

## REFERENCES

- Ahli, A. A. (2018). *Education systems are not equipping students with the skills required for the workforce* (Vol. 23529, Issue 2). <https://doi.org/http://dx.doi.org/10.2139/ssrn.4008200>
- Ajayi, V. O. (2023). A Review on Primary Sources of Data and Secondary Sources of Data. *European Journal of Education and Pedagogy*, 2(3), 1–7. [www.ej-edu.orgdoi:http://dx.doi.org/19810.21091/](http://www.ej-edu.orgdoi:http://dx.doi.org/19810.21091/)
- Amran, M. S., Kutty, F. M., & Surat, S. (2019). Creative Problem-Solving (CPS) Skills among University Students. *Creative Education*, 10(12), 3049–3058. <https://doi.org/10.4236/ce.2019.1012229>
- Andriani, D. (2021). *Research in Business & Social Science Anticipating the demographic bonus from the perspective of human capital in Indonesia*. 10(6), 141–152.
- Apsari, Y., Lisdawati, I., & Mulyani, E. R. (2018). the Implementation of Project Based Learning in Coursebook Evaluation Classroom. *Jurnal Ilmiah P2M STKIP Siliwangi P2M STKIP Siliwangi*, 5(2), 1–6.
- Armstrong, C. E. (2016). Running Lean Startup in the Classroom: From Idea to Experiment in 1 Week. *Management Teaching Review*, 2(2), 132–140. <https://doi.org/10.1177/2379298116683215>
- Ávalos, C., Pérez-Escoda, A., & Monge, L. (2019). Lean Startup as a Learning Methodology for Developing Digital and Research Competencies. *Journal of New Approaches in Educational Research*. <https://api.semanticscholar.org/CorpusID:199153726>
- Azzahra, A., Savandha, S. D., Bharoto, R. M. H., & Kevin, N. H. (2024). The Impact of High Job Qualification Standards on Unemployment Rates Among Fresh Graduates in Indonesia. *Journal Transnational Universal Studies*, 2(4), 244–255. <https://doi.org/10.58631/jtus.v2i4.109>
- Barron, B., & Chen, M. (2008). Teaching for meaningful learning: A review of research on inquiry-based and cooperative learning. *Powerful Learning: What We Know About Teaching for Understanding*, 11–70.
- Bell, S. (2010). Project-Based Learning for the 21st Century: Skills for the Future. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(2), 39–43. <https://doi.org/10.1080/00098650903505415>
- Benjamin, A. J., White, M., MacKeracher, M., & Stella, K. (2013). The Impact of Globalization on Adult Education in a Have-Not Province. *Brock Education Journal*, 22(2), 28–40. <https://doi.org/10.26522/brocked.v22i2.340>
- Bennet, T. (2006). *Defining the Importance of Employability Skills in Career/Technical Education*. Auburn, Alabama: The Graduate Faculty of Auburn University.

- Bergson-Shilcock, A., Taylor, R., & Hodge, N. (2023). Closing the digital skill divide. *National Skills Coalition*, 390(8619).
- Bersin, J. (2019). *LinkedIn 2019 Talent Trends: Soft Skills, Transparency and Trust*. LinkedIn. <https://www.linkedin.com/pulse/linkedin-2019-talent-trends-soft-skills-transparency-trust-bersin/>
- Bieraugel, M. (2015). Managing library innovation using the lean startup method. *Library Management*, 36(4/5), 351–361. <https://doi.org/10.1108/LM-10-2014-0131>
- Bland, D. J., & Osterwalder, A. (2019). *Testing Business Ideas: A Field Guide for Rapid Experimentation*. Wiley. <https://books.google.co.id/books?id=8smxDwAAQBAJ>
- Blank, S., & Eckhardt, J. T. (2023). The Lean Startup as an Actionable Theory of Entrepreneurship. *Journal of Management*, 50(8), 3012–3034. <https://doi.org/10.1177/01492063231168095>
- Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating Project-Based Learning: Sustaining the Doing, Supporting the Learning. *Educational Psychologist*, 26(3–4), 369–398. <https://doi.org/10.1080/00461520.1991.9653139>
- Brewer, L. (2013). *Enhancing youth employability*. <http://documents1.worldbank.org/curated/en/503651536154914951/pdf/129757-S4YE-Digital-Jobs-Report.pdf>
- Buchanan, M. E. (2018). Methods of data collection. *AORN Journal*, 33(1). [https://doi.org/10.1016/S0001-2092\(07\)69400-9](https://doi.org/10.1016/S0001-2092(07)69400-9)
- Cassens, N., & FH Wedel, W. (2021). The Lean Startup-A Systematic Literature Review. *Seminar IT-Management in the Digital Age, Winter*, 1–15. [https://www.fh-wedel.de/fileadmin/Mitarbeiter/Records/Cassens\\_2021\\_-\\_The\\_Lean\\_Startup\\_-\\_A\\_Systematic\\_Literature\\_Review.pdf](https://www.fh-wedel.de/fileadmin/Mitarbeiter/Records/Cassens_2021_-_The_Lean_Startup_-_A_Systematic_Literature_Review.pdf)
- Cerviño, G., & Vera, C. (2020). The impact of educational technologies in higher education. *Gist Education and Learning Research Journal*, 2(20), 155–169.
- Chi, W., Rafii-tari, H., Payne, C. J., Liu, J., Riga, C., & Bicknell, C. (2017). A Learning Based Training and Skill Assessment Platform with Haptic Guidance for Endovascular Catheterization. *IEEE International Conference on Robotics and Automation (ICRA)*, 2357–2363. <https://ieeexplore.ieee.org/document/7989273>
- Chikurteva, A., & Chikurtev, D. (2020). *Model of Project-Based Learning Platform*. 81–84.
- Cimatti, B. (2016). Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises. *International Journal for Quality Research*, 10(1), 97–130. <https://doi.org/10.18421/IJQR10.01-05>



- Crespí, P., García-Ramos, J. M., & Queiruga-Dios, M. (2022). Project-Based Learning (PBL) and Its Impact on the Development of Interpersonal Competences in Higher Education. *Journal of New Approaches in Educational Research*, 11(2), 259–276. <https://doi.org/10.7821/naer.2022.7.993>
- Deffinika, I., Putri, I. W., & Angin, K. B. (2022). HIGHER EDUCATION and TRAINING towards GLOBAL COMPETITIVENESS and HUMAN DEVELOPMENT in INDONESIA. *Geojournal of Tourism and Geosites*, 40(1), 1280–1288. <https://doi.org/10.30892/gtg.38436-770>
- Deza, H. S. (2020). *ANGKATAN KERJA KABUPATEN LIMA PULUH KOTA 2020* (B. P. S. Kabupaten Lima Puluh Kota (ed.)). Badan Pusat Statistik Kabupaten Lima Puluh Kota.
- Dong, H., Cifter, A. S., & Fan, Z. (2013). Methods for improving undergraduate students' sketching skills. *International Journal of Mechanical Engineering Education*, 41(4), 329–336. <https://doi.org/10.7227/IJMEE.41.4.7>
- Donner, J., Dean, M., Osborn, J., & Schiff, A. (2020). Platform-led upskilling: Marketplace platforms as a source of livelihoods training. *ACM International Conference Proceeding Series*. <https://doi.org/10.1145/3392561.3394629>
- Dugan, M., Dunne, Burnett, A., Morley, Matte, S., Switalski, Barbero, L., Puccio, G., & Parnes, S. (2017). *Creative Problem Solving: a quick, down-and-dirty handbook*. January. <http://inclusiveinno.org>
- Fajaryati, N., Budiyo, B., Akhyar, M., & Wiranto, W. (2020). The employability skills needed to face the demands of work in the future: Systematic literature reviews. *Open Engineering*, 10(1), 595–603. <https://doi.org/10.1515/eng-2020-0072>
- Far, S., Hossain, A., Anika, R. R., Mridula, S. T., & Hossain, T. (2024). Leveraging Online Learning and Certification Platforms for Technical Skill Development: A Strategy to Mitigate Unemployment. *JOURNAL OF BUSINESS AND SOCIAL SCIENCES*, 14(November).
- Felipe, A. L., Amouroux, E., Pham, T., & Stojcevski, A. (2016). Vietnamese students awareness towards a project based learning environment. *International Symposium on Project Approaches in Engineering Education*, 6(July), 320–324.
- Fitri, R., Lufri, L., Alberida, H., Amran, A., & Fachry, R. (2024). The project-based learning model and its contribution to student creativity: A review. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 10(1), 223–233. <https://doi.org/10.22219/jpbi.v10i1.31499>
- Gallup. (2022). *AWS Asia Pacific Digital Skills Study*.
- Granata, J., Pinxten, J., & Posadas, J. (2020). *Indonesia's Occupational Employment Outlook*.

- <https://documents1.worldbank.org/curated/en/236671622784581205/pdf/Indonesia-s-Occupational-Employment-Outlook-2020-Technical-Report.pdf>
- Gropello, E. Di, Kruse, A., & Tandon, P. (2011). *Skills for the Labor Market in Indonesia: Trends in Demand, Gaps, and Supply*. The World Bank. <https://doi.org/10.1596/978-0-8213-8614-9>
- Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics*, 19(4), 451–464. <https://doi.org/https://doi.org/10.1016/j.labeco.2012.05.014>
- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review*, 16(3), 235–266. <https://doi.org/10.1023/B:EDPR.0000034022.16470.f3>
- Huang, R., Spector, J. M., & Yang, J. (2019). Introduction to Educational Technology. *Lecture Notes in Educational Technology*, 1924, 3–31. [https://doi.org/10.1007/978-981-13-6643-7\\_1](https://doi.org/10.1007/978-981-13-6643-7_1)
- Jackson, D. (2019). Student Perceptions of the Development of Work Readiness in Australian Undergraduate Programs. *Journal of College Student Development*, 60, 219–239. <https://doi.org/10.1353/csd.2019.0020>
- Khatter, H., & Jain, A. (2020). A Collaborative Platform for Curated Skill Enhancement and Placement Activities. *Proceedings - 2020 12th International Conference on Computational Intelligence and Communication Networks, CICN 2020*, 487–491. <https://doi.org/10.1109/CICN49253.2020.9242644>
- Kivunja, C. (2015). Exploring the Pedagogical Meaning and Implications of the 4Cs " Super Skills " for the 21 st Century through Bruner's 5E Lenses of Knowledge Construction to Improve Pedagogies of the New Learning Paradigm. *Creative Education*, 6, 224–239. <https://doi.org/10.4236/ce.2015.62021>
- Krajcik, J. S., & Blumenfeld, P. (2006). Project Based Learning. *The Cambridge Handbook of the Learning Sciences*, 317–333. <https://doi.org/https://doi.org/10.1017/CBO9780511816833.020>
- Laker, D. R., & Powell, J. L. (2011). The differences between hard and soft skills and their relative impact on training transfer. *Human Resource Development Quarterly*, 22(1), 111–122. <https://doi.org/https://doi.org/10.1002/hrdq.20063>
- Lamri, J., & Lubart, T. (2023). Reconciling Hard Skills and Soft Skills in a Common Framework: The Generic Skills Component Approach. *Journal of Intelligence*, 11(6). <https://doi.org/10.3390/jintelligence11060107>
- Mansoori, Y. (2017). Enacting the lean startup methodology: The role of vicarious and experiential learning processes. In *International Journal of Entrepreneurial Behaviour and Research* (Vol. 23, Issue 5). <https://doi.org/10.1108/IJEBr-06-2016-0195>



- Miski, A. (2014). Development of a Mobile Application Using the Lean Startup Methodology. *International Journal of Scientific & Engineering Research*, 5(1), 1743–1748. <http://www.ijser.org>
- Monash University. (n.d.). User Experience Questionnaire. *My Technology Space*, 1–2.
- OCDE. (2024). OECD Economic Outlook. In *Rapport final* (Issue 1).
- OECD. (2021). Development Co-operation Report 2021 : Shaping a Just Digital Transformation. In *OECD iLibrary*. <https://www.oecd-ilibrary.org/sites/3cf15fef-en/index.html?itemId=/content/component/3cf15fef-en>
- Opara, E. (2023). *BASICS OF EDUCATIONAL TECHNOLOGY*.
- Othman, R., Alias, N. E., Mohd Nazir, S. S. A., Koe, W.-L., & Rahim, A. (2022). The Influence of Employability Skills toward Career Adaptability. *International Journal of Academic Research in Business and Social Sciences*, 12(7). <https://doi.org/10.6007/ijarbss/v12-i7/14445>
- Pang, E., Wong, M., Leung, C. H., & Coombes, J. (2019). Competencies for fresh graduates' success at work: Perspectives of employers. *Industry and Higher Education*, 33(1), 55–65. <https://doi.org/10.1177/0950422218792333>
- Patrick, S., Kennedy, K., & Powell, A. (2013). Mean What You Say: Defining and Integrating Personalized, Blended and Competency Education President and Chief Executive Officer, iNACOL. *International Association for K-12 Online Learning*. <http://www.inacol.org/>
- Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 22. <https://doi.org/10.1186/s41039-017-0062-8>
- Pratama, A., Farqi, A., & Mandyartha, E. P. (2022). Evaluation of User Experience in Integrated Learning Information Systems Using User Experience Questionnaire (UEQ). *Journal of Information Systems and Informatics*, 4(4), 1019–1029. <https://doi.org/10.51519/journalisi.v4i4.394>
- Preetha, P. (2021). Skill Development of Students Through Project- based Learning ( PBL ). *International Journal of Engineering Development and Research*, 9(1), 131–134.
- Puccio, G. J., & Holinger, M. (2022). Celebrating Giants And Trailblazers In Creativity Research And Related Fields. *Applied Creativity Pioneer*, 398–426.
- Puccio, Mance, G. L., Murdock, M., & C, M. (2011). *Creative Leadership: Skills That Drive Change* (2nd ed.). Sage Publications. <https://www.scirp.org/reference/referencespapers?referenceid=2422640>

- Putro, E., & Averil, J. (2023). Measuring the Benefits of the Skill Academy's Online Training Platform. *Journal of Information Systems and Informatics*, 5(4), 1644–1657. <https://doi.org/10.51519/journalisi.v5i4.614>
- Raguram, R. (2014). Problem solving methodology. *Middle - East Journal of Scientific Research*, 20(1), 117–123. <https://doi.org/10.5829/idosi.mejsr.2014.20.01.11334>
- Rahayu, S., Setyosari, P., Hidayat, A., & Kuswandi, D. (2022). the Effectiveness of Creative Problem Solving-Flipped Classroom for Enhancing Students' Creative Thinking Skills in Online Physics Educational Learning. *Jurnal Pendidikan IPA Indonesia*, 11(4), 649–656. <https://doi.org/10.15294/jpii.v11i4.39709>
- Rajendran, M., & Kaur, B. (2023). *Impact of Technology on Education*. 6(7), 214–220. <https://www.researchgate.net/publication/368637034>
- Ries Eric. (2011). *THE LEAN STARTUP: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Business* (1st Editio). Crown Business.
- Robles, M. (2012). Executive Perceptions of the Top 10 Soft Skills Needed in Today's Workplace. *Business Communication Quarterly*, 75, 453–465. <https://doi.org/10.1177/1080569912460400>
- Santosa, H., Mutiara, E., & Juanita, J. (2017). *An Understanding Demographic Bonus and Its Implication among Teenagers in Deli Serdang District*. 1(PHICo 2016), 404–408. <https://doi.org/10.2991/phico-16.2017.7>
- Sarin, C. (2019). Analyzing Skill Gap between Higher Education and Employability. *Research Journal of Humanities and Social Sciences*, 10(3), 941. <https://doi.org/10.5958/2321-5828.2019.00154.2>
- Scheerens, J., van der Werf, G., & de Boer, H. (2020). Soft Skills in Education: Putting the evidence in perspective. In *Soft Skills in Education: Putting the evidence in perspective*. <https://doi.org/10.1007/978-3-030-54787-5>
- Schrepp, M. (2019). User Experience Questionnaire Handbook. URL: [https://www.researchgate.net/publication/303880829\\_{ }User\\_{ }Experience\\_{ }Questionnaire\\_{ }Handbook\\_{ }Version\\_{ }2.\(Accessed: 02.02. 2017\), 1–15. www.ueq-online.org](https://www.researchgate.net/publication/303880829_{ }User_{ }Experience_{ }Questionnaire_{ }Handbook_{ }Version_{ }2.(Accessed: 02.02. 2017), 1–15. www.ueq-online.org)
- Schrepp, M., Hinderks, A., & Thomaschewski, J. (2017). Construction of a Benchmark for the User Experience Questionnaire (UEQ). *International Journal of Interactive Multimedia and Artificial Intelligence*, 4(4), 40. <https://doi.org/10.9781/ijimai.2017.445>
- Shveta, U. (2006). *National Focus Group on Educational Technology* (B. Sutar (ed.); First Edit). National Council of Educational Research and Training. [http://www.ncert.nic.in/new\\_ncert/ncert/rightside/links/pdf/focus\\_group/educational\\_technology.pdf](http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/educational_technology.pdf)



- Sielski, K., & Seckler, C. (2021). Theorizing Lean Startup Principles: An Action Regulation Theory Perspective. *Academy of Management Proceedings*, 2021(1), 15695. <https://doi.org/10.5465/ambpp.2021.15695abstract>
- Silva, D. S., Ghezzi, A., Aguiar, R. B. de, Cortimiglia, M. N., & ten Caten, C. S. (2020). Lean Startup, Agile Methodologies and Customer Development for business model innovation: A systematic review and research agenda. *International Journal of Entrepreneurial Behaviour and Research*, 26(4), 595–628. <https://doi.org/10.1108/IJEBr-07-2019-0425>
- Stewart, C., Wall, A., & Marciniak, S. (2016). Mixed Signals: Do College Graduates Have the Soft Skills That Employers Want? *Competition Forum*, 14(2), 276–281. [https://www.researchgate.net/profile/Alison-Wall/publication/316066488\\_Mixed\\_Signals\\_Do\\_College\\_Graduates\\_Have\\_the\\_Soft\\_Skills\\_That\\_Employers\\_Want/links/5ae86b62aca2725dabb40a10/Mixed-Signals-Do-College-Graduates-Have-the-Soft-Skills-That-Employers-Want.p](https://www.researchgate.net/profile/Alison-Wall/publication/316066488_Mixed_Signals_Do_College_Graduates_Have_the_Soft_Skills_That_Employers_Want/links/5ae86b62aca2725dabb40a10/Mixed-Signals-Do-College-Graduates-Have-the-Soft-Skills-That-Employers-Want.p)
- Taufiqur Rahman, Nurul Fitria, Evi Nurhidayah, & Ika Yuliandani. (2023). Effects of Project-Based Learning on Employability Skills. *Review of Islamic Studies*, 2(1), 1–10. <https://doi.org/10.35316/ris.v2i1.473>
- Tejawiani, I., Lastriyani, I., Lidiawati, L., Margono, M., & Fitriyani, I. F. (2023). Project-Based Learning Model to Enhance Soft Skills of Vocational High School Students. *Journal of World Science*, 2(8), 1159–1166. <https://doi.org/10.58344/jws.v2i8.392>
- Thomas, J. (2000). *A Review of Research on Project-Based Learning*. 1–45. <http://www.k12reform.org/foundation/pbl/research>
- Thomas, J., Condliffe, B., & Quint, J. (2000). Whatever Form a Project Takes , It Must Meet These Criteria To Be Gold Standard Pbl . *Interdisciplinary Journal of Problem-Based Learning*, 22(1), 1–18.
- Vidal, R. V. V. (2010). Creative problem solving: An applied university course. *Pesquisa Operacional*, 30(2), 405–426. <https://doi.org/10.1590/S0101-74382010000200009>
- Wang, X., Khanna, D., & Abrahamsson, P. (2016). *Teaching Lean Startup at University: an Experience Report*.
- Wibowo, T. S., Badi'ati, A. Q., Annisa, A. A., Wahab, M. K. A., Jamaludin, M. R., Rozikan, M., Mufid, A., Fahmi, K., Purwanto, A., & Muhaini, A. (2020). Effect of Hard Skills, Soft Skills, Organizational Learning and Innovation Capability on Islamic University Lecturers' Performance. *Systematic Reviews in Pharmacy*, 11(7), 556–569. <https://doi.org/10.31838/srp.2020.7.80>
- World Economic Forum. (2022). The future of jobs report 2020 | world economic forum. *The Future of Jobs Report*, October, 1163.

<https://www.weforum.org/reports/the-future-of-jobs-report-2020/digest>

Wurdinger, S., Haar, J., Hugg, R., & Bezon, J. (2007). A qualitative study using project-based learning in a mainstream middle school. *Improving Schools*, 10(2), 150–161. <https://doi.org/10.1177/1365480207078048>

Xu, H., & Miller, G. (2022). the Future of Work. In *Plan Canada* (Vol. 62, Issue 1). <https://doi.org/10.1515/9789048538744-006>

Yanindah, A. (2022). An insight into Youth Unemployment in Indonesia. *Proceedings of The International Conference on Data Science and Official Statistics*, 2021(1), 666–682. <https://doi.org/10.34123/icdsos.v2021i1.229>

