly Report on the Labor Force. https://tinyurl.com/y7hjrmu4
- Tara, S. N., & Kumar, N. S. (2016). Skill development in India:: In conversation with S. Ramadorai, Chairman, National Skill Development Agency & National Skill Development. doi.org/10.1016/j.dcan.2016.09.003
- Uvalic-Trumbic, S., & Daniel, J. (2016). Sustainable development begins with education. https://tinyurl.com/yc8mccye
- Vogel, P. (2015). Addressing the Gap between the Education System and the Labor Market. In Generation Jobless? (pp. 104-146). Palgrave Macmillan, London. https://tinyurl.com/23924eh8.
- World Bank Group. (2014). World development indicators 2014. World Bank Publications. https://tinyurl.com/3jtaffn9
- Yizengaw, T. (2005, May). Policy development in higher education in Ethiopia and the role of donors and development partners. In International Expert Meeting-Formulas that work: Making Higher Education Support More effective. https://tinyurl.com/b5emzswz

Publisher's note: Scienceline Publication Ltd. remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Open Access: This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit https://creativecommons.org/licenses/by/4.0/.

© The Author(s) 2025