# HUMAN CAPITAL AND EDUCATIONAL FINANCE: A REVIEW OF LITERATURE

### Kaharuddin, Zainudin Bin Hassan and Mahani Binti Mokhtar

Faculty of Education Universiti Teknologi Malaysia Skudai, Johor Bahru, Malaysia.

#### Abstract:

Critical review is done to analyze the importance of educational finance in establishing human capital. The key words of this review of literature are human capital, education financing, and benefit economical and individual. Education is highly important in developing human capital, because it influences the individual and it has benefit economical for the nation. Education as the main investment in human capital so it requires the government to supply financial and budget for school development and make it priority, more transparent, and fair.

Keywords: human capital, education financing, benefit economical and individual.

### 1. INTRODUCTION

The educational institution is the main element to produce more human capital as Carneiro and Heckman (2003) states that, a revolution in education and the higher subsidize can give positive impact to the quality at human resources. Psacharopolous (1995) and Belfield and Levin (2010) explained that, in economic rules, the cost for education and house hold are two mainstreaming in human capital development. Psacharopolous (1994) and Olden & Clune (1998) carried out studies about the importance of education in achieving human capital. Some countries had reformed the system in financing the education by increasing the budget and remove the gap between the poor and the rich. Profoundly, financing the education becomes the essential element in achieving ideal human capital. It becomes the investment both for the nation and the individual.

Human capital consists of knowledge. Knowledge is an ability which is owned by each individual that she/he got from education process. Lucas (1988) states that, there are two main factors which become the main source in establishing human capital in a nation, they are education and learning by doing. Human capital is an expensive asset to increase national growth (Fernandez, & Rogerson, 1999; Petrakis, 2012). Blundell et al (1999) and Vinding (2006) stated that, human capital in increasing the economic growth has been proven in Asia which has succeeded in making a revolution in education. It makes the social's economic growth becomes higher.

Human capital in supporting economic growth in a nation is very important as Becker (1993) stated that, education is the main source in reaching ideal human capital. Nelson and Philips (1966) and Lucas (1988) stated that, a good quality of education contributes a high

ISSN:-2347-2723

human capital and it leads the increasing of economic growth. Some recent studies had shown that the good human capital comes from the good education, best skill, and broaden knowledge (James, 2000; Danes, Stafford, Haynes, & Amarapurkar, 2009; Bell, & Stevenson, 2006).

### 2. EDUCATION AND GLOBALIZATION

The issues of human capital toward the globalization era become a serious fact in some countries. Some recent studies showed that, the increasing of economic growth of a nation is determined by the professional and competitive human resources, including the competence of organization and nation's income (Zula, & Chermack, 2007; Becker, Huselid, & Ulrich, 2002). Nelson & Phelps (1966) and Lucas (1988) stated that, the various rate in economic growth which happen in each country is caused by the human capital. In regarding to this fact, human capital becomes the main factor in increasing the economic growth in a nation.

Human is a core investment in human capital (Olakulehin, 2008; Tilaar, & Suryadi, (Eds.), 1993; Supriadi, 2003). Galor, (2006) states that, the importance of human capital in socio-economic can be seen from the delinquency capitalist –worker who against the system to establish human capital in order to create a better life. Becker, Huselid and Ulrich (2002) studied that, the development and the increasing of human capital in organization must be done continuously to improve organization's income. Hanusek (1996) and Becker et al (2002) stated that, to put the standard in measuring the input and the output of human capital in organization is still the controversy. Heckman (2000) stated that, cognitive and non-cognitive knowledge is very important to be considered as human's asset on each organization.

The importance of human capital as investment can be seen physically (Becker, Murphy, & Tamura, (Eds.), 1994; Galor, 2006). Another study showed that the most important things in the human capital are productive skill and productive knowledge (Palacios, 2002; Carneiro & Heckman, 2003; Awang, 2004; Danes, Stafford, Haynes, & Amarapurkar, 2009). In regarding to the importance of knowledge in establishing human capital, each individual has got to get education formally and informally in order to build up the economy (Sweetland, 1996; James, 2000; Zhang & Chen, 2008; Frederiksen & Kato, 2011).

### 3. EDUCATION AND HUMAN CAPITAL

The initial concept of human capital is education. Education is the main investment (Becker, 1993; Bell & Stevenson, 2006). Human capital which is produced by good education are able to increase the economic growth and individual income Blundell, Dearden, Meghir, & Sianesi, 1999; Nelson, & Phelps, 1966; Lucas, 1988). Zhan & Chen (2008) and Petrakis (2012) stated that, good human resources are more applicable in industry.

Education as the main part in human capital influences many countries to prioritize education because it contributes positive improvement to nation's income (Killeen, Turton, Diamond, Dosnon, & Wach, 1999; Heckman, 2000; Robeyns, 2006; Galor, 2006; Olakulehin, 2008; Santos, 2011; Ramos, Surinach, & Artís, 2012). Boccanfuso, Savard & Savy, (2013) and Zarutskie, (2008), stated that, lack of productivity is caused by human resources which lack of knowledge, skill, and experience. Many countries reform their education system in order to produce better human resources. Better human resources are able to increase the economic growth in a country (Galor, 2006; Anderson, & Bertaux, 2012; Ho, K. C., & Ge, Y. 2011).

ISSN:-2347-2723

Education produces a high qualified-man who is able to work and competitive in the work field Rodriguez-Pose & Vilalta-Bufi, 2005; Petrakis, 2012). Education contributes intellectuality, social linkage, morality, and experience Becker, 1993; Zarutskie, 2008; James, 2000; Danes, Stafford, Haynes, & Amarapurkar, 2009). Those elements above become main requirement in working on a company. Social linkage gives specific contribution to the field work (Benabou, 1996; Beames, & Atencio, 2008; Krebs, 2008).

## 4. EDUCATIONAL FINANCE AND HUMAN CAPITAL

Palacios (2002) and Carneiro and Heckman (2003) stated that, the main concept of human capital is knowledge and skill that is got from education and it requires fund and subzidise. The human capital is supported by the government through financing Fernandez, & Rogerson, 1999; Blundell, Dearden, Meghir, & Sianesi, 1999). Psacharopoulos (1995; 1994) and Belfield (2010) stated that, many countries has reformed their education system to improve education's quality. Some studies also showed that, many countries could not do the same thing because limited budget, bad system, and there is a gap in financing (Odden, & Clune,1998; Shagdar, 2006; Card, & Payne, 2002).

In handling the problem about education financing, a systematical way, effective and efficient which emphasizes to benefit, equality, and adequacy concept, are required (Odden, & Clune, 1998; Odden, & Archibald, 2001; Baker, Sciarra, & Farrie, 2010; Wylie, & King, 2004; Bougroum, & Ibourk, 2011). In applying educational finance, there are two kinds of approaches, they are; micro and macro finance which is based on students' amount and students' cost (Theisen, 1938; McMahon, & Wallace, 1993; McMahon, & Boediono, 2001). Because of education is organizations that can be produce benefit human resources for economic nation and individual itself, so that several developed countries and developing countries applied free education (Azarnert, 2010; Thro, 1994; Thro, 2004; Schoellman, 2012; Oketch, & Somerset, 2010; Olubor, 2009).

The aims of education reformation are the government can prepare proper budgeting and the students are able to get holistic facilitation Fowler, (Ed.), 1998; DiPaola, & Walther-Thomas, (Eds.). 2003). Another problem appeared in some countries which had applied reformation in education such as in distributing, budgeting discriminating and un-transparency of budget using in school level (Reyes, & Rodriguez, 2004; Stiefel, Sschwartz, Berne, & Chellman, 2005; Levacic, 2008; Hustedt, & Barnett, 2011; Motsamai, Jacobs, & Wet, 2011).

### 5. FORMAL EDUCATION AND HUMAN CAPITAL

Backer (1993) and Zarutskie (2008) have stated that, education is the main element in increasing the economic growth within a country. Some of empirical studies found a gap between the social status in conducting formal education in school and school reformation (Becker, 2000; Cohen, McCabe, et al. 2009; Holloway, & Pimlott-Wilson, 2011). In regarding to that case, intervention from the government is fully expected to able to decrease the gap (Byun, 2010; Olubor, 2009; Gunter, & Forrester, 2009).

School as the core of education and human capital requires all stakeholders should responsible in reforming the education system (Tirozzi, & Uro, 1997; Rhim, Ahearn, et al. 2007; Thro, 2004). Teacher, headmaster, and parents are the main supporters in motivating the students to learn (Benabou, 1996; Hanushek, 1996; Leech, & Campos., 2003; Modood, 2004; Tan, &

Kwok, 2005; Shatkin, & Gershberg, 2007; Odden, & Kelly, 2008; Dudley-Marling, 2009; Ampiah, & Adu-Yeboah, 2009). Another study showed that, the content of the lesson also influences in maintaining human capital, education, morality, social linkage, and skill (Michael, & Becker, 1973; Palacios, 2002; Holloway, & Pimlott-Wilson, 2011; Schuchart, 2012).

In economy point of view, education becomes the biggest attention in many countries. In developing countries, female are the main target in education because they are more proper (Psacharopoulos, 1994; Melero, 2004; Schatzel, Strandholm, & Callahan, 2012). In relation to the previous studies, school reformation should be done continuously by removing gap in order to get equal education. On the other hand, it requires huge budget for the facilities (Santos, 2011; Cohen, McCabe, et al. 2009; Graham, & Harwood, 2011; Evenson, & McGinn, 2004).

### 6. CONCLUSION

Education is very important in human capital had been admitted in many countries. Education is an asset within each individual and it should get attention from the government. The globalization era requires high quality human resource and it makes many countries reformed their education system in order to fulfill the requirement, because a good human resource contributes positive income to the country. Another way to minimize the problem in school reformation is removing the gap to get facilities. As a matter of fact, the problem comes from the system of financing in different area and it causes many weaknesses in education. In order to minimize that, monitoring the educational finance should be done continuously.

### REFERENCES

- 1. Ampiah, J. G., & Adu-Yeboah., C. (2009). "Mapping the Incidence of School Dropouts: A Case Study of Communities in Northern Ghana.". *Comparative Education, Vol. 45*(2), pp. 219-232.
- 2. Awang, H. (2004). Human Capital and Technology Development in Malaysia. *International Education Journal, Vol* 5(2), pp.239-246.
- 3. Anderson, M. C., & Bertaux, N. E. (2012). Education, Citizenship, and African American Community in Nineteenth-Century Cincinnati: Issues of Social, Cultural, and Human Capital. *Humanity & Society. Sage, Vol. 36*(2), pp.145-116.
- 4. Azarnert, L. V. (2010). Free education, fertility and human capital accumulation. *J Popul Econ. Springer*(23), pp.449-468.
- 5. Beames, S., & Atencio, M. (2008). Building social capital through outdoor education. *Journal of Adventure Education and Outdoor Learning, Vol.* 8(2), pp. 99-112.
- 6. Becker, G. S. (1993). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education 3rd Edition.
- 7. Becker, B. E., Huselid, M. A., & Ulrich, D. (2002). Six Key Principles for Measuring Human Capital Performance in Your Organization
- 8. Becker, B. D., Sciarra, D. G., & Farrie, D. (2010). *Is School Funding Fair?: A National Report Card.* Newark: Education Law Center, Newark.
- 9. Becker, G. S., Murphy, K. M., & Tamura, R. (Eds.). (1994). *Human Capital, Fertility, and Economic Growth*: The University of Chicago Press.

- 10. Becker, R. (2000). "Social Class and the Choice of Education. An Empirical Application of the Subjective Expected Utility Theory.". *Kolner Zeitschrift Fur Soziologie Und Zozialpsychologie, Vol.* 52(3), 450-+.
- 11. Bell, L., & Stevenson, H. (2006). Education Policy: Process Themes and Impact. Canada: Routledge, Taylor & Francis Group.
- 12. Benabou, R. (1996). Equity and Efficiency In Human Capital Investment: The Local Connection. *Review of Economic Studies* (63), pp.237-264.
- 13. Belfield, C., & Levin, H. M. (2010). Economics Of Education–Costs and Financing Of Schooling.
- 14. 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), pp.1-23.
- 15. Boccanfuso, D., Savard, L., & Savy, B. E. (2013). Human Capital and Growth: New Evidences from African Data. *Journal International Economic, Vol. 27*(1), pp.55-77.
- 16. Bougroum, M., & Ibourk, A. (2011). Access and equity in financing higher education: The case of Morocco. *Prospects, Vol.41*, pp.115-134.
- 17. Byun, S. Y. (2010). "Does Policy Matter in Shadow Education Spending? Revisiting the Effects of the High School Equalization Policy in South Korea.". *Asia Pacific Education Review, Vol. 11*(1), pp. 83-96.
- 18. Carneiro, P., & Heckman, J. J. (2003). *Human Capital Policy*. Germany Institute for the Study of Labor.
- 19. Card, D., & Payne, A. A. (2002). School finance reform, the distribution of school spending, and the distribution of student test scores. *Journal of Public Economics* 83, pp.49-82.
- 20. Cohen, J., E. M. McCabe, et al. (2009). "School Climate: Policy, Practice, and Teacher Education.". *Teachers College Record, Vol. 111*(1), pp. 180-213.
- 21. Danes, S. M., Stafford, K., Haynes, G., & Amarapurkar, S. S. (2009). Family Capital of Family Firms Bridging Human, Social, and Financial Capital. *Family Business Review Vol.22*(3), pp.199-215.
- 22. DiPaola, M. F., & Walther-Thomas, C. (Eds.). (2003). *Principals and special education: The critical role of school leaders*. FL: University of Florida: (COPPSE Document No. IB-7). Gainesville, Center on Personnel Studies in Special Education.
- 23. Dudley-Marling, C. (2009). "Home-School Literacy Connections: The Perceptions of African American and Immigrant ESL Parents in Two Urban Communities.". *Teachers College Record, Vol. 111*(7), pp. 1713-1752.
- 24. Evenson, K. R., & McGinn., A. P. (2004). "Availability of School Physical Activity Facilities to the Public in Four US Communities." *Journal American of Health Promotion, Vol. 18*(3), pp. 243-250.
- 25. Fernandez, R., & Rogerson, R. (1999). Education finance reform and investment in human capital: lessons from California. *Journal of Public Economics*, 74, pp.327-350.
- 26. Fowler, W. J. (Ed.). (1998). *Developments in School Finance, 1997*. Washington: U.S. Department of Education. National Center for Education Statistics.
- 27. Frederiksen, A., & Kato, T. (2011). Human Capital and Career Success: Evidence from Linked Employer-Employee Data. *Discussion Paper*.
- 28. Galor, O. (2006). Das Human-Kapital: A Theory of the Demise of the Class Structure. *Review of Economic Studies, Vol. 73*(1), pp. 85-117.

- 29. Gunter, H. M., & Forrester, G. (2009). "School Leadership and Education Policy-Making in England.". *Policy Studies, Vol.* 30(5), pp. 495-511.
- 30. Graham, L. J., & Harwood., V. (2011). "Developing Capabilities For Social Inclusion: Engaging Diversity Through Inclusive School Communities." *Journal International of Inclusive Education, Vol. 15*(1), pp. 135-152.
- 31. Hanushek, E. A. (1996). Measuring Investment in Education. *The Journal of Economic Perspectives, Vol. 10*(4), pp.9-30.
- 32. Heckman, J. J. (2000). Policies to foster human capital. *Research in Economics Vol.54*, pp.3-56.
- 33. Hustedt, J. T., & Barnett, W. S. (2011). Financing Early Childhood Education Programs: State, Federal, and Local Issues. *Educational Policy Vol.25*(1), pp.167-192.
- 34. Holloway, S. L., & Pimlott-Wilson, H. (2011). "The Politics of Aspriration: Neo-Liberal Education Policy, low Parental Aspiration, and Primary School Extended Services in Disadvantaged Communities.". *Childrens Geographies, Vol. 9*(1), pp. 79-94.
- 35. Ho, K. C., & Ge, Y. (2011). Education and human capital management in a world city: the case of Singapore. *Asia Pacific Journal of Education, Vol. 31*(3), pp.263-276.
- 36. James, E. H. (2000). Race-Related Differences in Promotions and Support: Underlying Effects of Human and Social Capital. *Organization Science*, *Vol. 11*(5), pp. 493-508.
- 37. Killeen, J., Turton, R., Diamond, W., Dosnon, O., & Wach, M. (1999). Education and the labour market: subjective aspects of human capital investment. *Journal Education Policy*, *Vol.14*(2), pp. 99-116.
- 38. Krebs, V. (2008). Social Capital: the Key to Success for the 21st Century Organization. *IHRIM Journal, Vol. 12*(5).
- 39. Leech, D., & Campos., E. (2003). "Is Comprehensive Education Really Free?: A Case Study of the Effects of Secondary School Admissions Policies on House Prices in One Local Area.". *Journal of the Royal Statistical Society Series a-Statistics in Cociety, Vol.* 166, pp. 135-154.
- 40. Levacic, R. (2008). Financing Schools: Evolving Patterns of Autonomy and Control. *Educational Management Administration & Leadership, Vol* 36(2), pp.221-234.
- 41. Lucas, R. E. (1988). On The Mechanics Of Economic Development. *Monetary Economics, Vol.22* pp 3-42.
- 42. McMahon, A., & Wallace, M. (1993). Development Planning: Surprise Outcomes for Multiracial Primary Schools. *Management in Education*, 7(1), pp.1-3.
- 43. McMahon, W. W., & Boediono. (2001). Improving Education Funding Methods in Indonesia. In W. W. McMahon, N. Suwaryani & Boediono (Eds.), *Improving Education Finance in Indonesia*. University of Illinois and Jakarta: Policy Research Center, Institute for Research and Development, MONE, and UNICEF and UNESCO.
- 44. Motsamai, M. J., Jacobs, L., & Wet, C. d. (2011). Policy and Practice: Financial Management in Schools in the Mafeteng District of Lesotho. *Kamla-Raj*, 26(2), pp.105-116.
- 45. Modood, T. (2004). Capitals, Ethnic Identity and Educational Qualifications. *Cultural Trends, Vol. 13*(2), pp.87-105.
- 46. Michael, R. T., & Becker, G. S. (1973). On the New Theory of Consumer Behavior. *Journal of Economics*, 75(4), pp. 378-396.
- 47. Melero, E. (2004). Evidence on Training and Career Paths: Human Capital, Information and Incentives. *Discussion Paper*.

- 48. Nelson, R. R., & Phelps, E. S. (1966). Investment in Humans, Technological Diffusion and Economic Growth. *The American Economic* 56(1/2), pp. 69-75.
- 49. Odden, A., & Clune, W. H. (1998). School Finance Systems: Aging Structures in Need Of Renovation. *Educational Evaluation and Policy Analysis vol.* 20(3), pp. 157-177.
- 50. Odden, A., & Archibald, S. (2001). Education Policy Analysis Archives committing to class-size reduction and finding the resources to implement it: a case study of resource reallocation. *Education Arizona State University, Vol.9*, 30.
- 51. Odden, A., & Kelly, J. A. (2008). Strategic Management of Human Capital in Public Education. A Project the Consortium for Policy Research in Education (CPRE). University of Wisconsin-Madison.
- 52. Olakulehin, F. K. (2008). Open and distance education as a strategy for human capital development in Nigeria. *Open Learning. Routledgen Taylor & Francis Group, Vol.* 23(2), pp.123-130.
- 53. Olubor, R. O. (2009). Private Cost Analysis of Pre-School Education in Nigerian Private Schools. *J Soc Sci. Institute of Education, University of Benin, vol. 19*(2), 141-148.
- 54. Oketch, M., & Somerset, A. (2010). Free Primary Education and After in Kenya: Enrolment impact, quality effects, and the transition to secondary school. London: Centre, Institute of Education, University of London.
- 55. Palacios, M. (2002). Policy Analisys: Human Capital Contracts "Equity-like" Instruments for Financing Higher Education. The Cato Institute. Washington.
- 56. Petrakis, P. (2012). Human Capital: Education, Innovation and Health. *The Greek Economy and the Crisis. Springer-Verlag Berlin Heidelberg*.
- 57. Psacharopoulos, G. (1995). The Profitability of Investment in Education: Concepts and Methods Available from http://www.c3l.uni-oldenburg.de/cde/econ/readings/psacharo.pdf
- 58. Psacharopoulos, G. (1994). Returns to Investment in Education: A Global Update. *World Development*, 22(9), pp.1325-11343.
- 59. Ramos, R., Surinach, J., & Artís, M. (2012). Regional Economic Growth and Human Capital: The Role of Over-education. *Regional Studies, Vol. 46*(10), pp.1389-1400.
- 60. Reyes, A. H., & Rodriguez, G. M. (2004). School Finance: Raising Questions for Urban Schools. *Education And Urban Society, Vol.* 37(1), 3-21.
- 61. Rhim, L. M., E. M. Ahearn, et al. (2007). "Charater School Statutes and Special Education: Policy Answers or Policy Ambiguity?". *Journal of Special Education, Vol.* 41(1), pp. 50-63.
- 62. Robeyns, I. (2006). Three models of education Rights, capabilities and human capital. *Sage Publications, Vol. 4*(1), pp.69-84.
- 63. Rodriguez-Pose, A., & Vilalta-Bufi, M. (2005). Education, migration, and job satisfaction: the regional returns of human capital in the EU. *Journal of Economic Geography* (5), pp. 545-566.
- 64. Santos, M. E. (2011). Human Capital and the Quality of Education in a Poverty Trap Model. *Oxford Development Studies, Vol. 39*(1), pp. 25-47.
- 65. Schoellman, T. (2012). Education Quality and Development Accounting. *Review of Economic Studies* (79), pp.388-417.

- 66. Schatzel, K., Strandholm, K., & Callahan, T. (2012). An educational option for those facing lay-off: a human capital perspective. *Human Resource Development International*, *Vol.* 15(3), pp.303-319.
- 67. Shatkin, G., & Gershberg, A. I. (2007). "Empowering Parents and Building Communities-The Role of School-Based Councils in Educational Governance and Accountability.". *Urban Education, Vol.* 42(6), pp. 582-615.
- 68. Shagdar, B. (2006). Human capital in Central Asia: trends and challenges in education. *Central Asian Survey, Vol. 25*(4), pp. 515-532.
- 69. Stiefel, L., Sschwartz, A. E., Berne, R., & Chellman, C. C. (2005). School Finance Court Cases and Disparate Racial Impact: The Contribution of Statistical Analysis in New York. *Education And Urban Society, Vol.* 37(2), pp.151-173.
- 70. Supriadi, D. (2003b). Unit Cost of Elementary and Secondary Education: Referral for Determination of Funding Policy Autonomy and Education in the Era of School-Based Management. (pp. 13). Bandung: PT. Remaja Rosdakarya.
- 71. Sweetland, S. R. (1996). Human Capital Theory: Foundations of a Field of Inquiry. *Review of Educational Research*, 66(3), pp.341-359.
- 72. Schuchart, C. (2012). School social capital and secondary education plans. *Educational Studies. Routledge Taylor & Francis*, pp.1-14.
- 73. Tan, S., & Kwok, P. (2005). "Knolwledge Building in Inter-School Learning Communities: Reflections From a Case on Project Learning in Hong Kong.". *Towords Sustainable and Scalable Educational Innovations Informend by Learning Sciences, Vol.* 133, pp. 908-913.
- 74. Theisen, W. W. (1938). Financial Planning. Revie Of Educational Research, 8(2), pp.2-7.
- 75. Thro, W. (1994). Judicial Analysis During the Third Wave of School Finance Litigation: The Massachusetts Decision as a Model. *Boston College Law Review,* (3). *Vol.35*
- 76. Thro, W. (2004). "The Finance Paradox: How American Constitutional Values Inhibit The Fanding of Quality Education. *Perspectives in Education, Vol. 22*(3), pp.99-107.
- 77. Tilaar, H. A. R., & Suryadi, A. (Eds.). (1993). *Education Policy Analysis: an introduction*. Bandung: PT Remaja Rosdakarya.
- 78. Tirozzi, G., & Uro, G. (1997). "Education Reform in the United States-National Policy in Support of Local Efforts for School Improvement." *American Psychologist, Vol. 52*(3), pp.241-249.
- 79. Vinding, A. L. (2006). Absorptive Capacity and Innovative Performance: A Human Capital Approach. *Econ. Innov. New Techn, Routledge Taylor & Francis Group, Vol.* 15(4/5), pp. 507-517.
- 80. Wylie, C., & King, J. (2004). How do effective schools manage their finances?
- 81. Zarutskie, R. (2008). The role of top management team human capital in venture capital markets: evidence from first time fundsSSRN Accepted Paper Series.
- 82. Zhang, H., & Chen, X. (2008). An Extended Input–Output Model on Education and the Shortfall of Human Capital in China. *Economic Systems Research*, *Vol.* 20(2), pp.205-221.
- 83. Zula, K. J., & Chermack, T. J. (2007). Integrative Literature Review: Human Capital Planning: A Review of Literature and Implications for Human Resource Development. *Human Resource Development Review*, *6*(3), pp.245-262.